



# City of Tigard Tigard Business Meeting - Agenda

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TIGARD CITY COUNCIL & LCRB Revised 5/20/2011 - **Revised 5/20/2011-Replaced Item 3.C Agenda Item Summary; Revised 5/18/2011-Added Study Session Item B and Agenda Items 3.F and 6.**

MEETING DATE AND TIME: May 24, 2011 - 6:30 p.m. Study Session; 7:30 p.m. Business Meeting

MEETING LOCATION: City of Tigard - Town Hall - 13125 SW Hall Blvd., Tigard, OR 97223

#### PUBLIC NOTICE:

Anyone wishing to speak on an agenda item should sign on the appropriate sign-up sheet(s). If no sheet is available, ask to be recognized by the Mayor at the beginning of that agenda item. Citizen Communication items are asked to be two minutes or less. Longer matters can be set for a future Agenda by contacting either the Mayor or the City Manager.

Times noted are *estimated*; it is recommended that persons interested in testifying be present by 7:15 p.m. to sign in on the testimony sign-in sheet. *Business agenda items can be heard in any order after 7:30 p.m.*

Assistive Listening Devices are available for persons with impaired hearing and should be scheduled for Council meetings by noon on the Monday prior to the Council meeting. Please call 503-639-4171, ext. 2410 (voice) or 503-684-2772 (TDD - Telecommunications Devices for the Deaf).

Upon request, the City will also endeavor to arrange for the following services:

- Qualified sign language interpreters for persons with speech or hearing impairments; and
- Qualified bilingual interpreters.

Since these services must be scheduled with outside service providers, it is important to allow as much lead time as possible. Please notify the City of your need by 5:00 p.m. on the Thursday preceding the meeting by calling: 503-639-4171, ext. 2410 (voice) or 503-684-2772 (TDD - Telecommunications Devices for the Deaf).

SEE ATTACHED AGENDA

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VIEW LIVE VIDEO STREAMING ONLINE:

<http://www.tvctv.org/government-programming/government-meetings/tigard>

CABLE VIEWERS: The regular City Council meeting is shown live on Channel 28 at 7:30 p.m. The meeting will be rebroadcast at the following times on Channel 28:

Thursday	6:00 p.m.	Sunday	11:00 a.m.
Friday	10:00 p.m.	Monday	6:00 a.m.

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City of Tigard  
**Tigard Business Meeting - Agenda**

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**TIGARD CITY COUNCIL & LCRB**

MEETING DATE AND TIME: May 24, 2011 - 6:30 p.m. Study Session; 7:30 p.m. Business Meeting  
MEETING LOCATION: City of Tigard - Town Hall - 13125 SW Hall Blvd., Tigard, OR 97223

6:30 PM

• STUDY SESSION

- EXECUTIVE SESSION: The Tigard City Council will go into Executive Session to consult with counsel regarding current litigation or litigation likely to be filed, under ORS 192.660(2) (h). All discussions are confidential and those present may disclose nothing from the Session. Representatives of the news media are allowed to attend Executive Sessions, as provided by ORS 192.660(4), but must not disclose any information discussed. No Executive Session may be held for the purpose of taking any final action or making any final decision. Executive Sessions are closed to the public.

- A. DISCUSS AMENDMENTS TO PRINCIPLES OF COOPERATION BETWEEN ODOT AND TIGARD
- B. DISCUSS 2011-12 MASTER FEES & CHARGES SCHEDULE

7:30 PM

- 1. BUSINESS MEETING
  - A. Call to Order
  - B. Roll Call
  - C. Pledge of Allegiance
  - D. Council Communications & Liaison Reports
  - E. Call to Council and Staff for Non-Agenda Items
- 2. CITIZEN COMMUNICATION (Two Minutes or Less, Please)
  - A. Follow-up to Previous Citizen Communication
  - B. Citizen Communication – Sign Up Sheet

3. CONSENT AGENDA: Tigard City Council and Local Contract Review Board  
These items are considered routine and may be enacted in one motion without separate discussion. Anyone may request that an item be removed by motion for discussion and separate action. Motion to:

A. Approve City Council Minutes:

1. April 12, 2011
2. April 19, 2011

B. RECEIVE AND FILE:

- 2010 ANNUAL SOLID WASTE FINANCIAL REPORT

C. CONSIDER A RESOLUTION TO RENAME AND OUTLINE ALLOWED USES OF THE TREE REPLACEMENT FUND

D. APPROVE GRANT APPLICATION TO THE OFFICE OF COMMUNITY ORIENTED POLICING SERVICES (COPS)

E. AWARD PAVEMENT MANAGEMENT PROGRAM SLURRY SEAL APPLICATIONS CONTRACT

F. AWARD CONTRACT FOR AUDITING SERVICES

- Consent Agenda - Items Removed for Separate Discussion: Any items requested to be removed from the Consent Agenda for separate discussion will be considered immediately after the Council/City Center Development Agency has voted on those items which do not need discussion.

4. QUASI-JUDICIAL PUBLIC HEARING - COMPREHENSIVE PLAN AMENDMENT, SENSITIVE LANDS REVIEWS AND ADJUSTMENT TO EXTEND WALL STREET TO FIELDS' PROPERTY

**COMPREHENSIVE PLAN AMENDMENT (CPA) 2009-00004/SENSITIVE LANDS REVIEW (SLR) 2009-00004/SENSITIVE LANDS REVIEW (SLR) 2009-00005/ADJUSTMENT (VAR) 2010-00002 - WALL STREET EXTENSION (FIELDS)**

**REQUEST** : The applicant is requesting amendments to the Comprehensive Plan to remove Goal 5 protection from Tigard Significant Wetlands and the riparian corridor surrounding Fanno Creek in order to extend Wall Street across City of Tigard property and Fanno Creek to his property. Sensitive Lands Review is required for proposed work within the 100-year floodplain and wetlands. The applicant is requesting an adjustment to the street improvement standards in order to construct a narrower street section than required by code. Tree removal permits to remove trees within the sensitive lands were submitted under a separate application. LOCATION: No address, Washington County Tax Assessor's Map 2S102DA, Tax Lot 690. No address, Washington County Tax Assessor's Map 2S102DD, Tax Lot 100. 13560 SW Hall Blvd., Washington County Tax Assessor's Map 2S102DD, Tax Lot 200. No address, Washington County Tax Assessor's Map 2S10100, Tax Lot 1200. ZONES: R-12: Medium-Density Residential District. The R-12 zoning district is designed to accommodate a full range of housing types at a minimum lot size of 3,050 square feet. A wide range of civic and institutional uses are also permitted conditionally. R-25: Medium High-Density Residential District. The R-25 zoning district is designed to accommodate existing housing of all types and new attached single-family and multi-family housing units at a minimum lot size of 1,480 square feet. A limited amount of neighborhood commercial uses is permitted

outright and a wide range of civic and institutional uses are permitted conditionally.

**COMPREHENSIVE PLAN DESIGNATION:** Medium Density Residential and Medium-High Density Residential.

**APPLICABLE REVIEW CRITERIA:** Community Development Code Chapters 18.370, 18.380, 18.390, 18.510, 18.745, 18.775, 18.790 & 18.810; Comprehensive Plan Goals 1, 2, 5, 6, 7, 8, 11 & 12; Tigard Municipal Code Chapter 9; Metro Functional Plan Titles 3, 6 and 13; and Statewide Planning Goals 1, 2, 5, 6, 7, 8, 11 and 12.

• **Open Public Hearing and Continue to July 12, 2011**

5. LEGISLATIVE PUBLIC HEARING (CONTINUED FROM MAY 10, 2011) FOR CITY OF TIGARD 2011 ECONOMIC OPPORTUNITIES ANALYSIS

- Open Public Hearing - Mayor
- Review Hearing Procedures: City Attorney
- Declarations: Does any Council member wish to declare or discuss a conflict of interest or abstention.
- Staff Report
- Public Testimony
- Staff Recommendation
- Council Discussion
- Close Public Hearing
- Council Consideration

6. CITY MANAGER RECRUITMENT - DISCUSSION OF CANDIDATE PROFILE

7. COUNCIL LIAISON REPORTS

8. NON AGENDA ITEMS

9. EXECUTIVE SESSION: The Tigard City Council will go into Executive Session to conduct deliberations regarding real property transactions, and to consult with counsel regarding current litigation or litigation likely to be filed under ORS 192.660;(2)(e) and (h). All discussions are confidential and those present may disclose nothing from the Session. Representatives of the news media are allowed to attend Executive Sessions, as provided by ORS 192.660(4), but must not disclose any information discussed. No Executive Session may be held for the purpose of taking any final action or making any final decision. Executive Sessions are closed to the public.

10. ADJOURNMENT

**AIS-502**

**Item #: A.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** 15 Minutes

**Agenda Title:** Tigard & ODOT Principles

**Prepared For:** Judith Gray

**Submitted By:**

Judith Gray  
Community  
Development

**Item Type:** Update, Discussion, Direct Staff

**Meeting Type:**

Council Business  
Mtg - Study Sess.

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**ISSUE**

Consider amendments offered by ODOT to the principles of cooperation between it and the City of Tigard.

**STAFF RECOMMENDATION / ACTION REQUEST**

Staff recommends that Council accept the principles with the changes proposed by ODOT. Also, Council is requested to adopt the principles by resolution at a future Council meeting.

**KEY FACTS AND INFORMATION SUMMARY**

As part of ongoing efforts to establish regular and open discussions with ODOT, Council has conducted regular meetings with Region 1 Manager, Jason Tell. Most of these meetings involved discussion of specific topics and projects. However, Council also wished to establish principles of cooperation and collaboration to guide these and other discussions. At its October 26, 2010 meeting Council approved a discussion draft of principles. The draft was shared with Jason Tell at Council's November 16, 2010 meeting. Mr. Tell was requested to review the principles and suggest any modifications. He returned the principles with minor amendments, which are included as Attachment 1.

**OTHER ALTERNATIVES**

Council may choose to not accept the changes proposed by ODOT or propose other amendments for consideration by the agency.

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

Goal 1c. Participate in the Southwest Corridor Study.

Goal 1d. Work with state and regional partners to modify the Transportation Planning Rule.

Goal 1e. Work with partners on urbanization policy issues.

Long Term Goals. Continue pursuing opportunities to reduce traffic congestion.

**DATES OF PREVIOUS COUNCIL CONSIDERATION**

October 26, 2010: Council discussed the upcoming November 16 meeting and draft principles and implementation actions.

November 16, 2010: Council met with Jason Tell, ODOT Region 1 Manager; and David Kim, ODOT Area Manager to discuss topics of shared interests, including the draft principles of coordination and collaboration.

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**Attachments**

Revised Principles

**Suggested Principles for Discussion with Jason Tell, ODOT Region 1 Manager**  
 (ODOT additions are underlined; deletions are shown with ~~strike through~~)

<p><b><u>Principle 1:</u></b>          Recognize Pacific Highway’s function as a principal arterial, but ensure the community’s needs are met for:</p> <ul style="list-style-type: none"> <li>▪ business and employment opportunities</li> <li>▪ access to alternative transportation modes</li> <li>▪ improved appearance, environmental quality and livability</li> <li>▪ <u>safe and efficient transportation system</u></li> </ul>	<p><b><u>Implementing Items:</u></b></p> <ul style="list-style-type: none"> <li>▪ access management and intersection improvements</li> <li>▪ exceptions, when needed, to ODOT specifications and design standards</li> <li>▪ local street connectivity, including frontage and backage roads</li> <li>▪ pedestrian, bike, and transit improvements</li> <li>▪ construction/installation of landscaped medians and allowed u-turns; tree planting and other landscaping; water quality facilities; bus queuing lanes; improved bus stops and park-and-rides</li> </ul>
<p><b><u>Principle 2:</u></b>          Develop High Capacity Transit (HCT) as a major travel mode within the Pacific Highway 99W Corridor.</p>	<p><b><u>Implementing Items:</u></b></p> <ul style="list-style-type: none"> <li>▪ close and supportive coordination in planning for and implementing HCT within the Pacific Hwy 99W Corridor</li> </ul>
<p><b><u>Principle 3:</u></b>          Acquire funding from multiple sources to invest in state and local transportation facilities <del>within</del> <u>that serve</u> Tigard.</p>	<p><b><u>Implementing Actions:</u></b></p> <ul style="list-style-type: none"> <li>▪ Identify and acquire funding from local, regional, state, and national sources to invest in state and local transportation facilities within and adjacent to Tigard.</li> <li>▪ <u>Identify and prioritize a list of projects for the OR99W corridor.</u></li> </ul>
<p><b><u>Principle 4:</u></b>          Invest in capital improvements and traffic management measures for state <i>and</i> local roads and streets to reduce congestion, improve safety and <u>operation capacity</u> for <i>both</i> systems.</p>	<p><b><u>Implementing Items:</u></b></p> <ul style="list-style-type: none"> <li>▪ street connectivity improvements</li> <li>▪ access management program</li> <li>▪ signal modernization</li> <li>▪ traffic information systems</li> <li>▪ pedestrian, bike and transit improvements</li> <li>▪ agreement (with funding) for Tigard to assume jurisdiction of Hall Boulevard</li> </ul>
<p><b><u>Principle 5:</u></b>          Develop a transportation efficient and economically viable urban land use pattern within the Pacific Hwy 99W Corridor by integrating land use and transportation planning and capital investments.</p>	<p><b><u>Implementing Actions:</u></b></p> <ul style="list-style-type: none"> <li>▪ Adopt HCT supportive land use designations for the Pacific Highway Corridor.</li> <li>▪ <u>Identify and address barriers to facilitate</u> higher value urban development in the corridor.</li> <li>▪ Coordinate and prioritize infrastructure investments in the Pacific Hwy Corridor.</li> <li>▪ Reconcile ODOT’s facility management needs with Tigard’s land use aspirations.</li> </ul>

**AIS-488**

**Item #: B.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** 15 Minutes

**Agenda Title:** FY 2011-12 Master Fees & Charges Schedule

**Prepared For:** Toby LaFrance

**Submitted By:**

Carissa Collins  
Financial and  
Information  
Services

**Item Type:** Update, Discussion, Direct Staff

**Meeting Type:**

Council Business  
Mtg - Study Sess.

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**ISSUE**

As part of the budget process, council has the opportunity to review and discuss items associated with department budgets, the capital improvement program and state-shared revenues during Budget Committee meetings. Council has yet to evaluate the fees and charges that have been presented in the FY 2012 Approved Budget.

**STAFF RECOMMENDATION / ACTION REQUEST**

Staff requests that council review the proposed FY 2012 Master Fees & Charges Schedule and to let staff know if they require more information prior to the June 14, 2011 Business Meeting.

**KEY FACTS AND INFORMATION SUMMARY**

Every fiscal year, a revised Master Fees & Charges Schedule is submitted to Council for approval along with the citywide operating budget. The attached schedule includes fee updates for the following departments: Library, Police, Policy and Administration, Community Development, and Public Works. Included in the schedule are phased-in fees such as water, and street maintenance. These phased-in fees have already been approved by City Council and are included in the FY 2012 Approved Budget.

In addition to the Master Fees and Charges Schedule is a summary of changes proposed by departments. Some of the proposed updates include the following:

- Fees that are adjusted annually based on cost indices for labor and construction.
- Fees established by Washington County or Clean Water Services (CWS) and administered by the city including the Transportation Development Tax (TDT), Traffic Impact Fee (TIF), or sanitary sewer and storm water charges.

Any fee change that is based on prior Council action, such as phase-in increases, or changes based on economic indicies that have been approved by prior Council action have been included in the Approved FY 2012 Budget. Any new fee that has not come to Council for consideration have not been included in the Approved FY 2012 Budget.

After evaluating the proposed FY 2012 Master Fees and Charges Schedule, staff would like to know if council requires furthur information regarding the proposed fees prior to the June 14, 2011 Business Meeting.

**OTHER ALTERNATIVES**

Not to approve the FY 2012 Master Fees & Charges Schedule.

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

Goal #6: Financial Stability

**DATES OF PREVIOUS COUNCIL CONSIDERATION**

N/A

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**Fiscal Impact**

**Cost:** \$0.00

**Budgeted (yes or no):** Yes

**Where Budgeted (department/program):** All Departments

**Additional Fiscal Notes:**

It is standard practice to include fee changes that are based on prior Council decisions in the Approved Budget and they have for Fiscal Year 2012. Similarly, fee changes that have not come before Council for prior decisions have not been included in the revenues supporting the Approved Budget for FY 2012. The fiscal impact for all new fees and charges that have been proposed are minimal and will generate less than \$10,000 in revenue for the city and have not been anticipated as part of the Approved FY 2012 Budget. Revenues generated by those fees that are changed based on TMC and previously approved resolutions and ordinances, or are set by other agencies were anticipated in the FY 2012 budget.

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**Attachments**

Summary of Changes to FY 2012 Master Fees & Charges

FY 2012 Master Fees and Charges with Redlines

FY 2012 Proposed Master Fees & Charges Summary of Changes Report

Exhibit B

Department	Fee Description	Schedule Page(s)	Basis of Change	Authority	Included in Budget? (Y/N)
City Management	<u>Claims Application Fee</u>	2	Language revised to provide clarity for processing a claim.	TMC 1.21.050 & TMC 1.22 Ord. 08-09	n/a
	<u>City Management Fees/Charges Effective Date</u>	2	Since the last update of the fees and charges schedule, the effective dates have been revised to correct the Scribner's error.	Dept. Policy	n/a
Citywide	<u>2GB Flash Drives</u>	3	New fee implemented in order to recover city costs for public requests for records. Flash drives hold more information than traditional CD's.	Dept. Policy	N
	<u>Microprints</u>	3	Microprints have been replaced by microfiche and microfilm. Therefore, this fee has been eliminated.	Dept. Policy	N
Financial & Information Service	<u>Business License (Annual Fee)</u>	4	Fee adopted by council and adjusted annually in conjunction with the Portland Consumer Price Index (CPI) at 1.25%.	Ord. 88-13	Y
Library	<u>Public Copier and Printer Charges (color pages)</u>	6	New fee implemented in order to recover city costs for printing in color.	Dept. Policy	N
Community Development	<u>Planning Fees/Charges</u>	17-23	Adjustment tied to Seattle Construction Cost Index (CCI) which is 0.9% as of May 2011.	Res. 03-59	Y
	<u>Colocation (of Wireless Communication Facilities)</u>	17	Although applications have been received, due to oversight, fees has not been charged for this service.	TMC 18.798	N
	<u>GIS Maps</u>	21	Last fee was reviewed in 2002. Fees adjusted in order to recover printing costs.	Dept. Policy	N
	<u>Tigard Transportation System Plan Document</u>	22	Fee increased to reflect city cost to reproduce a bound color paper copy of the document	Dept. Policy	N
	<u>Fee in Lieu of Shared Open Space (MU-CBD zone only)</u>	23	Fee in Lieu is determined by multiplying the current Washington County Assessor determined real market value of the land (not improvements) by 10%.	TDC 18.610.030. F.2.b. (3)	N
	<u>Sanitary Sewer Connection Fee</u>	23	This fee is determined by Cleanwater Services. The City of Tigard receives 3.99% of fees collected.	Clean Water Services	Y
	<u>Park System Development Charges (SDC)</u>	33-35	Charges are adjusted annually based on an average of the Seattle Construction Cost Index (CCI) and the changes in the cost of land acquisitions. Fees are decreased by 15% based on these indices.	Res.01-12	Y
	<u>Traffic Impact Fee (TIF)</u>	36	Fees adjusted 6% annually per Washington County. As of July 1, 2009, this fee was replaced by the Transportation Development Tax (TDT)	Washington County	Y
Public Works	<u>Countywide Transportation Development Tax (TDT)</u>	37	A voter approved fee that went into effect July 1, 2009. Rates are adjusted annually by the county.	Washington County	Y
	<u>Parks Shelter Rental Fees (2 hour minimum)</u>	24	Fees adjusted to recover costs for providing service.	Dept. Policy	N
	<u>Right-of-Way (ROW) Permit Fee</u>	25	Does not include a fee increase. However, due to oversight, fee was omitted from Master Fees & Charges Schedule.	Dept. Policy	N
	<u>Street Maintenance Fee</u>	25	Fee is adjusted annually tied to a two year rolling average of the combined Oregon Composite Construction Cost and the national labor cost indices. The total combined indices can be no lower than 2% and no higher than 7%. Result of index applied for FY 2012 is 4%.	TMC 18.765	Y

# City of Tigard, Oregon

## Master Fees & Charges Schedule

Fiscal Year 2011-2012



**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>CITY ADMINISTRATION-MANAGEMENT</b>			
	<b>Claims Application Fee (TMC 1.21.050 &amp; 1.22; Ord. 08-09)</b>	\$1,000.00 /deposit*	<del>11/28/2000</del>
	*Application Claim fee shall be actual cost incurred by the city to process application claim.		6/24/2008
	Any funds remaining from the deposit after the application claim has been processed will be refunded to the applicant claimant, and applicant shall be responsible for any additional costs incurred.		
	Payment of any costs exceeding the amount of the deposit is required prior to issuance of a final decision by the city on the claim.		
 <b>ADMINISTRATIVE SERVICES</b>			
	<b><u>Municipal Court Fees</u></b>		
	Civil Compromise	\$150.00	<del>4/10/2003</del> 8/28/2008
	Traffic School and Compliance Program Fee		
	Criminal	\$150.00	<del>4/10/2003</del> 8/28/2008
	Juvenile non-traffic	\$75.00	<del>4/10/2003</del> 8/28/2008
	Traffic School	Equal to the relevant fine provided for the violation in the Violations Bureau Fine Schedule	<del>5/25/2006</del> 8/28/2008
	Traffic School Setover	\$20.00	<del>4/10/2003</del> 8/28/2008
	License Reinstatement	\$15.00	<del>4/10/2003</del> 8/28/2008
	Payment Agreement Administrative Fee	\$15.00	<del>4/10/2003</del> 8/28/2008
	Overdue Payment Letter	\$10.00	<del>4/10/2003</del> 8/28/2008
	Show Cause Hearings - Court Costs		<del>4/10/2003</del> 8/28/2008
	Non-compliance	\$25.00	
	Non-payment - fees paid prior to hearing	No Fee	
	Warrant Fee	\$50.00	<del>4/10/2003</del> 8/28/2008
 <b>CITY MANAGEMENT</b>			
	<b><u>Public Assembly</u></b>		8/25/1970
	Application Fee		
	Persons Reasonably Anticipated		
	1,000 to 2,499	\$100.00	
	2,500 to 4,999	\$150.00	
	5,000 to 9,999	\$500.00	
	10,000 to 49,999	\$1,000.00	
	50,000 and over	\$1,500.00	
 <b>ADMINISTRATIVE SERVICES/RECORDS</b>			
	<b><u>Tigard Municipal Code (TMC) (Titles 1 - 17) or TMC/CDC (Titles 1-18)</u></b>		
	Compact Disk (CD)	\$10.00	7/1/2009

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
CITYWIDE			
	<u>Attorney Time</u>	Current attorney billing rate	1999
	<u>2GB Flash Drives</u>	<b>\$11.00 each</b>	<b>7/1/2011</b>
	<u>Audio/Video Tapes</u>	\$6.00	7/1/2003
	<u>Computer/Compact Disks</u>	\$10.00	7/1/2006
	<u>DVD/VHS</u>	\$12.00	7/1/2006
	<u>Faxes for Public</u>	\$2.00 /first page \$1.00 /each additional page	7/1/2007
	<u>Microfiche Sheet Copies</u>	\$1.00 /sheet up to 50 sheets plus staff time	7/1/2007
	<u>Microprints</u>	<del>\$0.25 /8-1/2 x 11 page</del> <del>\$1.00 /11 x 17 page</del>	<del>2009</del> <del>7/1/2009</del>
	<u>Microfilm/Microfiche &amp; Photocopies</u>		
	8-1/2 x 11	\$0.25 /page	1999
	11 x 14	\$0.50 /page	1999
	11 x 17	\$1.00 /page	7/1/2005
	17 x 24	\$1.50 /page	7/1/2007
	36 x 36	\$2.50 /page	7/1/2007
	<u>Nomination Petition Fee</u>	\$50.00	7/1/2008
	<u>Oversized Copies</u>	\$2.50 /page	7/1/2011
	<u>Photographs</u>	Actual Cost	1999
	<u>Recording of Documents</u>	Actual Cost	1999
	<u>Research Fee</u>	Staff hourly rate + Citywide Overhead Fee + Materials	2/7/2002

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>FINANCIAL &amp; INFORMATION SERVICES</b>			
	<u>Assessment Assumption</u>	\$50.00	4/22/1985
	<u>Budget Document</u>		
	Compact Disk (CD)	\$10.00	7/1/2007
	Paper	\$50.00	
	<u>Business License</u>		
	Annual Fee*		
	0-2 employees	<del>\$79.50</del> <b>\$80.50</b> /per year	7/1/2009 2011
	3-5 employees	<del>\$106.00</del> <b>\$107.00</b> /per year	7/1/2009 2011
	6-10 employees	<del>\$347.00</del> <b>\$351.00</b> /per year	7/1/2009 2011
	11-50 employees	<del>\$571.00</del> <b>\$578.00</b> /per year	7/1/2009 2011
	51 or more employees	<del>\$776.00</del> <b>\$785.00</b> /per year	7/1/2009 2011
	* Adjusted annually in conjunction with the Portland Consumer Price Index (CPI)		
	Pro-Rated Fee Schedule		
	Issued January 1 - June 30	See Fee Schedule above	
	Issued July 1 - December 31	1/2 the annual fee	
	Temporary License	\$25.00	1/1/2008
	Duplicate License/Change of Ownership Fee		
	Change in ownership or name only	\$10.00	1/1/2008
	Copy/replacement of license	\$10.00	1/1/2008
	Delinquency Charge		
	Whenever the business license fee is not paid on or before the delinquent date, a delinquency charge equal to ten percent (10%) of the original business license fee due and payable shall be added for each calendar month or fraction thereof that the fee remains unpaid. The total amount of the delinquency penalty for any business license year shall not exceed one hundred percent (100%) of the business license fee due and payable for such year.		
	<u>Comprehensive Annual Financial Report</u>	\$0.00	2/7/2002
	<u>Franchise Fee (See TMC 15.06 &amp; ROW Usage Fee Below)</u>		
	Cable TV	5% of gross revenue	1/26/1999
	Electricity	3.5% of gross revenue	2/23/1993

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	Natural Gas	5% of gross revenue	7/13/2004
	Telecommunication <i>(Includes telecommunication utilities, long distance providers, private networks and competitive access providers)</i>	5% of gross revenue or \$2.90/linear foot of installation in right-of-way, whichever is greater	8/8/2006
	Telecommunication Franchise Application Fee	\$2,000.00	1/23/2001
	Solid Waste Disposal (See TMC 11.04)	4% of gross revenue	1/1/2006
	<b><u>Lien Search Fee</u></b>	\$35.00	2/1/2004
	<b><u>Overhead Fee</u></b>		
	Added to charges for property damage/repair	10% of total charge	
	<b><u>Passport Execution Fee</u></b>	\$25.00	2/1/2008
	<b><u>Passport Photographs Fee</u></b>	\$10.00	4/1/2007
	<b><u>Returned Check Fee</u></b>	\$20.00	10/9/2001
	<b><u>Right-of-Way Usage Fee (See TMC 15.06 and Franchise Fee Above)</u></b>		9/8/2006
	Electricity	3.5% of gross revenue or \$2.90/linear foot of installation in right-of-way, whichever is greater	
	Natural Gas	5% of gross revenue or \$2.90/linear foot of installation in right-of-way, whichever is greater	
	Sanitary Sewer	5% of gross revenue or \$2.90/linear foot of installation in right-of-way, whichever is greater	
	Telecommunication	5% of gross revenue or \$2.90/linear foot of installation in right-of-way, whichever is greater	
	Water	5% of gross revenue or \$2.90/linear foot of installation in right-of-way, whichever is greater	

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>LIBRARY</b>			
	<u>Collection Agency Fee</u>	\$10.00	7/1/2007
	<u>Disk or CD (Blank)</u>	\$1.00	2/7/2002
	<u>Headphones</u>	\$2.00	7/1/2007
	<u>Lost Items</u>	Replacement cost + \$5.00 processing fee	7/1/2003
	<u>Overdue Items</u>		
	Daily Charge (All Items except DVDs & Blu-Rays)	\$0.15 /item	7/1/2003
	Daily Charge (DVDs & Blu-Rays)	\$1.00 /item	7/1/2005
	Maximum Charge	\$5.00 /item	7/1/2005
	<u>Public Copier and Printer Charges</u>		
		\$0.10 /page for black & white	2001
		<b>\$0.50 / page for color</b>	<b>7/1/2011</b>
	<u>Replacement Library Card Fee</u>	\$1.00	7/1/2007

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>POLICE</b>			
	<b><u>Alarm Permits</u></b>		
	Burglary or Robbery	\$25.00	7/1/2009
	<b><u>Failure to Obtain or Renew Alarm Permit Fee</u></b>	\$25.00	6/28/1982
	<b><u>False Alarm Charge</u></b>		
	3rd false alarm	\$50.00	7/1/2003
	4th false alarm	\$75.00	
	5th false alarm	\$100.00	
	6 or more false alarms	\$150.00	
	<b><u>Law Enforcement Officers Safety Act Qualification Fee</u></b>	\$25.00	7/1/2006
	<b><u>Liquor License</u></b>	\$25.00	7/10/2001
	<b><u>Police Services Fees</u></b>		
	DVD and VHS Evidence Copies	Actual staff costs plus materials	7/1/2005
	Police Documents/Reports	\$10.00 /for the first 15 pages and \$0.30 /page thereafter	7/1/2008
	Police Digital Photo CD Copies	\$10.00 /CD	7/1/2005
	Police Photograph Copies	\$10.00 /roll	7/1/2003
	<b><u>Property Forfeiture for Criminal Activity</u></b>	Varies	5/25/1999
	<b><u>Second Hand Dealers and Transient Merchant License</u></b>		
	Occasional	\$40.00	7/1/2010
	Full-Time	\$100.00	7/1/2010
	Reporting Forms	\$0.80 each	7/1/2010
	<b><u>Vehicle Release Fee</u></b>	\$100.00	7/1/2007

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>COMMUNITY DEVELOPMENT - BUILDING</b>			
	<b><u>Building Permit Fees</u></b>		
	<b>(Commercial)</b>		10/1/2009
	<u>Total Valuation:</u>		
	\$0.00 to \$500.00	\$51.09 /minimum	
	\$500.01 to \$2,000.00	\$51.09 /for the first \$500 and \$2.69 /for each additional \$100 or fraction thereof	
	\$2,000.01 to \$25,000.00	\$91.44 /for the first \$2,000 and \$10.76 /for each additional \$1,000 or fraction thereof	
	\$25,000.01 to \$50,000.00	\$338.92 /for the first \$25,000 and \$8.06 /for each additional \$1,000 or fraction thereof	
	\$50,000.01 to \$100,000.00	\$540.42 /for the first \$50,000 and \$5.38 /for each additional \$1,000 or fraction thereof	
	\$100,000.01 and over	\$809.42 /for the first \$100,000 and \$4.49 /for each additional \$1,000 or fraction thereof	
	<b>(Single Family &amp; Multi-Family)</b>		10/1/2009
	<u>Total Valuation:</u>		
	\$0.00 to \$2,000.00	\$66.25 /minimum	
	\$2,000.01 to \$25,000.00	\$66.25 /for the first \$2,000 and \$11.48 /for each additional \$1,000 or fraction thereof	
	\$25,000.01 to \$50,000.00	\$330.29 /for the first \$25,000 and \$8.75 /for each additional \$1,000 or fraction thereof	
	\$50,000.01 to \$100,000.00	\$549.04 /for the first \$50,000 and \$6.25 /for each additional \$1,000 or fraction thereof	
	\$100,000.01 to \$250,000.00	\$861.54 /for the first \$100,000 and \$4.46 /for each additional \$1,000 or fraction thereof	
	\$250,000.01 to \$500,000.00	\$1,530.54 /for the first \$250,000 and \$4.42 /for each additional \$1,000 or fraction thereof	
	\$500,000.01 to \$1,000,000.00	\$2,635.54 /for the first \$500,000 and	

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
		\$4.10 /for each additional \$1,000 or fraction thereof	
	\$1,000,000.01 to \$2,000,000.00	\$4,685.54 /for the first \$1,000,000 and \$3.33 /for each additional \$1,000 or fraction thereof	
	\$2,000,000.01 and over	\$8,015.54 /for the first \$2,000,000 and \$3.18 /for each additional \$1,000 or fraction thereof	
	<b><u>(Site Work/Grading)</u></b>		10/1/2009
	<u>Total Valuation:</u>		
	\$0.00 to \$500.00	\$51.09 /minimum	
	\$500.01 to \$2,000.00	\$51.09 /for the first \$500 and \$2.69 /for each additional \$100 or fraction thereof	
	\$2,000.01 to \$25,000.00	\$91.44 /for the first \$2,000 and \$10.76 /for each additional \$1,000 or fraction thereof	
	\$25,000.01 to \$50,000.00	\$338.92 /for the first \$25,000 and \$8.06 /for each additional \$1,000 or fraction thereof	
	\$50,000.01 to \$100,000.00	\$540.42 /for the first \$50,000 and \$5.38 /for each additional \$1,000 or fraction thereof	
	\$100,000.01 and over	\$809.42 /for the first \$100,000 and \$4.49 /for each additional \$1,000 or fraction thereof	
	<b><u>(Single Family, Multi-Family, Commercial, &amp; Industrial Building Permit Fee for Additions, Alterations, and Demolitions)</u></b>		10/1/2009
	<u>Total Valuation:</u>		
	\$0.00 to \$500.00	\$53.27 /minimum	
	\$500.01 to \$2,000.00	\$53.27 /for the first \$500 and \$3.39 /for each additional \$100 or fraction thereof	
	\$2,000.01 to \$25,000.00	\$104.12 /for the first \$2,000 and \$15.21 /for each additional \$1,000 or fraction thereof	
	\$25,000.01 to \$50,000.00	\$453.95 /for the first \$25,000 and \$11.02 /for each additional \$1,000 or fraction thereof	
	\$50,000.01 to \$100,000.00	\$729.45 /for the first \$50,000 and	

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
		\$7.53 /for each additional \$1,000 or fraction thereof	
	\$100,000.01 to \$500,000.00	\$1,105.95 /for the first \$100,000 and \$6.04 /for each additional \$1,000 or fraction thereof	
	\$500,000.01 to \$1,000,000.00	\$3,521.95 /for the first \$500,000 and \$5.09 /for each additional \$1,000 or fraction thereof	
	\$1,000,000.01 and over	\$6,066.95 /for the first \$1,000,000 and \$3.39 /for each additional \$1,000 or fraction thereof	
	<b><u>Building Plan Review Fee</u></b>	65% of base building permit fee	9/26/2000
	<b><u>Deferred Submittals</u></b>	\$200.00 minimum fee	9/24/2002
	Plan Review	65% of building permit fee based on valuation of the particular portion or portions of the project.	
	<b><u>Electrical Fees</u></b>		10/1/2009
	New residential, single or multi-family per dwelling unit; service included:		
	1000 square feet or less	\$168.54	
	Each additional 500 square feet or portion thereof	\$33.92	
	Limited energy, residential or multi-family (with above sq ft)	\$75.00	
	Each manufactured home or modular dwelling service or feeder	\$67.84	
	Services or feeders; installation, alterations or relocation:		
	200 amps or less	\$100.70	
	201 amps to 400 amps	\$133.56	
	401 amps to 600 amps	\$200.34	
	601 amps to 1000 amps	\$301.04	
	Over 1000 amps or volts	\$552.26	
	Reconnect only	\$67.84	
	Temporary services or feeders; installation, alteration or relocation:		
	200 amps or less	\$59.36	
	201 amps to 400 amps	\$125.08	
	401 amps to 600 amps	\$168.54	
	Branch circuits; new, alteration or extension per panel:		
	With purchase of service or feeder - each branch circuit	\$7.42	
	Without purchase of service or feeder First Branch Circuit	\$56.18	

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	Each addit. Branch circuit	\$7.42	
	Miscellaneous (service or feeder not included):		
	Each pump or irrigation circuit	\$67.84	
	Each sign or outline lighting	\$67.84	
	Signal circuit(s) or a limited energy panel, alteration or extension	\$75.00	
	Each additional inspection over the allowable in any of the above		
	Per Inspection	\$66.25 /hour (min 1 hour)	
	Per Hour	\$66.25 /hour (min 1 hour)	
	Industrial Plant Inspection	\$78.18 /hour (min 1 hour)	
	Electrical permit plan review fee	25% of the electrical permit fee	
	<b><u>Fire Life Safety Plan Review (Commercial Only)</u></b>	40% of base building permit fee	9/26/2000
	<b><u>Manufactured Dwelling Installation</u></b>	\$305.50	9/24/2002
	<b><u>Manufactured Dwelling and Mobile Home Parks, Recreation Camps, and Organizational Camps</u></b>	Per OAR	9/24/2002
	<b><u>Mechanical Fees (1 &amp; 2 Family Dwellings for New, Additions, or Alterations)</u></b>		10/1/2009
	Heating/Cooling:		
	Air conditioning	\$46.75	
	Furnace 100,000 BTU (ducts/vents)	\$46.75	
	Furnace 100,000+ BTU (ducts/vents)	\$54.91	
	Heat pump	\$61.06	
	Duct work	\$23.32	
	Hydronic hot water system	\$23.32	
	Residential boiler (radiator or hydronic)	\$23.32	
	Unit heaters (fuel-type, not electric), in-wall, in duct, suspended, etc.	\$46.75	
	Flue/vent for any of above	\$23.32	
	Other	\$23.32	
	Other fuel appliances:		
	Water heater	\$23.32	
	Gas fireplace	\$33.39	
	Flue/vent for water heater or gas fireplace	\$23.32	
	Log lighter (gas)	\$23.32	
	Wood/pellet stove	\$33.39	
	Wood fireplace/insert	\$23.32	

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	Chimney/liner/flue/vent	\$23.32	
	Other	\$23.32	
	Environmental exhaust and ventilation:		
	Range hood/other kitchen equipment	\$33.39	
	Clothes dryer exhaust	\$33.39	
	Single-duct exhaust (bathrooms, toilet compartments, utility rooms)	\$23.32	
	Attic/crawlspace fans	\$23.32	
	Other	\$23.32	
	Fuel piping:		
	First four	\$14.15	
	Each additional	\$4.03	
	Minimum permit fee	\$90.00	
	Mechanical plan review fee	25% of Permit Fee	
	<b><u>Mechanical Permit Fees</u></b>		10/1/2009
	<b>(Commercial and Multi-family)</b>		
	<u>Total Valuation:</u>		
	\$0.00 to \$500.00	\$69.06 /minimum	
	\$500.01 to \$5,000.00	\$69.06 /for the first \$500 and \$3.07 /for each additional \$100 or fraction thereof	
	\$5,000.01 to \$10,000.00	\$207.21 /for the first \$5,000 and \$2.81 /for each additional \$100 or fraction thereof	
	\$10,000.01 to \$50,000.00	\$347.71 /for the first \$10,000 and \$2.54 /for each additional \$100 or fraction thereof	
	\$50,000.01 to \$100,000.00	\$1,363.71 /for the first \$50,000 and \$2.49 /for each additional \$100 or fraction thereof	
	\$100,000.01 and over	\$2,608.71 /for the first \$100,000 and \$2.92 /for each additional \$100 or fraction thereof	
	Plan Review	25% of permit fee	9/24/2002
	<b><u>Phase Permitting</u></b>	\$200.00	9/24/2002
	Plan Review	10% of total project building permit fee not to exceed \$1,500 for each phase	
	<b><u>Plumbing Fees</u></b>		10/1/2009
	<b>(Commercial, Industrial, Residential, &amp; Multi-Family)</b>		

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	<b>New One &amp; Two Family Dwellings</b>		
	1 bath	\$312.70	
	2 bath	\$437.78	
	3 bath	\$500.32	
	Each additional bath/kitchen fixture	\$25.02	
	<b>Site Utilities</b>		
	Catch basin or area drain	\$18.76	
	Drywell, leach line, or trench drain	\$18.76	
	Footing drain, first 100'	\$50.03	
	Each additional 100' or part thereof (footing drain)	\$37.52	
	Manufactured home utilities	\$50.03	
	Manholes	\$18.76	
	Rain drain connector	\$18.76	
	Sanitary sewer, first 100'	\$62.54	
	Storm sewer, first 100'	\$62.54	
	Water service, first 100'	\$62.54	
	Each additional 100' or part thereof (sanitary, storm, water service)	\$37.52	
	<b>Fixture or Item</b>		
	Backflow preventer	\$31.27	
	Backwater valve	\$12.51	
	Clothes washer	\$25.02	
	Dishwasher	\$25.02	
	Drinking fountain	\$25.02	
	Ejectors/sump	\$25.02	
	Expansion tank	\$12.51	
	Fixture/sewer cap	\$25.02	
	Floor drain/floor sink/hub	\$25.02	
	Garbage disposal	\$25.02	
	Hose bib	\$25.02	
	Ice maker	\$12.51	
	Interceptor/grease trap	\$25.02	
	Medical gas (value: \$ )	<i>see table</i>	
	Primer	\$12.51	
	Roof drain (commercial)	\$12.51	
	Sink/basin/lavatory	\$25.02	
	Solar units (potable water)	\$62.54	
	Tub/shower/shower pan	\$12.51	
	Urinal	\$25.02	
	Water closet	\$25.02	
	Water heater	\$37.52	

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	Water Piping/DWV	\$56.29	
	Other:	\$25.02	
	<b>Minimum permit fee</b>	\$72.50	
	<b>Plumbing plan review</b>	25% of permit fee	
	<b>Medical Gas Systems</b>		9/24/2002
	<u>Total Valuation:</u>		
	\$1 - \$5,000	\$72.50 /minimum	
	\$5,001 - \$10,000	\$72.50 /for the first \$5,000 and \$1.52 /for each additional \$100 or fraction thereof, to and including \$10,000.	
	\$10,001 - \$25,000	\$148.50 /for the first \$10,000 and \$1.54 /for each additional \$100 or fraction thereof, to and including \$25,000.	
	\$25,001 - \$50,000	\$379.50 /for the first \$25,000 and \$1.45 /for each additional \$100 or fraction thereof, to and including \$50,000.	
	\$50,001 and up	\$742.00 /for the first \$50,000 and \$1.20 /for each additional \$100 or fraction thereof.	
	<b><u>Residential Fire Suppression Systems Permit</u></b>		10/1/2009
	Multipurpose or Continuous Loop System		
	<u>Square Footage:</u>		
	0 to 2,000	\$121.90	
	2,001 to 3,600	\$169.60	
	3,601 to 7,200	\$233.20	
	7,201 and greater	\$327.54	
	Stand Alone System		
	<u>Square Footage:</u>		
	0 to 2,000	\$198.75	
	2,001 to 3,600	\$246.45	
	3,601 to 7,200	\$310.05	
	7,201 and greater	\$404.39	
	<b><u>Commercial Fire Suppression Systems Permit</u></b>		10/1/2009
	<i>Based on valuation-Use New Commercial Building Fee Table</i>		

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	<b><u>Restricted Energy</u></b>		6/27/2000
	Residential Energy Use, for all systems combined	\$75.00	
	Commercial Energy Use, for each system	\$75.00	
	<b><u>Sanitary Sewer Inspection Fee</u></b>		6/6/2000
	Residential	\$35.00	
	Commercial	\$45.00	
	Industrial	\$75.00	
	<b><u>Miscellaneous Fees</u></b>		
	Address Change	\$50.00	7/1/2007
	Fee paid inspections for residential structures pursuant to Title 14, Chapter 16		6/27/2000
	Single & Two Family Dwellings	\$100.00	
	Apartment Houses & Social Care Facilities	\$160.00 /plus \$7 for each dwelling unit in excess of 3	
	Hotels	\$160.00 /plus \$5 for each dwelling unit in excess of 5	
	<b><u>Information Processing &amp; Archiving (IPA) Fee</u></b>	\$2.00 /sheet larger than 11" X 17"	7/1/2010
		\$0.50 /sheet 11" X 17" and smaller	
	<b><u>Investigation Fee</u></b>	Additional fee to equal to the amount of the permit	7/1/2007
	<b><u>Phased Occupancy</u></b>	\$200.00	6/27/2000
	<b><u>Permit or Plan Review Extension</u></b>	\$90.00	
	<b><u>Temporary Occupancy</u></b>	\$90.00	
	<b><u>Other Inspections &amp; Fees:</u></b>		
	1. Inspections outside of normal business hours (minimum charge - 2 hours)	\$90.00 per hour	10/1/2009
	2. Reinspection fees	\$90.00 per hour	10/1/2009
	3. Inspections for which no fee is specifically indicated (minimum charge: one-half hour)	\$90.00 per hour	10/1/2009
	4. Additional plan review required by changes, additions or revisions to plans (minimum charge: one-half hour)	\$90.00 per hour	10/1/2009

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>COMMUNITY DEVELOPMENT - DEVELOPMENT SERVICES ENGINEERING</b>			
	<b><u>Erosion Control Permit Fee</u></b>		10/29/2003
	(City receives none of this fee)		
	Less than \$50,000.00	\$26.00	
	\$50,000.00 to \$100,000.00	\$40.00	
	More than \$100,000.00	\$40.00 /+\$24.00 for each additional \$100,000 or fraction thereof	
	<b><u>Erosion Control Plan Check Fee</u></b>	65% of inspection fee	10/29/2003
	(City receives 50% of fee)		
	<b><u>Fee In Lieu Of Bicycle Striping</u></b>		7/1/2004
	8-inch white stripe	\$2.50 /linear foot of frontage	
	Bike lane legends	\$175.00 /each	
	Directional mini-arrows	\$100.00 /each	
	Mono-directional reflective markers	\$4.00 /each	
	<b><u>Fee In Lieu Of Undergrounding</u></b>	\$35.00 /lineal feet of frontage	10/29/2003
	<b><u>Public Facility Improvement Permit</u></b>	2% plan review plus	7/1/2009
		5% of estimated cost of public improvement with a \$300 minimum	7/1/2005
	<b><u>Streetlight Energy &amp; Maintenance Fee</u></b>	Based upon PGE Sch #91 Opt, "B" for the first two years costs	2000
	<b><u>Traffic/Pedestrian Signs</u></b>	Cost of materials and labor	2/7/2002

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Revised Fee or Charge	Effective Date
<b>COMMUNITY DEVELOPMENT - DEVELOPMENT SERVICES PLANNING</b>				
	<u>Accessory Residential Units</u>	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	<u>Annexation</u> (As of July 1, 2006 a moratorium on this fee was in effect, per Resolution <del>08-12</del> 11-08, through February <del>2009</del> 2012)	<del>\$2,750.00</del>	\$2,775.00	7/1/ <del>2010</del> 2011
	<u>Appeal</u>			
	Director's Decision (Type II) to Hearings Officer	<del>\$250.00</del>	\$252.00	7/1/ <del>2003</del> 2011
	Expedited Review (Deposit)	<del>\$300.00</del>	\$303.00	7/1/ <del>2003</del> 2011
	Hearings Referee	<del>\$500.00</del>	\$505.00	7/1/ <del>2003</del> 2011
	Planning Commission/Hearing's Officer to City Council	<del>\$2,765.00</del>	\$2,790.00	7/1/ <del>2010</del> 2011
	<u>Approval Extension</u>	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	<u>Colocation (of Wireless Communication Facilities)</u>	\$52.00		7/1/2011
	<u>Conditional Use</u>			
	Initial	<del>\$5,474.00</del>	\$5,523.00	7/1/ <del>2010</del> 2011
	Major Modification	<del>\$5,474.00</del>	\$5,523.00	7/1/ <del>2010</del> 2011
	Minor Modification	<del>\$599.00</del>	\$605.00	7/1/ <del>2010</del> 2011
	<u>Design Evaluation Team (DET)</u>			
	<u>Recommendation (deposit)</u>	<del>\$1,529.00</del>	\$1,542.00	7/1/ <del>2010</del> 2011
	<u>Development Code Provision Review</u>			
	Single-Family Building Plan	<del>\$73.00</del>	\$75.00	7/1/ <del>2010</del> 2011
	Commercial/Industrial/Institution	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	Commercial/Industrial/Institution– Tenant Improvements in Existing Development			
	Project Valuation up to \$4,999	\$0.00	\$0.00	7/1/2010
	Project Valuation \$5,000 - \$74,999	<del>\$73.00</del>	\$75.00	7/1/ <del>2010</del> 2011
	Project Valuation \$75,000 - \$149,999	<del>\$184.00</del>	\$185.00	7/1/ <del>2010</del> 2011
	Project Valuation \$150,000 and more	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	<u>Downtown Review</u>			
	Downtown Review Compliance Letter	<del>\$599.00</del>	\$605.00	7/1/ <del>2010</del> 2011
	Downtown Design Administrative Review			
	Under \$1,000,000.00	<del>\$1,401.00</del>	\$1,414.00	7/1/ <del>2010</del> 2011
	\$1,000,000.00 and over (max fee \$25,000.00)	<del>\$5,401.00</del>	\$5,449.00	7/1/ <del>2010</del> 2011
	Downtown Design Review - Design Review Board	<del>\$2,843.00</del>	\$2,868.00	7/1/ <del>2010</del> 2011
			+ 0.004 x project valuation	7/1/ <del>2010</del> 2011
			+0.002 x project valuation	7/1/ <del>2010</del> 2011
			+ applicable Type II fee	7/1/ <del>2010</del> 2011

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Revised Fee or Charge	Effective Date
	<b><u>Hearing Postponement</u></b>	<del>\$334.00</del>	<b>\$337.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Historic Overlay/Review District</u></b>			
	Historic Overlay Designation	<del>\$4,281.00</del>	<b>\$4,320.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Removal Historic Overlay Designation	<del>\$4,281.00</del>	<b>\$4,320.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Exterior Alteration in Historic Overlay District	<del>\$642.00</del>	<b>\$647.00</b>	7/1/ <del>2010</del> <b>2011</b>
	New Construction in Historic Overlay District	<del>\$642.00</del>	<b>\$647.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Demolition in Historic Overlay District	<del>\$642.00</del>	<b>\$647.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Home Occupation Permit</u></b>			
	Type I	<del>\$101.00</del>	<b>\$102.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Type II	<del>\$599.00</del>	<b>\$605.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Interpretation of the Community Development Code</u></b>			
	Director's Interpretation	<del>\$599.00</del>	<b>\$605.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Appeal to City Council	<del>\$2,765.00</del>	<b>\$2,790.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Land Partition</u></b>			
	Residential and Non-Residential (3 Lots)	<del>\$3,962.00</del>	<b>\$3,997.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Residential and Non-Residential (2 Lots)	<del>\$3,295.00</del>	<b>\$3,325.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Expedited	<del>\$4,623.00</del>	<b>\$4,664.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Final Plat	<del>\$920.00</del>	<b>\$928.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Lot Line Adjustment</u></b>	<del>\$599.00</del>	<b>\$605.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Minor Modification to an Approved Plan</u></b>	<del>\$599.00</del>	<b>\$605.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Non-Conforming Use Confirmation</u></b>	<del>\$599.00</del>	<b>\$605.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Planned Development</u></b>			
	Conceptual Plan Review	<del>\$7,752.00</del>	<b>\$7,822.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Detailed Plan Review (Concurrent Hearing)	Applicable SDR Fee or Subdivision Fee +	<del>\$375.00</del> <b>\$379.00</b>	7/1/ <del>2010</del> <b>2011</b>
	Detailed Plan Review (Separate Hearing)	Applicable SDR Fee or Subdivision Fee +	<del>\$2,313.00</del> <b>\$2,334.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Pre-Application Conference</u></b>	<del>\$599.00</del>	<b>\$605.00</b>	7/1/ <del>2010</del> <b>2011</b>
	<b><u>Sensitive Lands Review</u></b>			
	With Excessive Slopes/Within Drainage Ways/ Within 100-Year Floodplain (Type I)	<del>\$599.00</del>	<b>\$605.00</b>	7/1/ <del>2010</del> <b>2011</b>
	With Excessive Slopes/Within Drainage Ways/ Within Wetlands (Type II)	<del>\$2,629.00</del>	<b>\$2,653.00</b>	7/1/ <del>2010</del> <b>2011</b>

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Revised Fee or Charge	Effective Date
	With Excessive Slopes/Within Drainage Ways/ Within Wetlands/Within the 100-Year Floodplain (Type III)	<del>\$2,841.00</del>	<del>\$2,867.00</del>	7/1/ <del>2010</del> 2011
<b><u>Sign Permit</u></b>				
	Existing and Modification to an Existing Sign (No Size Differential)	<del>\$164.00</del>	<del>\$165.00</del>	7/1/ <del>2010</del> 2011
	Temporary Sign (Per Sign)	\$52.00		7/1/2010
<b><u>Site Development Review &amp; Major Modification</u></b>				
	Under \$1,000,000.00	<del>\$4,645.00</del>	<del>\$4,687.00</del>	7/1/ <del>2010</del> 2011
	\$1,000,000.00/Over	<del>\$6,034.00</del>	<del>\$6,088.00</del>	7/1/ <del>2010</del> 2011
	Minor Modification	<del>\$599.00</del>	<del>\$605.00</del>	7/1/ <del>2010</del> 2011
		(+ \$6.00/per each \$10,000.00 over \$1,000,000.00)		
<b><u>Subdivision</u></b>				
	Preliminary Plat without Planned Development	<del>\$5,363.00</del>	<del>\$5,411.00</del> /+ \$93.00 per lot	7/1/ <del>2010</del> 2011
	Preliminary Plat with Planned Development	<del>\$7,422.00</del>	<del>\$7,488.00</del>	7/1/ <del>2010</del> 2011
	Expedited Preliminary Plat without Planned Development	<del>\$6,148.00</del>	<del>\$6,203.00</del> /+ \$93.00 per lot	7/1/ <del>2010</del> 2011
	Expedited Preliminary Plat with Planned Development	<del>\$7,422.00</del>	<del>\$7,488.00</del>	7/1/ <del>2010</del> 2011
	Final Plat	<del>\$1,855.00</del>	<del>\$1,872.00</del>	7/1/ <del>2010</del> 2011
	Plat Name Change	<del>\$335.00</del>	<del>\$338.00</del>	7/1/ <del>2010</del> 2011
<b><u>Temporary Use</u></b>				
	Director's Decision	<del>\$294.00</del>	<del>\$296.00</del>	7/1/ <del>2010</del> 2011
	Special Exemption/Non-Profit	\$0.00		7/1/2003
	Special Mixed Use-Central Business District Zone Rate			
	1st Temporary Use in a Calendar Year	<del>\$294.00</del>	<del>\$296.00</del>	7/1/ <del>2010</del> 2011
	2nd Through 5th Temporary Use With Substantially the Same Site Plan Within A Calendar Year	\$52.00	\$52.00	7/1/2010
<b><u>Tree Removal</u></b>				
		<del>\$294.00</del>	<del>\$296.00</del>	7/1/ <del>2010</del> 2011
<b><u>Variance/Adjustment</u></b>				
	Administrative Variance	<del>\$642.00</del>	<del>\$647.00</del>	7/1/ <del>2010</del> 2011
	Development Adjustment	<del>\$294.00</del>	<del>\$296.00</del>	7/1/ <del>2010</del> 2011
	Special Adjustments			
	Adjustment to a Subdivision	<del>\$294.00</del>	<del>\$296.00</del>	7/1/ <del>2010</del> 2011
	Reduction of Minimum Residential Density	<del>\$294.00</del>	<del>\$296.00</del>	7/1/ <del>2010</del> 2011
	Access/Egress Standards			

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Revised Fee or Charge	Effective Date
	Adjustment	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Landscaping Adjustments			
	Existing/New Street Trees	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	Parking Adjustments			
	Reduction in Minimum or Increase			
	In Maximum Parking Ratio	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Reduction in New or Existing			
	Development/Transit Imprvmnt	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Reduction in Bicycle Parking	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Alternative Parking Garage			
	Layout	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Reduction in Stacking Lane			
	Length	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	Sign Code Adjustment	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Street Improvement Adjustment	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Tree Removal Adjustment	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	Wireless Communication Facility Adjustments			
	Setback from Nearby Residence	<del>\$642.00</del>	\$647.00	7/1/ <del>2010</del> 2011
	Distance from Another Tower	<del>\$294.00</del>	\$296.00	7/1/ <del>2010</del> 2011
	<b><u>Zoning Map/Text Amendment</u></b>			
	Legislative - Comprehensive Plan	<del>\$9,195.00</del>	\$9,277.00	7/1/ <del>2010</del> 2011
	Legislative - Community Development Code	<del>\$3,754.00</del>	\$3,787.00	7/1/ <del>2010</del> 2011
	Quasi-Judicial	<del>\$3,459.00</del>	\$3,490.00	7/1/ <del>2010</del> 2011
	<b><u>Zoning Analysis (Detailed)</u></b>	<del>\$599.00</del>	\$605.00	7/1/ <del>2010</del> 2011
	<b><u>Zoning Inquiry Letter (Simple)</u></b>	<del>\$88.00</del>	\$89.00	7/1/ <del>2010</del> 2011
<b>COMMUNITY DEVELOPMENT - MISCELLANEOUS FEES &amp; CHARGES</b>				
	<b><u>Building Plan Copies</u></b>			
		\$2.50 /copy		7/1/2007
	<b><u>Community Development Code</u></b>			
	CD Rom	\$10.00		7/1/2006
	<b><u>Tigard Comprehensive Plan --Volumes 1 &amp; 2</u></b>			
		<del>\$77.00</del>	\$75.00	4997 7/1/2011

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Revised Fee or Charge	Effective Date
	<b><u>GIS Maps*</u></b>			2/7/2002
	8-1/2" x 11"	<del>Black and White Non Aerial</del>	<del>\$0.25</del> \$2.50	7/1/2007 2011
		<del>Color Aerial</del>	<del>\$1.50</del> \$4.00	7/1/2007 2011
	11" x 17"	<del>Black and White Non Aerial</del>	<del>\$1.50</del> \$5.00	7/1/2007 2011
		<del>Color Aerial</del>	<del>\$2.50</del> \$7.00	7/1/2007 2011
	17" x 22"	<del>Black and White Non Aerial</del>	<del>\$2.50</del> \$11.00	7/1/2007 2011
		<del>Color Aerial</del>	<del>\$5.00</del> \$15.00	7/1/2007 2011
	<del>22" x 32"</del>	<del>Black and White</del>	<del>\$5.00</del>	
		<del>Color</del>	<del>\$7.50</del>	
	34" x 44"	<del>Black and White Non Aerial</del>	<del>\$7.50</del> \$25.00	7/1/2007 2011
		<del>Color Aerial</del>	<del>\$10.00</del> \$30.00	7/1/2007 2011
	<b>Custom Maps</b>		<b>Staff Hourly Rate</b>	
	<b><u>Information Processing &amp; Archiving (IPA) Fee</u></b>			
	Temporary Sign		\$5.00	7/1/2010
	Type I Review		\$18.00	7/1/2010
	Type II Review		\$175.00	7/1/2010
	Type III Review		\$200.00	7/1/2010
	Type IV Review		\$200.00	7/1/2010
	<b><u>Maps</u></b>			2/7/2002
	<del>Address Maps by Section</del>		<del>\$2.50 /plot</del>	
	<del>Annexation &amp; Road Jurisdiction</del>		<del>\$10.00 /plot</del>	
	<del>As-Built Drawings</del>		<del>\$2.50 /copy or plot</del>	
	<del>Assessor's Tax Map</del>		<del>\$2.50 /copy or plot</del>	
	<del>Bike Path Plan</del>		<del>\$6.00 /plot</del>	
	<del>Buildable Lands Inventory</del>		<del>\$10.00 /plot</del>	
	<del>Comprehensive Plan and Zoning Map</del>		<del>\$10.00 /plot</del>	
	<del>Orthophotographs</del>		<del>\$5.00 /copy</del>	
	<del>Stream Corridor &amp; Wetlands Map</del>		<del>\$10.00 /plot</del>	
	<del>Street Index Map</del>		<del>\$10.00 /plot</del>	
	<del>Subdivision Map</del>		<del>\$10.00 /plot</del>	
	<del>Subdivision Plat Map</del>		<del>\$2.50 /copy</del>	
	<del>Topographic Maps</del>		<del>\$5.00 /copy</del>	
	<del>Transportation Plan Map</del>		<del>\$10.00 /plot</del>	

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Revised Fee or Charge	Effective Date
	<del>Vertical Bench Mark Control Map</del>		<del>\$6.00 /copy</del>	
	<del>Zoning Map</del>		<del>\$10.00 /plot</del>	
	<b><u>Neighborhood Meeting Signs (Land Use)</u></b>			
		\$2.00		1997
	<b><u>Oversize Load Permit</u></b>			
		\$200.00		7/1/2005
	<b><u>Planimetric Maps</u></b>			
				3/10/1986
	Blueline print - quarter section	\$5.00		
	Mylar - quarter section	\$150.00	/+ reproduction cost	
	<b><u>Retrieval of Materials Confiscated in ROW</u></b>			
	Lawn and A-board signs	\$40.00	/sign	7/1/2010
	Other signs and materials (based on size and value)		City Manager's Discretion (per TMC 7.61.035 Ord 10-06)	7/1/2010
	<b><u>Tigard Transportation System Plan</u></b>			
			<del>\$15.00</del> <b>\$75.00</b>	<del>2000</del> <b>7/1/2011</b>
	<b><u>Tigard Triangle</u></b>			
	Master Plan (3/92)	\$10.00		Obsolete
	Master Plan Color Map (Adopted 11/92)	\$2.50		
	Specific Area Plan (1/94)	\$7.50		
	Transportation & Traffic Evaluation			
	<b><u>Visual Preference Survey</u></b>			
		\$5.00	/for second copy	Obsolete
	<b><u>Washington Square Regional Center</u></b>			1999
	Task Force Recommendations	\$10.00		

Department	Revenue Source	Fee or Charge	Effective Date
<b>COMMUNITY DEVELOPMENT - MISCELLANEOUS DEVELOPMENT</b>			
	<u>Blasting Permit</u>	\$271.00	7/1/2009
	<u>Fee in Lieu of Sewer (Commercial Only)</u>	Based on actual cost of sewer connection, if sewer was available	1998
	<u>Fee in Lieu of Shared Open Space (MU-CBD zone only)</u>	<b>Fee in lieu is determined by multiplying the current Washington County Assessor-determined real market value of the land (not improvements) by 10%.</b>	7/1/2011
	<u>Sanitary Sewer Connection Fee</u> (This fee is determined by Cleanwater Services. The City of Tigard receives 3.99% of fees collected.)	<del>\$4,100.00</del> <b>\$4,500.00</b> /dwelling unit	<del>7/1/2010</del> 2011
	<u>Tree Replacement Fee</u>	\$125.00 /caliber inch	9/1/2001
	<u>Water Quality Facility Fee</u> (City receives 100% of fees collected)		6/6/2000
	Residential Single Family	\$225.00 /unit	
	Commercial & Multi-family	\$225.00 /2,640 sq. ft of additional impervious surface	
	<u>Water Quantity Facility Fee</u> (City receives 100% of fees collected)		6/6/2000
	Residential Single Family	\$275.00 /unit	
	Commercial & Multi-family	\$275.00 /2,640 sq. ft of additional impervious surface	
	<u>Metro Construction Excise Tax</u> (City will retain 5% for administrative expenses) (Tax set by Metro, but collected by cities)	12% of building permits for projects with a total valuation of \$100,001 or more; not to exceed \$12,000.	7/1/2006
	<u>Vacation (Streets and Public Access)</u>	\$2,209.00 /deposit + actual costs	7/1/2009

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>PUBLIC WORKS</b>			
	<u>Addressing Assignment Fee</u>	\$50.00	10/29/2003
	<u>Community Garden Plot Rental</u>		
	Large	\$40.00 /year	7/1/2010
	Small	\$20.00 /year	7/1/2010
	<u>Encroachment Permit</u>	None has been set yet	
	<u>Engineering Public Improvement Design Standards</u>	\$5.00	7/15/1998
	<u>Local Improvement District Assessments</u>	Actual Cost	7/24/1996
	<u>Park Reservation Fees</u>		
	Application Fee		
	Resident	\$25.00	7/1/2010
	Non-Resident	\$50.00	7/1/2010
	Rental Change Fee	\$15.00	7/1/2011
	Special Use/Alcohol Permit Fee	\$25.00 Fee assessed at time of reservation	7/1/2010
	Special Event Permit Fee	\$75.00 0 to 100 people \$175.00 101 to 500 people \$275.00 501 to 2000 people \$475.00 More than 2000 people	7/1/2010 7/1/2010 7/1/2010 7/1/2010
	Shelter Rental Fees (2 hour minimum)		
	<del>Shelter #1</del>		
	<del>Resident</del>	<del>\$16.00 /hour</del>	<del>7/1/2010</del>
	<del>Non-Resident</del>	<del>\$32.00 /hour</del>	<del>7/1/2010</del>
	Shelter #2		
	Resident	\$33.00 /hour	7/1/2010
	Non-Resident	\$66.00 /hour	7/1/2010
	Shelter #1, #3, #4, Bishop/Scheckla Pavilion, & Summerlake		
	Resident	\$23.00 /hour	7/1/2010
	Non-Resident	\$46.00 /hour	7/1/2010
	Soccer/Ball Field Rental Fee (2 hour minimum)		
	Resident	\$10.00 /hour	7/1/2010
	Non-Resident	\$20.00 /hour	7/1/2010
	Deposit     May be required for some events to mitigate possible cleanup and/or damages.	Not to exceed \$400	7/1/2010
	<u>Reimbursement District Application Fee</u>	\$300.00	1/27/1998
	<u>Reimbursement District Fee</u>	Not to Exceed \$6,000.00 unless reimbursement fee exceeds \$15,000.00 Any amount over \$15,000.00 shall be reimbursed by the owner. \$6,000.00 limit	7/1/2001

City of Tigard  
Fees and Charges Schedule

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
		valid for only 3 years from Council approval of district cost.	
	<b><u>Right-of-Way (ROW) Permit Fee</u></b>		
	ROW Permit Fee	<b>\$300.00</b> Not required for Public Facility Improvements	<b>7/1/2011</b>
	Encroachment Permit	<b>\$300.00</b>	<b>7/1/2011</b>
	<b><u>Street Maintenance Fee (TMC 18.765)</u></b>		
	Monthly Residential Rate - Single and Multi-Family	\$4.13	4/1/2011
	Monthly Non-Residential Rate	\$1.06	4/1/2011
	Monthly Residential Rate - Single and Multi-Family	<del>\$5.25</del> <b>\$5.45</b>	1/1/2012
	Monthly Non-Residential Rate	<del>\$1.19</del> <b>\$1.23</b>	1/1/2012
	Staff Review	No Charge No Charge	
	City Council Written Appeal Filing Fee	\$300.00 \$300.00	
	<b><u>Solid Waste Compactor Permit</u></b>	\$100.00	
	<b><u>Traffic Control Devices</u></b>		
	Speed Hump Program	50% of cost	5/1/1996

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>PUBLIC WORKS - UTILITIES</b>			
	<u>Booster Pump Charge</u>		
	Meter Size (diameter inches)		
	5/8 x 3/4	\$4.08 /monthly	1/1/2011
		\$4.32 /monthly	1/1/2012
		\$4.58 /monthly	1/1/2013
		\$4.86 /monthly	1/1/2014
		\$5.15 /monthly	1/1/2015
	1	\$10.87 /monthly	1/1/2011
		\$11.52 /monthly	1/1/2012
		\$12.21 /monthly	1/1/2013
		\$12.95 /monthly	1/1/2014
		\$13.72 /monthly	1/1/2015
	1.5	\$32.60 /monthly	1/1/2011
		\$34.56 /monthly	1/1/2012
		\$36.63 /monthly	1/1/2013
		\$38.83 /monthly	1/1/2014
		\$41.16 /monthly	1/1/2015
	2	\$52.93 /monthly	1/1/2011
		\$56.11 /monthly	1/1/2012
		\$59.47 /monthly	1/1/2013
		\$63.04 /monthly	1/1/2014
		\$66.82 /monthly	1/1/2015
	3	\$93.33 /monthly	1/1/2011
		\$98.93 /monthly	1/1/2012
		\$104.87 /monthly	1/1/2013
		\$111.16 /monthly	1/1/2014
		\$117.83 /monthly	1/1/2015
	4	\$191.41 /monthly	1/1/2011
		\$202.89 /monthly	1/1/2012
		\$215.07 /monthly	1/1/2013
		\$227.97 /monthly	1/1/2014
		\$241.65 /monthly	1/1/2015
	6	\$203.75 /monthly	1/1/2011
		\$215.98 /monthly	1/1/2012
		\$228.93 /monthly	1/1/2013
		\$242.67 /monthly	1/1/2014

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
		\$257.23 /monthly	1/1/2015
	8	\$326.00 /monthly	1/1/2011
		\$345.56 /monthly	1/1/2012
		\$366.29 /monthly	1/1/2013
		\$388.27 /monthly	1/1/2014
		\$411.57 /monthly	1/1/2015
	10	\$636.93 /monthly	1/1/2011
		\$675.15 /monthly	1/1/2012
		\$715.65 /monthly	1/1/2013
		\$758.59 /monthly	1/1/2014
		\$804.11 /monthly	1/1/2015
	12	\$917.17 /monthly	1/1/2011
		\$972.20 /monthly	1/1/2012
		\$1,030.53 /monthly	1/1/2013
		\$1,092.36 /monthly	1/1/2014
		\$1,157.91 /monthly	1/1/2015

**Customer Charge**

*(Basic fee charged to customers to have the  
City deliver water.)*

**Meter Size (diameter inches)**

5/8 x 3/4

	\$15.78 /monthly	1/1/2011
	\$17.99 /monthly	1/1/2012
	\$20.51 /monthly	1/1/2013
	\$23.38 /monthly	1/1/2014
	\$24.38 /monthly	1/1/2015
1	\$35.40 /monthly	1/1/2011
	\$40.36 /monthly	1/1/2012
	\$46.01 /monthly	1/1/2013
	\$52.45 /monthly	1/1/2014
	\$54.70 /monthly	1/1/2015
1.5	\$93.49 /monthly	1/1/2011
	\$106.58 /monthly	1/1/2012
	\$121.50 /monthly	1/1/2013
	\$138.51 /monthly	1/1/2014
	\$144.47 /monthly	1/1/2015
2	\$151.68 /monthly	1/1/2011
	\$172.92 /monthly	1/1/2012

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
		\$197.12 /monthly	1/1/2013
		\$224.72 /monthly	1/1/2014
		\$234.38 /monthly	1/1/2015
	3	\$298.56 /monthly	1/1/2011
		\$340.36 /monthly	1/1/2012
		\$388.01 /monthly	1/1/2013
		\$442.33 /monthly	1/1/2014
		\$461.35 /monthly	1/1/2015
	4	\$567.12 /monthly	1/1/2011
		\$646.52 /monthly	1/1/2012
		\$737.03 /monthly	1/1/2013
		\$840.21 /monthly	1/1/2014
		\$876.34 /monthly	1/1/2015
	6	\$635.88 /monthly	1/1/2011
		\$724.90 /monthly	1/1/2012
		\$826.39 /monthly	1/1/2013
		\$942.08 /monthly	1/1/2014
		\$982.59 /monthly	1/1/2015
	8	\$993.12 /monthly	1/1/2011
		\$1,132.16 /monthly	1/1/2012
		\$1,290.66 /monthly	1/1/2013
		\$1,471.35 /monthly	1/1/2014
		\$1,534.62 /monthly	1/1/2015
	10	\$1,832.55 /monthly	1/1/2011
		\$2,089.11 /monthly	1/1/2012
		\$2,381.58 /monthly	1/1/2013
		\$2,715.00 /monthly	1/1/2014
		\$2,831.75 /monthly	1/1/2015
	12	\$2,592.94 /monthly	1/1/2011
		\$2,955.95 /monthly	1/1/2012
		\$3,369.78 /monthly	1/1/2013
		\$3,841.55 /monthly	1/1/2014
		\$4,006.74 /monthly	1/1/2015
	<b><u>Final Notification Process Fee</u></b>	\$30.00 /per instance	7/1/2009
	<b><u>Fire Hydrant Flow Test</u></b>	\$325.00 /test	12/9/2008

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	<b><u>Fire Hydrant Usage - Temporary</u></b>		
	3" hydrant meter deposit*	\$650.00	9/1/2002
	*Deposit is refundable if returned in good condition		
	Hook-up service	\$50.00	2/27/2001
	Continued use	\$50.00 /month	2/27/2001
	Consumption	Current irrigation water usage rate per 100 cubic feet of water used	9/1/2002
	<b><u>Fire Rates (Sprinklers)</u></b>		
	6" or smaller	\$17.00 /month	2/27/2001
	8" or larger	\$22.50 /month	
	<b><u>Fire Service Connection</u></b>		
		\$1,400.00 /+ 12% fee based on construction costs.	2/27/2001
	<b><u>Meter Disconnection</u></b>		
		Actual labor and material costs + 10%	9/1/2002
	<b><u>Meter Installation Fees</u></b>		
	5/8" x 3/4" Meter	\$325.00	2/27/2001
	1" Meter	\$500.00	2/27/2001
	1 1/2" Meter	\$850.00	2/27/2001
	2" Meter	\$1,000.00	2/27/2001
	3" or more Meter	Actual Cost	5/23/2000
	<b><u>Meter Out-of-Order Test</u></b>		
		Meter calibration cost + actual labor and material costs + 10%	9/1/2002
	<b><u>Sanitary Sewer Service</u></b>		
	(City receives 15.82% of fees collected)		
	Base Charge	\$19.14 /dwelling unit/month	7/1/2007
	Use Charge	\$1.31 /100 cubic feet/month for individual customer winter average	7/1/2007
	<b><u>Storm and Surface Water</u></b>		
	(City retains 75% of Service Charge fees collected)		
	(City retains 100% of its Surcharge fees collected)		
	Service Charge	\$4.00 /ESU/month	6/6/2000
	Tigard Surcharge	\$2.00 /ESU/month	7/1/2009
	<b><u>Water Bacteriological Quality Testing</u></b>		
	Cost per test	\$60.00	7/1/2008

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	<b><u>Water Disconnection Charge for Non-payment</u></b>		
	During business hours	\$50.00	2/27/2001
	<b><u>Water Line Construction - New Development</u></b>	12% of Actual Cost	2/27/2001
	<b><u>Water Main Extension</u></b>		
	Designed and installed by others	12% of Actual Cost	9/1/2002
	<b><u>Water Meter Radio Read Device</u></b>	\$156.80	7/1/2008
	<b><u>Water Usage Charges</u></b>		
	Residential		
	Tier 1	\$2.04 /100 cubic feet of water	1/1/2011
	Tier 2	\$2.98 /100 cubic feet of water	1/1/2011
	Tier 3	\$3.41 /100 cubic feet of water	1/1/2011
	Tier 1	\$2.33 /100 cubic feet of water	1/1/2012
	Tier 2	\$3.40 /100 cubic feet of water	1/1/2012
	Tier 3	\$3.89 /100 cubic feet of water	1/1/2012
	Tier 1	\$2.65 /100 cubic feet of water	1/1/2013
	Tier 2	\$3.87 /100 cubic feet of water	1/1/2013
	Tier 3	\$4.43 /100 cubic feet of water	1/1/2013
	Tier 1	\$3.02 /100 cubic feet of water	1/1/2014
	Tier 2	\$4.42 /100 cubic feet of water	1/1/2014
	Tier 3	\$5.05 /100 cubic feet of water	1/1/2014
	Tier 1	\$3.15 /100 cubic feet of water	1/1/2015
	Tier 2	\$4.60 /100 cubic feet of water	1/1/2015
	Tier 3	\$5.27 /100 cubic feet of water	1/1/2015
	Multi-Family		
	Tier 1	\$1.70 /100 cubic feet of water	1/1/2011
	Tier 2	\$2.48 /100 cubic feet of water	1/1/2011
	Tier 3	\$2.84 /100 cubic feet of water	1/1/2011
	Tier 1	\$1.94 /100 cubic feet of water	1/1/2012
	Tier 2	\$2.83 /100 cubic feet of water	1/1/2012
	Tier 3	\$3.24 /100 cubic feet of water	1/1/2012
	Tier 1	\$2.21 /100 cubic feet of water	1/1/2013
	Tier 2	\$3.22 /100 cubic feet of water	1/1/2013
	Tier 3	\$3.69 /100 cubic feet of water	1/1/2013

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
		Tier 1 \$2.52 /100 cubic feet of water	1/1/2014
		Tier 2 \$3.67 /100 cubic feet of water	1/1/2014
		Tier 3 \$4.21 /100 cubic feet of water	1/1/2014
		Tier 1 \$2.63 /100 cubic feet of water	1/1/2015
		Tier 2 \$3.83 /100 cubic feet of water	1/1/2015
		Tier 3 \$4.39 /100 cubic feet of water	1/1/2015
	Commercial	Tier 1 \$2.32 /100 cubic feet of water	1/1/2011
		Tier 2 \$3.38 /100 cubic feet of water	1/1/2011
		Tier 3 \$3.87 /100 cubic feet of water	1/1/2011
		Tier 1 \$2.64 /100 cubic feet of water	1/1/2012
		Tier 2 \$3.85 /100 cubic feet of water	1/1/2012
		Tier 3 \$4.41 /100 cubic feet of water	1/1/2012
		Tier 1 \$3.02 /100 cubic feet of water	1/1/2013
		Tier 2 \$4.39 /100 cubic feet of water	1/1/2013
		Tier 3 \$5.03 /100 cubic feet of water	1/1/2013
		Tier 1 \$3.44 /100 cubic feet of water	1/1/2014
		Tier 2 \$5.01 /100 cubic feet of water	1/1/2014
		Tier 3 \$5.73 /100 cubic feet of water	1/1/2014
		Tier 1 \$3.58 /100 cubic feet of water	1/1/2015
		Tier 2 \$5.22 /100 cubic feet of water	1/1/2015
		Tier 3 \$5.98 /100 cubic feet of water	1/1/2015
	Industrial	Uniform Rate	
		\$3.23 /100 cubic feet of water	1/1/2011
		\$3.68 /100 cubic feet of water	1/1/2012
		\$4.20 /100 cubic feet of water	1/1/2013
		\$4.79 /100 cubic feet of water	1/1/2014
		\$4.99 /100 cubic feet of water	1/1/2015
	Irrigation	Uniform Rate	
		\$4.59 /100 cubic feet of water	1/1/2011
		\$5.23 /100 cubic feet of water	1/1/2012
		\$5.97 /100 cubic feet of water	1/1/2013
		\$6.80 /100 cubic feet of water	1/1/2014
		\$7.09 /100 cubic feet of water	1/1/2015

Tiered Rate Structure Thresholds (100 cubic feet of water)

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge		Effective Date
		<b>Meter Size</b>		
		5/8 x 3/4	Tier 1	6 ccf
			Tier 2	15 ccf
			Tier 3	over 15 ccf
		1	Tier 1	16 ccf
			Tier 2	40 ccf
			Tier 3	over 40 ccf
		1.5	Tier 1	48 ccf
			Tier 2	120 ccf
			Tier 3	over 120 ccf
		2	Tier 1	78 ccf
			Tier 2	195 ccf
			Tier 3	over 195 ccf
		3	Tier 1	137 ccf
			Tier 2	344 ccf
			Tier 3	over 344 ccf
		4	Tier 1	282 ccf
			Tier 2	705 ccf
			Tier 3	over 705 ccf
		6	Tier 1	300 ccf
			Tier 2	750 ccf
			Tier 3	over 750 ccf
		8	Tier 1	480 ccf
			Tier 2	1,200 ccf
			Tier 3	over 1,200 ccf
		10	Tier 1	938 ccf
			Tier 2	2,345 ccf
			Tier 3	over 2,345 ccf
		12	Tier 1	1,350 ccf
			Tier 2	3,376 ccf
			Tier 3	over 3,376 ccf

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge		Effective Date
<b>COMMUNITY DEVELOPMENT - DEVELOPMENT SERVICES PLANNING</b>				
<b>Park System Development Charge (SDC)*</b>				
	Single Family Unit	<del>\$4,811.00</del>	<b>\$4,048.34</b>	<del>1/1/2010</del> 7/1/2011
	Multi-family Unit	<del>\$3,867.00</del>	<b>\$3,254.20</b>	<del>1/1/2010</del> 7/1/2011
	Spaces in a manufactured home park	<del>\$3,814.00</del>	<b>\$3,209.17</b>	<del>1/1/2010</del> 7/1/2011
	Commercial/industrial (per employee)	<del>\$327.00</del>	<b>\$274.81</b>	<del>1/1/2010</del> 7/1/2011

**\*See Appendix for methodology used to calculate the charges.**

The Park System Development Charge (Park SDC) is a City of Tigard charge that is assessed on new development to support the acquisition and development of parks, greenways, and paved trails, all of which are used by residents of Tigard and by those who work here. The Park SDC is a one-time fee charged to new development to help pay a portion of the costs associated with building additional parks and trails to meet the needs created by both residential and commercial/industrial growth. The SDC revenues can only be used on capacity-increasing capital improvements and cannot be used to repair existing park facilities.

Park SDCs are assessed on new residential development on a per-unit basis and against commercial and industrial development on a per-employee basis.

The amount of the charge for each land use category is adjusted each year, effective July 1st, in relation to two indices, one reflecting changes in development/construction costs and one reflecting changes in land acquisition costs.

For information about Park SDCs regarding a specific project contact the City's Permits/Projects Coordinator at 503-718-2426.

For more detailed information on calculating Park SDCs see City of Tigard Resolution No. 04-97 and the accompanying report, "Parks and Recreation System Development Charges Methodology Update" by Don Ganer & Associates, Inc., November 10, 2004.

Department	Revenue Source	Fee or Charge	Effective Date
	<b>Park SDC Annual Adjustment</b>		4/10/2001

Parks SDC fees shall be adjusted annually on July 1st of each year beginning in 2011. The new fee will be determined by multiplying the existing fees by the average of two indices, one reflecting changes in development/construction costs and one reflecting changes in land acquisition costs. The average of these two indices is a reasonable approach because the Parks SDC fee is roughly split 50% between land acquisition land development components.

The index for the Land Acquisition component will be the base cost for residential tract land in Tigard, as determined by the Washington County Appraiser. The average cost for residential tract land was selected because it is readily identified and is the lowest priced of the buildable lands in Tigard. Changes in this base cost can be calculated in terms of a percentage increase, to create the level of change to the original index, and projected to the overall acquisition cost. In accordance with Measure 5, the Washington County Appraiser's office will determine appraised values on July 1 of each year.

The index for the Land Development component of the Parks SDC will be the Construction Cost Index for the City of Seattle as published in the December issue of the Engineering News Record (ENR). The Seattle cost index will be used because the city is the geographically closest to Tigard of twenty metropolitan areas for which the ENR maintains cost data. This index is adjusted monthly, quarterly, and annually. The annual index for each year will be selected beginning with the index for December 2002.

**Park SDC Annual Adjustment (cont.)**

Calculation Definitions:

SDC (2000) = Current SDC fee

L (2000) = Average cost of residential tract land 2000

L (2001) = Average cost of residential tract land 2001

L (2xxx) = Average cost of residential tract land 2xxx

C (2000) = Construction cost index of 2000

C (2001) = Construction cost index of 2001

C (2xxx) = Construction cost index of 2xxx

LCI = Land Cost Index: change from the current year from previous year

CCI = Construction Cost Index: change from the current year from previous year

ACI = Average cost index change of LCI + CCI

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
	<u>Formula:</u>		
	L (2001) / L (2000)	= LCI	
	and		
	C (2001) / C (2000)	= CCI	
	therefore		
	LCI + CCI / 2	= ACI	
	then		
	SDC (2001) X ACI	= SDC (2002)	

Each year subsequent to 2002, the costs shall be revised using the current year and previous year's data. Notwithstanding the foregoing, all calculations shall be carried out to the thousandth place. A final product ending in .49 or less shall be rounded down to the nearest dollar, .50 or more up to the next dollar. Community Development staff will perform the adjustment calculation and prepare the resolution each year.

**City of Tigard  
Fees and Charges Schedule**

Department	Revenue Source	Fee or Charge		Effective Date
<b>COMMUNITY DEVELOPMENT - DEVELOPMENT SERVICES ENGINEERING</b>				
<b>Traffic Impact Fee *</b>				
	Trip Rate			
	Residential Use	<del>\$382.00</del>	<b>\$404.00</b> /average weekday trip	7/1/ <del>2010</del> 2011
	Business & Commercial Use	<del>\$96.00</del>	<b>\$102.00</b> /average weekday trip	7/1/ <del>2010</del> 2011
	Office Use	<del>\$350.00</del>	<b>\$371.00</b> /average weekday trip	7/1/ <del>2010</del> 2011
	Industrial Use	<del>\$367.00</del>	<b>\$389.00</b> /average weekday trip	7/1/ <del>2010</del> 2011
	Institutional Use	<del>\$158.00</del>	<b>\$168.00</b> /average weekday trip	7/1/ <del>2010</del> 2011
	Transit Rate	<del>\$27.00</del>	<b>\$30.00</b> /average daily trip	7/1/ <del>2010</del> 2011

The Traffic Impact Fee (TIF) is a Washington County charge, approved by the voters in November, 1990, that is administered and collected by the City of Tigard. It went into effect in 1991. On July 1, 2009 it was replaced with the Transportation Development Tax (TDT) regarding new development projects. All projects that received Land Use Approval and submitted building permit applications prior to July 1, 2009 remain under TIF as do most non-residential projects that received Land Use Approval prior to July 1, 2009 even if building permit applications were submitted after that date. Residential, change-of-use, and minor addition projects for which building permit applications are submitted on or after July 1, 2009 are subject to TDT.

TIF charges are assessed on new development to help provide funds for the increased capacity transportation improvements needed to accommodate the additional vehicle traffic and demand for transit facilities generated by that development. TIF provides funds for these capacity improvements to county and city arterials, certain collectors, and certain state and transit facilities as listed in the County's Base Report list of projects. TIF is categorized as an Improvement Fee: revenue must be dedicated to capital improvements that expand capacity and may not be used for maintenance, repair, or other non-capital improvements.

TIF is assessed on new development on the basis of the number of trips that development is projected to generate. The bases for these trip projections are the statistical analyses and findings about trip generation found in the Institute of Transportation Engineers (ITE) Manual. Table II.1 of the Washington County Traffic Impact Fee Procedures Manual provides figures for the weekday average trips generated per unit by different Land Uses. For residential uses the units are dwelling or occupancy units. For commercial and industrial uses the units are the square footage of the use or units unique to the use such as lanes, fueling positions, etc.

The TIF rate for each land use category is adjusted each year, effective July 1st, to account for inflation.

For information about the TIF regarding a specific project contact the City's Permits/Projects Coordinator at (503) 718-2426.

For more detailed information on calculating TIF charges and a detailed list of Land Uses and their associated average trip rates see the Washington County Countywide Transportation Development Tax Manual.

**\*See Appendix for methodology used to calculate the charges.**

**The Traffic Impact Fee program is governed by Washington County. All fees and procedures are set by the County.**

**City of Tigard  
Fees and Charges Schedule**

**Countywide Transportation Development Tax (TDT) - (Example Land Uses and Charges\*)**

Single Family Detached	<del>\$5,227.00</del>	<b>\$6,665.00</b> /per unit	7/1/ <del>2010</del> 2011
Apartment	<del>\$3,352.00</del>	<b>\$4,325.00</b> /per unit	7/1/ <del>2010</del> 2011
Residential Condominium/Townhouse	<del>\$3,106.00</del>	<b>\$3,976.00</b> /per unit	7/1/ <del>2010</del> 2011
General Office Building	<del>\$5,246.00</del>	<b>\$6,869.00</b> (per TSFGFA**)	7/1/ <del>2010</del> 2011
Medical Office Building	<del>\$17,958.00</del>	<b>\$23,370.00</b> (per TSFGFA**)	7/1/ <del>2010</del> 2011
Fast Food Restaurant (no drive thru)	<del>\$15,897.00</del>	<b>\$21,133.00</b> (per TSFGFA**)	7/1/ <del>2010</del> 2011
Shopping Center	<del>\$6,828.00</del>	<b>\$8,968.00</b> (per TSFGLA**)	7/1/ <del>2010</del> 2011

The Countywide Transportation Development Tax (TDT) is a Washington County Tax approved by the voters in November, 2008, that is administered and collected by the City of Tigard. It went into effect on July 1, 2009, replacing the Traffic Impact Fee (TIF) program.

Like TIF, TDT is assessed on new development to help provide funds for the increased capacity transportation improvements needed to accommodate the additional vehicle traffic and demand for transit facilities generated by that development. It provides funds for these capacity improvements to county and city arterials, certain collectors, and certain state and transit facilities as listed in the County's Capital Improvements Project List. The TDT is categorized as an Improvement Fee: revenue must be dedicated to capital improvements that expand capacity and may not be used for maintenance, repair, or other non-capital improvements.

TDTs are assessed on new development on a per-unit basis. For residential uses the units are dwelling units, bedrooms, etc. For commercial and industrial uses the units are the square footage of the use or units unique to the use such as lanes, fueling positions, etc.

The TDT rate for each land use category is adjusted each year, effective July 1st, and the rates for each year from July 1, 2009 through June 30, 2013 were established in Appendix B to Washington County Engrossed Ordinance 691, August 29, 2008. The TDT rates effective 7/1/2010 include a 10% Temporary Discount implemented October 2009 by Washington county. If the Temporary Discount program is terminated the effective rates will revert to the original calculated rates.

For information about the TDT regarding a specific project contact the City's Permits/Projects Coordinator at (503) 718-

\* For more detailed information on calculating TDT charges and a detailed list of Land Uses and TDT charges through 6/30/2013 see Appendix B to Washington County Engrossed Ordinance 691, August 29, 2008 and the Washington County Countywide Transportation Development Tax Manual.

\*\* TSFGFA = thousand square feet gross floor area; TSFGLA = thousand square feet gross leasable area.

**City of Tigard  
Fees and Charges Schedule**

EXHIBIT A

Department	Revenue Source	Fee or Charge	Effective Date
<b>PUBLIC WORKS - WATER</b>			
	<b>Water System Development Charge (SDC)*</b>		
	5/8" x 3/4" Meter	\$3,821.00	2/1/2011
		\$4,705.00	2/1/2012
		\$5,590.00	2/1/2013
		\$6,474.00	2/1/2014
	1" Meter	\$10,191.00	2/1/2011
		\$12,551.00	2/1/2012
		\$14,910.00	2/1/2013
		\$17,269.00	2/1/2014
	1 1/2" Meter	\$30,555.00	2/1/2011
		\$37,629.00	2/1/2012
		\$44,703.00	2/1/2013
		\$51,777.00	2/1/2014
	2" Meter	\$49,616.00	2/1/2011
		\$61,103.00	2/1/2012
		\$72,589.00	2/1/2013
		\$84,076.00	2/1/2014

3" Meters and larger diameter

For connections to the water system with meters larger than 2-inches, the City will forecast the demands on an average-day, peak-day, and peak-hour basis.

The number of EDUs associated with the demands will be determined by the following:

$$EDUs = \left( \frac{ADD * 0.400}{226.4} \right) + \left( \frac{(PDD - ADD) * 0.343}{249.1} \right) + \left( \frac{(PHD - PDD) * 0.257}{90.6} \right)$$

**\*See Appendix for methodology used to calculate the charges.**

Where:

ADD is the projected average-day demand of the new user in gallons per day, and

PDD is the projected peak-day demand of the new user in gallons per day, and

PHD is the projected peak hour demand of the new user in gallons per day, and

The constants used in the above formula are:

0.004 equals the proportion of the City's water facilities allocated to the average-day function

226.4 equals the estimated gallons per day on an average-day basis demanded by an EDU

0.343 equals the proportion of the City's water facilities allocated to the max-day extra-capacity function

249.1 equals the estimated gallons per day on an max-day extra capacity demanded by an EDU

0.257 equals the proportion of the City's water facilities allocated to the max-hour extra capacity function

90.6 equals the estimated gallons per day of max-hour extra-capacity demanded by an EDU

The City may update the values in the formula above as the system changes to recognize the changing costs imposed by large customers

**AIS-524**

**Item #: 3. A.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** Consent Item

**Agenda Title:** Approve City Council Minutes

**Prepared For:** Carol Krager

**Submitted By:**

Carol Krager  
City Management

**Item Type:** Motion Requested

**Meeting Type:**

Consent Agenda -  
Approve Minutes

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**ISSUE**

Shall Council approve City Council Minutes

**STAFF RECOMMENDATION / ACTION REQUEST**

**KEY FACTS AND INFORMATION SUMMARY**

**OTHER ALTERNATIVES**

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

**DATES OF PREVIOUS COUNCIL CONSIDERATION**

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**Attachments**

[April 12, 2011 Minutes](#)

[April 19, 2011 Minutes Placeholder](#)



# City of Tigard

## Tigard Business Meeting – Minutes

### TIGARD CITY COUNCIL AND LOCAL CONTRACT REVIEW BOARD

**MEETING DATE AND TIME:** April 12, 2011 - 6:30 p.m. Study Session;  
7:30 p.m. Business Meeting

 **MEETING LOCATION:** City of Tigard - Town Hall - 13125 SW Hall Blvd., Tigard, OR 97223

**STUDY SESSION:** Mayor Dirksen called the Study Session to order at 6:30 pm.  
Council Present: Mayor Dirksen, Council President Buehner, Councilor Wilson, Councilor Woodruff and Councilor Henderson

Staff Present: City Manager Prosser, Assistant City Manager Newton, Community Development Director Bunch, Public Works Director Koellermeier, Associate Planner Caines, Associate Planner Floyd, City Attorney Ramis and Deputy City Recorder Krager

Press: Eric Florip, Oregonian

- A. Administrative Items – Mayor Dirksen reminded Council of the first Budget Committee Meeting starting on Monday April 18, 6:30 pm, Public Works Auditorium
- B. Shining Stars Banquet – Mayor Dirksen will be honored at the Tualatin Riverkeepers Green Heron Banquet on the same night as the Shining Stars Banquet. Council President Buehner, Councilor Henderson and Councilor Wilson will attend the Shining Stars Banquet with their spouses.

#### EXECUTIVE SESSION

City Manager Prosser read the citation and the Tigard City Council entered into an Executive Session at 6:32 pm to discuss pending litigation and to consider the employment of a public officer, employee, staff member or individual agent, under ORS 192.660(2) (h) and (a). Executive Session ended at 7:27 pm.

#### 1. BUSINESS MEETING

- A. Mayor Dirksen called the meeting to order at 7:34 pm.
- B. Deputy City Recorder Krager called the roll.

	Present	Absent
Mayor Dirksen	x	
Councilor Henderson	x	
Councilor Woodard	x	
Councilor Wilson	x	
Council President Buehner	x	

C. Pledge of Allegiance

D. Council Communications & Liaison Reports: Mayor Dirksen announced that Council will report on the National League of Cities Conference held at Washington DC, at the end of the meeting.

E. Call to Council and Staff for Non-Agenda Items: None

2. CITIZEN COMMUNICATION

A. Follow-up to Previous Citizen Communication: None

B.  Tigard High School Student Envoy Tracie Tran gave a report on current happenings at THS. A copy of her report is in the meeting packet.

C. Tigard Area Chamber of Commerce Executive Director Debi Mollahan thanked Council for participating in the “Meet your City Council” event. She mentioned many upcoming activities including speed networking, the grand opening of The Knoll at Tigard CPAH housing, and the upcoming Shining Stars banquet.

D. Citizen Communication – Signup Sheet: Tree Board Chair Anthony Tycer spoke as a citizen regarding changes to tree planting requirements and the tree mitigation fund, which will be renamed at tonight’s meeting.

He encouraged the Mayor and Council to exercise accountability over the use of money in the tree fund. He said that without a certifiable return on investment, the Tree Board is not in favor of using Friends of Trees for tree planting. He is in favor of the goal to plant trees on private property to help increase the urban canopy. With regard to use of mitigation funds, he said it is appropriate to inquire how much per tree will be spent, where it will go and what will be charged for site preparation. He said he has a personal goal to increase participation in the street tree giveaway from 30 in 2010 to 60 in 2011, but he would also like to site the trees in such a way that their shadows fall across asphalt and reduce heat signatures.

He urged Council to be careful when using the Survey Monkey to shape conclusions by citizen committees, as a questionable premise will lead to questionable conclusions.

Mr. Tycer said there has been a paradigm shift in measuring trees for mitigation. The measure used to be the breast-height diameter calculation but this changed to canopy coverage percentage, so that treed lots and un-treed lots are treated the same. He cautioned against unintended consequences of decisions like this and asked, “How are we going to favor native tree planting?”

3.  CONSENT AGENDA:

A. Approve City Council Meeting Minutes

1. February 22, 2011

2. ~~March 8, 2011~~ (Moved to the April 26, 2011 Consent Agenda)

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**TIGARD CITY COUNCIL MEETING MINUTES – April 12, 2011**

- B. Receive and File:
  1. Council Calendar
  2. Council Tentative Agenda for Future Meeting Topics
  
- C. Renew Resolution No. 08-47 That Establishes a Process to Form Ad-Hoc, Limited Duration Citizen Advisory Committees.
  - Resolution No. 11-12 – A RESOLUTION AMENDING THE PROCESS TO FORM AND APPOINT LIMITED DURATION CITIZEN ADVISORY COMMITTEES (CAC) BY ALLOWING AN OPTION TO DO SO THROUGH A ONE-STEP PROCESS WHEN UTILIZING A STANDING COMMITTEE

Council President Buehner moved for approval of the Consent Agenda and Councilor Wilson seconded the motion and all voted in favor.

	Yes	No
Mayor Dirksen	x	
Councilor Henderson	x	
Councilor Woodard	x	
Councilor Wilson	x	
Council President Buehner	x	

4.  PROCLAIM APRIL 25-30, 2011 AS NATIONAL COMMUNITY DEVELOPMENT WEEK  
 Mayor Dirksen proclaimed April 25-30 as National Community Development Week. He said this recognizes the Community Development Block Grant program, enacted 37 years ago. This federal program provides funding to communities for affordable housing or neighborhood revitalization needs. Tigard has received \$3,429,286 for use within the city of Tigard. A part of the proclamation urges Congress to continue to provide formula funding for the CDBG.
  
5.  ARBOR DAY, RECEIVE THE TREE CITY USA GROWTH AWARD AND PRESENT TREE STEWARDSHIP AWARDS  
 Associate Planner Daniels and Arborist Prager introduced this item. Associate Planner Daniels said Tigard declares an Arbor Month, not just an Arbor Day and presented a PowerPoint covering local events celebrating it. A copy of this presentation is in the meeting packet.

Arborist Prager said Tigard is being recognized for the tenth year as a Tree City USA. He read the requirements that were met and noted that the City of Tigard planted over 13,000 trees within the City limits in 2010, representing an 11% increase in the tree canopy. He said Tigard also received a Tree City USA Growth Award for expanded urban forestry efforts. He said over 100 trees have been planted at local schools, providing outdoor classrooms, shade and water quality benefits.

 Brian Wegener, representing the Oregon Department of Forestry’s Oregon Community of Trees spoke. He said as a Tigard citizen he was very pleased to present the Tree City USA Growth Award to his home town. He presented the City with new road signs, a plaque honoring Tigard for being a Tree City for Ten Years, and a flag. Mr. Wegener presented the Mayor with a lapel pin and hat.

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**TIGARD CITY COUNCIL MEETING MINUTES – April 12, 2011**

 Assistant Planner Daniels described the upcoming tree planting at Metzger Elementary on April 22, 2011. A second grade class will be planting trees with Mayor Dirksen. She announced the winner of the 2011 Tree Stewardship Awards: Tigard Parks and Recreation Advisory Board. She read the nomination: “The efforts of the Parks and Recreation Advisory Board have made a lasting impression on the urban forestry in Tigard for generations to come and this is why they deserve the 2011 Tree Stewardship Award.” The award was accepted by PRAB Member Hong Dao.

6. CONSIDER A RESOLUTION TO RENAME AND OUTLINE ALLOWED USES OF THE TREE REPLACEMENT FUND

 Associate Planner Caines and Arborist Prager gave a brief staff report on the tree replacement fund. Associate Planner Caines said in February of 2010 Council asked staff to clarify the allowed uses of the Tree Replacement Fund as part of the Urban Forestry Code revision. She said the first phase is renaming it the Urban Forestry Fund and outlining allowed expenditures. A future phase will examine the Urban Forestry Master Plan and how funds are collected and used in the long term to achieve goals of that plan, and will coincide with the adoption of the urban forestry code. She said the resolution under Council consideration renames the fund and outlines the allowed expenditures: site preparation for planting trees, minor grading, plan preparation plan, actual tree planting and three years of early establishment maintenance activities to ensure young tree survival. The resolution also outlines that trees can be planted on public or private property, and there is a line that states the amount that can be spent on average for different projects around the city. She said this maximum amount is on average, ten percent above the tree replacement fee in lieu, which is currently \$125 per caliper inch. She said this resolution reflects the consensus of the Urban Forestry Code Revision Citizen Advisory Committee and is recommended for approval by the Tree Board.

Councilor Woodard asked if the three-year period only covers trees put in by developers. Associate Planner Caines said trees can be planted on either public or private property. Councilor Woodard asked what the plan is for the GIS technology and how many FTE’s are required to sustain it. Arborist Prager responded that the resolution codifies the current practices and reason the City uses GIS is that there is citizen and developer interest in finding out where the trees they paid for are being planted. He said staff is currently building this program and the GIS aspect would not increase staff time.

Councilor Woodard said he had concerns about the cost of the trees and the service level expectations. He said he would like to see a more detailed scope of work. He asked why demolition costs are not included in the formula. He said he was supportive and loves trees, but wants more detail about the three-year early tree establishment. He asked, “What have we done before versus what we will be doing tomorrow?”

Councilor Wilson stated that what is being voted on tonight does not commit the City to anything; it just broadens the use. He said, “Regarding the GIS, Arborist Prager is the person who will enter this information and the GIS system exists now. The bottom line is that we are just allowing ourselves more latitude.”

Mayor Dirksen said the problem that this resolution addresses is that in the past we have only been allowed to plant on public property, yet we receive mitigation money from private developers. The question was, “Why can’t we use these funds on private property?”

Councilor Woodard asked if three years are required for newly planted tree maintenance, and could it be less? Mayor Dirksen said this is the standard in the code that we set for developers and now we will be applying it to

ourselves. Arborist Prager supported the three-year threshold.

Councilor Henderson asked how much was in the fund. Arborist Prager estimated \$1.2 million.

Councilor Wilson commented that Tigard is in danger of overplanting its public spaces. He said the city also has areas, typically commercial, that are under-canopied. He said he would like the city to concentrate on quality rather than quantity. He asked about the 10% rule. Associate Planner Caines said that is an average. Councilor Wilson said that was nowhere near enough. He said an old adage is, “Never put a \$100 tree in a \$10 hole. Current thinking is that we need to spend more money on preparation.” He said he would like to see Tigard put trees along Pacific Highway but said that will be costly. He noted that asphalt demolition and pavement replacement were not listed.

 Mayor Dirksen verified that the Council could approve paying more than what is listed in Attachment A for a project staff wants to do. Councilor Wilson issued a charge for staff to seek out those spaces where trees aren't and won't occur naturally and plant trees there. He said he wants to see paving demolition and utility relocation listed as eligible charges, as well as legal work such as obtaining easements and deed restrictions.

Arborist Prager said the language is intentionally broad. He said the advisory committees were adamant that the costs be capped so large projects would require Council approval. He said he felt the language was expansive enough to cover a lot of these things mentioned tonight.

Councilor Wilson asked if staff knew what is in our fee-in-lieu of undergrounding fund. City Manager Prosser noted that the first Budget Committee meeting is next week and this question could be addressed then.

Mayor Dirksen said staff should go out and find places where trees need to be and put them there, aiming for quality, not quantity. This could even be made a policy. He said removal of impervious surfaces should be listed. Councilor Woodard recommended “removal of old irrigation systems” be added.

In response to a question from Council President Buehner, the city has codes in place to require commercial developers to replace trees that don't live. Community Development Director Bunch said the effort to enforce landscaping that has not been kept up would be a huge effort. He recommends asking future developers to partner and help leverage resources.

City Manager Prosser asked if Council wanted to amend the motion now or have staff come back with amendments as part of phase two? Associate Planner Caines suggested adding what Council suggested and putting this on a future consent agenda. City Attorney Ramis said Council's direction should be clear because if the product that comes back is not what you want, you can pull it off the Consent Agenda.

Community Development Director Bunch suggested partnerships with property owners for projects showing what can be done with a tree planting demonstration project.

Council President Buehner requested that trees not be planted facing north on steep hills, such as evergreen trees on 135<sup>th</sup>. They shade the road and icy conditions remain longer, making driving more dangerous. This issue is tabled.

Mayor Dirksen said this issue is tabled and it will be revisited as a Consent Agenda item with revised language.

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## **TIGARD CITY COUNCIL MEETING MINUTES – April 12, 2011**

7.  LOCAL CONTRACT REVIEW BOARD: AWARD PURCHASE AGREEMENT FOR REPLACEMENT OF THE IN-CAR VIDEO SYSTEM FOR PATROL VEHICLES TO CDW/PANASONIC

Police Chief Orr, Police Department Business Manager Imdieke and Senior Management Analyst Barrett were present to discuss this item. Last year the police car video equipment was patched together and staff planned to replace this equipment next fiscal year. Business Manager Imdieke reported that the vendor for this equipment filed bankruptcy in June of 2010 and went out of business shortly thereafter. He reported that staff evaluated several vendors and after reviews and on-site demonstrations, it was decided to go with the Panasonic equipment. He said this is a multi-year contract and Council must approve the appropriation each year.

Council Woodard said he knows the police needs this equipment. He verified the costs and lease payments are being paid this year from savings but was concerned that the second year payment will leave the department short of human resources. Police Department Business Manager Imdieke said the second year payment is included in the proposed budget, above and beyond what FTE costs are. And the third year will be budgeted the year after.

Councilor Henderson expressed concern about the unfilled FTE's. Police Chief Orr said most of the savings came from last fiscal year's Materials and Services budget. He said City Manager Prosser asked the Police Department last year to identify purchases they could defer in the Materials and Services budget. He said they are in full staffing now. Councilor Henderson asked if the savings were realized because crime went down. Police Chief Orr said it did go down but Tigard is back up slightly this year; however, we are still lower than two years ago.

Mayor Dirksen said the value of this equipment proves itself many times over. Council President Buehner moved to approve the purchase of the CDW/Panasonic equipment. Councilor Wilson seconded the motion and all voted in favor.

8.  REPORT FROM MAYOR AND CITY COUNCILORS ON NATIONAL LEAGUE OF CITIES CONGRESSIONAL CITY CONFERENCE

Mayor Dirksen said he attended the National League of Cities Congressional City Conference in Washington, DC, along with Council President Buehner and Councilor Woodard. He asked them to give a brief report.

Council President Buehner attended sessions such as Governing the New Normal and met with several of Oregon's elected officials. She noted that they heard a speech given by First Lady Michelle Obama. She brought back some information on parliamentary procedure that she will distribute to Council members.

Councilor Woodard said he attended classes and seminars and learned a lot about public engagement, strategic thinking, managing and media relations. He said government is not going to be getting more money; a different approach has to be taken, doing more with less and utilizing business talents to meet economic challenges. We

need to economically develop in a way that benefits everyone. He referred to the recent Chamber of Commerce “Meet the Council” event and said, “We have to engage the public, we need to learn to work together better, and we have to do a better job at providing the needed services, sustainably.”

 Mayor Dirksen said he participated with the Joint Policy Advisory Committee on Transportation (JPACT) meeting with Oregon’s congressional delegation and transportation leaders. He said most discussions related to the budget and deficit reduction. He said funding transportation and infrastructure are high priorities. He said this was JPACTS’s focus as they met with congressional leaders. Mayor Dirksen and Council President Buehner met with Congressman Walden. Mayor Dirksen said also took part in an interesting workshop called, Roadblocks to a New Transportation Program. He met with the NLC Transportation Committee to discuss policies and how to influence Congress in times in these economic times, and also heard a presentation from the Secretary of Housing and Urban Development.

Mayor Dirksen summarized that attending the National League of Cities Conference helps Council come back to Tigard and make more objective decisions, due to a bigger perspective and exposure to new ideas. He said, “What I hear is that compared to most, Tigard and their Council are doing very well.”

## 9. DISCUSS CITY MANAGER RECRUITMENT PROCESS

 Human Resources Director Zodrow said City Manager Prosser is retiring in July. She said her goal tonight is to work with Council to develop a timeline and look at the process for finding his replacement.

Council President Buehner referred to the timeline in the meeting packet and said it was too tight. Mayor Dirksen agreed and asked if it was necessary to have the candidate profile finalized prior to advertising the position.

Mayor Dirksen said the sample profile included in the packet is a good start but asked how to make it specific for Tigard. He suggested that members of Council interview city staff, community leaders, members of boards and commissions and business leaders, and ask what they want to see in a City Manager. He said he has a preliminary list to submit to each Councilor, and requests that they conduct one-on-one interviews and bring the information back to help develop the candidate profile. He said it make take four to five weeks to complete that process

Mayor Dirksen asked if this should be an in-house or executive search firm recruitment. Human Resources Director Zodrow said it would be beneficial to hire a nationwide search firm which would extend contacts throughout the western United States. She said additional benefits of an executive search firm are the networking capabilities and city marketing.

Councilor Henderson mentioned that some other nearby cities also are searching for a city manager and suggested it would be beneficial to partner with them. In response to a question from Councilor Wilson, Human Resources Director Zodrow said the cost would be 25%-30% of the manager’s annual salary for the executive search firm service.

Councilor Wilson said he agrees with the executive search idea because they may be able to approach someone who is not even looking for another position. He suggested the City take as much time as possible to get the best candidate.

Council President Buehner asked about the appropriateness of the Mayor or Council screening applicants by phone prior to interviews. Councilor Wilson suggested not just calling references but digging deeper and interviewing people who know the applicant.

City Manager Prosser asked if some of the hiring authorities could visit the cities where the finalists work and mentioned a former police chief recruitment where this was done. Human Resources Director Zodrow noted that the League of Oregon Cities can also help with background checks.

It was decided to begin the advertising process before the candidate profile is completed. Council agreed that Human Resources Director Zodrow could select finalists for the recruitment firm

Mayor Dirksen said Tigard needs to make sure there is someone in place in the interim after City Manager Prosser leaves and the new manager is in place. He said the obvious choice to him is Assistant City Manager Newton. He asked Council to confirm that choice and allow Human Resources to complete a compensation package.

10. COUNCIL LIAISON REPORTS

11. NON AGENDA ITEMS – None

12. EXECUTIVE SESSION – Not held

13. ADJOURNMENT At 9:49 pm Council President Buehner moved for adjournment and Councilor Wilson seconded the motion. All voted in favor.

	Yes	No
Mayor Dirksen	x	
Councilor Henderson	x	
Councilor Woodard	x	
Councilor Wilson	x	
Council President Buehner	x	

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Carol A. Krager, Deputy City Recorder

Attest:

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Mayor, City of Tigard

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Date

## **Consent Agenda Item 3.A.2:**

Approve City Council Minutes  
for April 19, 2011

will be available Friday in the May 20, 2011  
Council Newsletter

**AIS-465**

**Item #: 3. B.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** Consent Item

**Agenda Title:** Receive and File the 2010 Annual Solid Waste Financial Report

**Prepared For:** Dennis Koellermeier

**Submitted By:**

Greer Gaston  
Public Works

**Item Type:** Receive and File

**Meeting Type:**

Consent - Receive  
and File

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**ISSUE**

Receive and file the 2010 Annual Solid Waste Financial Report.

**STAFF RECOMMENDATION / ACTION REQUEST**

No action is requested; this is a receive and file item.

**KEY FACTS AND INFORMATION SUMMARY**

- The City of Tigard has two franchised solid waste haulers, Pride Disposal Company and Waste Management Incorporated.
- Every March these haulers provide the City with financial reports for the preceding calendar year as required by Tigard Municipal Code 11.04.090.
- Staff then reviews the reports in accordance with the Annual Haulers' Financial Report Review Procedure found in Resolution No. 01-54-A. This resolution:
  - Sets an aggregate target profit rate of 10 percent annually for the solid waste haulers.
  - Automatically triggers a solid waste rate adjustment when the aggregate profit rate falls below 8 percent or exceeds 12 percent.
- The aggregate profit rate for 2010 was 8.26 percent. This rate falls is within the resolution's target window. In accordance with the resolution, no solid waste rate adjustments are warranted at this time.
- The Council received a memo and the aggregate report in its April 15, 2011 newsletter packet. In that memo, staff advised the firm of Bell and Associates would be retained to further evaluate the financial reports. Specifically, the firm reviewed the cost of service by customer class to determine if interclass subsidies or other irregularities exist. The data from that review is attached as the "2010 Return on Revenues." It appears there were some inequities, primarily among commercial and drop box customer classes. Staff intends to conduct a similar review again next year to determine if the 2010 numbers are an anomaly or if this is a consistent trend meriting further consideration.

**OTHER ALTERNATIVES**

Not applicable

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

Not applicable

**DATES OF PREVIOUS COUNCIL CONSIDERATION**

The 2010 Annual Solid Waste Financial Report was originally provided to the Council in its April 15, 2011, newsletter packet as an attachment to an April 12, 2011, memo from Public Works Director Dennis Koellermeier.

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**Attachments**

4-15-11 Council Newsletter Excerpt

2010 Return on Revenues



# Council Newsletter

Provided to the Tigard City Council on a weekly basis to stay abreast of current city issues.

April 15, 2011

## 1. April 19 Meeting Materials

Attached is a revised agenda that reflects the addition of a brief study session to determine the 2011 Exemplary Citizen Award for the Chamber Shining Stars event on May 7. You'll find the nominations in a confidential envelope in your mailbag.

Also attached are materials for Agenda Item #3: 1st QUARTER GOAL UPDATE. Liz asks that you remember to bring your 3-ring binder for the Council Goal update.

## 2. Wilsonville Water Treatment Plant Tour

Council is invited to join the Lake Oswego Council for a tour of the Wilsonville Water Treatment Plant on **Thursday, May 12, 2011 at 4 p.m.** Participants will meet at the plant and tour for approximately 90 minutes.

Tour goals include a chance to experience a modern plant that uses ozone treatment and the opportunity to draw comparisons on specific features that will be new to the Lake Oswego-Tigard Water Treatment Plant (centrifuge, ozone, state of the art technology, equipment and spaces that meet current building codes).

The tour was set up to provide information to the newest members of both Councils but everyone is welcome. John G. will organize a tour of the Lake Oswego-Tigard WTP in a few weeks so you can compare WTP systems and the project scope.

**If you plan on attending, please notify Joanne or Dennis K. or John Goodrich.**

## 3. Funding Update for Walnut St. Project

Attached is a memo from Engineering regarding the status of an MTIP funding request for sidewalks and

bike lanes on Walnut St. in front of Fowler Middle School.

## 4. Solid Waste Financial Report Findings

Attached is a memo from Dennis Koellermeier with figures for the year ending 12/31/10.

## 5. Small Business Town Hall

Margaret Doherty will be holding a town hall on **Tuesday, April 19th, from 7 – 8 p.m. at TVF&R Station 51** (8935 SW Burnham Rd), near City Hall. The topic is small business. The public is invited to attend and hear what the legislature is doing to encourage small business and share input on how they can do better. She will also discuss the local economy in Tigard and the city's plans to help drive it forward.

## 6. Legislative Week in Review

Attached is an update from Kent Wyatt on legislation with the potential to affect the city.

## 7. NLC Prescription Card Update

Attached are February's usage statistics for Tigard.

## 8. Weekly Water Update

Attached is the Lake Oswego\*<sup>Tigard</sup> Water Partnership update for the week of April 14.

## 9. News

- > City buys dog park, will expand hours
- > Soapbox: Redistricting: it's about community not pizza
- > Tigard City Council begins discussing search process to replace retiring CM Craig Prosser
- > Washington county grows, gains clout
- > City buys Potso Dog Park for \$625,000 in bond money
- > TriMet ridership booms during commutes



## City of Tigard Memorandum

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**To:** City Manager Craig Prosser  
**From:** Public Works Director Dennis Koellermeier   
**Re:** Annual Solid Waste Financial Report Findings for 2010  
**Date:** April 12, 2011

As required by Tigard Municipal Code (TMC) Chapter 11-04-090, Tigard's two franchised solid waste haulers have submitted their annual financial reports for the calendar year ending December 31, 2010.

The TMC requires the Council be provided with an aggregate report summarizing the franchisee reports and recommendations on rate adjustments based on Resolution No. 01-54-A. This resolution sets a target, aggregate profit rate of 10 percent and calls for the Council to consider a rate adjustment if the profit rate falls below 8 percent or exceeds 12 percent.

The aggregate financial report is attached and shows a profit rate of 8.26 percent. Based on the resolution, the aggregate profit rate is within the resolution set target percent and would initially suggest that rate adjustments are not warranted at this time.

The City is in the process of retaining Bell and Associates, an accounting firm with expertise in the solid waste industry, to further evaluate the financial reports. The evaluation will include a cost of service review at the customer class level (residential, multi-family, and commercial) to determine if interclass subsidies or other irregularities exist.

Once Bell and Associates completes its review, this item will be scheduled on an upcoming Council agenda.

**Attachments:**

1. Aggregate Financial Report for 2010
2. Resolution No. 01-54-A

City of Tigard  
Franchised Solid Waste Haulers Financial Reports  
For Year ended December 31, 2010  
(Aggregate Report)

	Calendar Year 2010	Direct Labor Hours	Indirect Cost
Total Indirect Costs -----			\$1,245,736
<b>Drop Boxes</b>			
Operating Revenue	\$2,099,320		
Operating Costs	<u>\$2,089,099</u>	7,393	\$239,859
Net Income	<u>\$10,221</u>		
	0.49%		
<b>Can/Cart Services</b>			
Operating Revenue			
Residential	\$3,274,948		
Multi-Family	\$15,091		
Commercial	\$141,522		
Operating Costs	<u>\$1,793,359</u>	7,871	\$252,708
Net Income	<u>\$1,638,202</u>		
	47.74%		
<b>Container Services</b>			
Operating Revenue			
Residential	\$37,425		
Multi-Family	\$691,187		
Commercial	\$2,522,184		
Operating Costs	<u>\$2,151,180</u>	7,369	\$239,760
Net Income	<u>\$1,099,616</u>		
	33.83%		
<b>Recycling Services</b>			
Operating Revenue			
Residential	\$925		
Multi-Family	\$0		
Commercial	(\$3,410)		
Bin/Cart Recycling	\$48,256		
Container Recycling	\$59,247		
Operating Costs	<u>\$1,722,938</u>	12,965	\$417,373
Net Income	<u>(1,617,920)</u>		
	-1505.00%		
<b>Yard Debris</b>			
Operating Revenue	\$16,054		
Operating Costs	<u>\$420,439</u>	3,012	\$96,036
Net Income	<u>(\$404,385)</u>		
	-2519%		
<b>Medical Waste</b>			
Operating Revenue	\$1,351		
Operating Costs	<u>\$0</u>		
Net Income	<u>\$1,351</u>		
	100%		
<b>Consolidated Net Income</b>			
	\$727,085		
Other Revenue	8,565		
Other Costs	0		
Adjustment to Allowable Costs	<u>727</u>		
<b>Grand Total Net Income</b>	<u><u>\$736,377</u></u>		
<b>Total Revenues</b>	\$8,912,665	38,610	\$1,245,736
<b>Profit Percentage</b>	<u><u>8.26%</u></u>		

CITY OF TIGARD, OREGON

RESOLUTION NO. 01-54-A

A RESOLUTION OF THE TIGARD CITY COUNCIL FORMALIZING COUNCIL POLICIES AFFECTING SOLID WASTE RATE ACTIONS AND RESCINDING RESOLUTION NO. 96-03

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WHEREAS, the Tigard City Council desires to manage solid waste rates in a manner which is consistent with the Solid Waste Management Ordinance (TMC 11.04); and

WHEREAS, the Solid Waste Industry and recycling programs and markets continue to rapidly change; and

WHEREAS, the Solid Waste Industry is being forced to change by multiple court challenges region-wide which question continuing the past rate practice of commercial rates subsidizing the residential service rates; and

WHEREAS, the Tigard City Council wishes to update its established policies for solid waste management to insure rates that are just, fair, reasonable and adequate to provide ongoing necessary service to the public; and

WHEREAS, the Tigard City Council desires to rescind Resolution No. 96-03 and adopt updated policies to meet the challenges faced in providing solid waste services for the citizens of Tigard.

NOW, THEREFORE, BE IT RESOLVED by the Tigard City Council that:

SECTION 1: The Tigard City Council hereby rescinds Resolution No. 96-03 in its entirety.

SECTION 2: The Tigard City Council will use the following policy when it reviews any changes to the solid waste rates in an effort to reduce the commercial subsidy of residential service rates and move to rates that are based on cost of service over a period of time:

**SERVICE-TYPE RATE SUBSIDY POLICY**

It is the desire of the Tigard City Council to eventually have solid waste rates be profitable by each service type (i.e., cart, container, drop box). Since there currently exists a commercial (container) subsidy of the residential (cart) rates and drop box rates, a phased-in reduction of the subsidy is anticipated within the next seven years. The subsidy will be reduced at increments acceptable to the City Council.

SECTION 3: The Finance Director, or designee, will use the following policy when computing the solid waste haulers' rate of return:

**OPERATING MARGIN/RATE OF RETURN POLICY**

The Operating Margin, or rate of return, will be calculated on the before tax net profit as a percentage of gross revenue. The "profit rate" review will be based on the aggregate pre-tax net income as a percentage of the aggregate gross revenues of the franchised haulers. The City Council shall consider an adjustment during rate review proceedings to provide a ten percent (10%) margin in the aggregate.

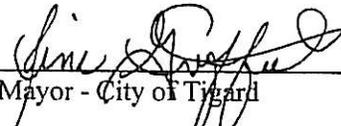
SECTION 4: ANNUAL HAULERS' FINANCIAL REPORT REVIEW PROCEDURE

The Finance Director, or designee, will review the solid waste haulers' annual financial reports and gather any clarifications deemed necessary from the haulers or their designated representatives each year. After being satisfied that the reports are complete and properly filled out in accordance with the instructions provided, the Finance Director, or designee, will determine the "profit rate" by the aggregate pre-tax net income of the haulers as a percentage of aggregate gross revenues.

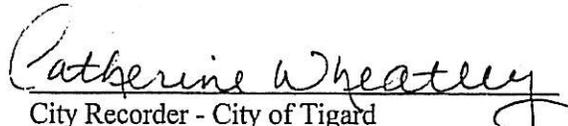
The Finance Director, or designee, will then report the results to the City Manager, the Mayor and City Council. If the aggregate profit rate falls below eight percent (8%) the City Council shall consider an adjustment to provide a ten percent (10%) margin. If the aggregate profit rate exceeds twelve percent (12%), the City Council shall consider an adjustment downward to provide a ten percent (10%) margin.

EFFECTIVE DATE: This resolution will be effective on and after October 1, 2001.

PASSED: This 25<sup>th</sup> day of September 2001.

  
\_\_\_\_\_  
Mayor - City of Tigard

ATTEST:

  
\_\_\_\_\_  
City Recorder - City of Tigard

*Reported*  
2010 Return on Revenues

	Residential Service			Commercial Service			Drop Box		Grand Totals
	Solid Waste	Recycling	Yard Debris	Solid Waste	Recycling				
<b>Collection &amp; Service Revenues</b>	<b>3,435,754</b>	<b>49,181</b>	<b>16,054</b>	<b>3,255,168</b>	<b>55,837</b>		<b>2,099,320</b>		<b>8,911,314</b>
	<b>% of direct</b>	<b>% of direct</b>	<b>% of direct</b>	<b>% of direct</b>	<b>% of direct</b>		<b>% of direct</b>		
<b>Direct Costs of Operations</b>	<b>1,540,652</b> costs	<b>793,190</b> costs	<b>324,402</b> costs	<b>1,911,420</b> costs	<b>512,375</b> costs		<b>1,849,240</b> costs		<b>6,931,279</b>
Disposal Expense	668,277 43%	10,124 1%	69,156 21%	1,092,871 57%	2,606 1%		1,124,389 61%		2,967,423
Labor Expense	369,319 24%	338,724 43%	136,500 42%	383,566 20%	257,145 50%		330,608 18%		1,815,862
Truck Expense	252,704 16%	203,550 26%	79,136 24%	205,944 11%	134,713 26%		193,141 10%		1,069,188
Equipment Expense	72,241 5%	137,809 17%	27,335 8%	60,816 3%	29,615 6%		77,445 4%		405,261
Franchise Fees	139,320 9%	1,093 0%	323 0%	135,696 7%	1,572 0%		84,832 5%		362,836
Other Direct Expense	38,791 3%	101,890 13%	11,952 4%	32,527 2%	86,724 17%		38,825 2%		310,709
	<b>% of G&amp;A</b>	<b>% of G&amp;A</b>	<b>% of G&amp;A</b>	<b>% of G&amp;A</b>	<b>% of G&amp;A</b>		<b>% of G&amp;A</b>		
<b>Indirect Costs of Operations</b>	<b>254,264</b> costs	<b>240,593</b> costs	<b>93,588</b> costs	<b>225,716</b> costs	<b>172,469</b> costs		<b>259,107</b> costs		<b>1,245,737</b>
Management Expense	52,378 21%	51,521 21%	19,932 21%	46,543 21%	36,352 21%		54,421 21%		261,147
Administrative Expense	77,135 30%	76,182 32%	29,286 31%	68,796 30%	52,783 31%		80,570 31%		384,752
Other Overhead Expenses	124,751 49%	112,890 47%	44,370 47%	110,377 49%	83,334 48%		124,116 48%		599,838
<b>Total Cost</b>	<b>1,794,916</b>	<b>1,033,783</b>	<b>417,990</b>	<b>2,137,136</b>	<b>684,844</b>		<b>2,108,347</b>		<b>8,177,016</b>
<b>Less Unallowable Costs</b>	<b>148</b>	<b>129</b>	<b>60</b>	<b>118</b>	<b>142</b>		<b>131</b>		<b>728</b>
<b>Allowable Costs</b>	<b>1,794,768</b>	<b>1,033,654</b>	<b>417,930</b>	<b>2,137,018</b>	<b>684,702</b>		<b>2,108,216</b>		<b>8,176,288</b>
<b>Franchise Income</b>	<b>1,640,986</b>	<b>-984,473</b>	<b>-401,876</b>	<b>1,118,150</b>	<b>-628,865</b>		<b>-8,896</b>		<b>735,026</b>
<b>Return on revenues</b>	<b>47.76%</b>	<b>-2001.73%</b>	<b>-2503.28%</b>	<b>34.35%</b>	<b>-1126.25%</b>		<b>-0.42%</b>		<b>8.25%</b>
<b>Revenues</b>	<b>3,500,989</b>			<b>3,311,005</b>			<b>2,099,320</b>		<b>8,911,314</b>
	<b>% of revenue</b>			<b>% of revenue</b>			<b>% of revenue</b>		
<b>Direct Costs of Operations</b>	<b>2,658,244</b> 76%			<b>2,423,795</b> 73%			<b>1,849,240</b> 56%		<b>6,931,279</b>
<b>Indirect Costs of Operations</b>	<b>588,445</b> 17%			<b>398,185</b> 12%			<b>259,107</b> 8%		<b>1,245,737</b>
<b>Total Cost</b>	<b>3,246,689</b>			<b>2,821,980</b>			<b>2,108,347</b>		<b>8,177,016</b>
<b>Less Unallowable Costs</b>	<b>337</b> 0%			<b>260</b> 0%			<b>131</b> 0%		<b>728</b>
<b>Allowable Costs</b>	<b>3,246,352</b>			<b>2,821,720</b>			<b>2,108,216</b>		<b>8,176,288</b>
<b>Franchise Income</b>	<b>254,637</b>			<b>489,285</b>			<b>-8,896</b>		<b>735,026</b>
<b>Return on revenues</b>	<b>7.27%</b>			<b>14.78%</b>			<b>-0.42%</b>		<b>8.25%</b>

AIS-487

Item #: 3. C.

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** Consent Item

**Agenda Title:** Consider a Resolution to Rename and Outline Allowed Uses of the Tree Replacement Fund

**Submitted By:** Cheryl Caines  
Community Development

**Item Type:** Resolution

**Meeting Type:**

Consent Agenda

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**ISSUE**

Should City Council approve a resolution to change the name of the Tree Replacement Fund to the Urban Forestry Fund and identify allowed uses of the fund?

**STAFF RECOMMENDATION / ACTION REQUEST**

It is recommended that the City Council approve the proposed resolution.

**KEY FACTS AND INFORMATION SUMMARY**

The existing Tree Replacement Fund is important to achieving goals of the Urban Forestry Program. The Tree Board is proposing to address future use of the Fund in the following two phases.

- Phase 1 - Rename the existing Tree Replacement Fund to be the Urban Forestry Fund and identify allowed expenditures of this fund.
- Phase 2 - Identify how the fund will be used in the long term to achieve goals and objectives of the Urban Forestry Master Plan. This will coincide with the adoption of the revised Urban Forestry Code (Spring 2012). The Tree Board's recommendations for Phase 2 will consider tree mitigation fees resulting from future development and other possible funding sources.

The attached resolution implements Phase 1 by renaming the fund to better match the city's goals of preserving Tigard's urban forest and giving clear direction on allowed uses of the fund. This resolution was presented to Council at the April 12, 2011 meeting where Council expressed some concern over the scope and cost of the tree establishment activities which are outlined in Exhibit A. Discussion about this matter addressed the proposed three year tree establishment period and whether or not local conditions such as climate, rainfall, and soil were considered when setting the time period; omission of demolition activities from the list was also noted. These include activities like removal of existing impervious surfaces or structures as part of site preparation on commercial and industrial sites, and removal of drip irrigation systems once they are no longer needed.

Based upon Council feedback, Exhibit A was revised to include demolition activities and the revised resolution is being submitted as a consent agenda item for final review and approval.

**OTHER ALTERNATIVES**

City Council could:

- Not approve the proposed resolution, and rely on current practices, or
- Direct staff to revise the resolution and bring it back to Council for further consideration.

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

This action implements Council Goal 1: Implement the Comprehensive Plan (b) Update the Tree Code

**DATES OF PREVIOUS COUNCIL CONSIDERATION**

Funding of the Urban Forestry Plan was briefly discussed at the joint Tree Board/City Council meeting on December 21, 2010. City Council gave feedback to staff on the proposed resolution at a March 22, 2011 study session. The resolution was presented at the April 12, 2011 City Council meeting. Council directed staff to make minor changes to Exhibit A and bring the resolution back as a consent agenda item.

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#### **Fiscal Impact**

**Cost:** N/A

**Budgeted (yes or no):** N/A

**Where Budgeted (department/program):** N/A

#### **Additional Fiscal Notes:**

The resolution will change the name of the Tree Replacement Fund and outline the allowed uses of the fund.

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#### **Attachments**

Tree Fund Resolution

Exhibit A Revised

**CITY OF TIGARD, OREGON  
TIGARD CITY COUNCIL  
RESOLUTION NO. 11- \_\_\_\_\_**

A RESOLUTION RENAMING THE TREE REPLACEMENT FUND TO BE THE URBAN FORESTRY FUND AND OUTLINING THE ALLOWED USES OF THIS FUND.

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WHEREAS, Ordinance 98-19 established Chapter 18.790, and the Tree Removal standards in the Tigard Development Code; and

WHEREAS, the Tree Removal standards include a formula for tree replacement proportional to the percentage and size of trees removed during development; and

WHEREAS, the Tree Removal standards allow for an “in-lieu of” tree replacement payment by developers that do not perform tree replacement themselves to cover the city’s cost of tree replacement; and

WHEREAS, the city established the Tree Replacement Fund to accept “in-lieu of” tree replacement payments; and

WHEREAS, the Tree Removal standards and the Tree Replacement Fund are not specific on the allowed uses of funds collected as “in-lieu of” tree replacement payments; and

WHEREAS, on February 16, 2010 City Council directed city staff to clarify the allowed uses of the Tree Replacement Fund as part of the Urban Forestry Code Revisions project; and

WHEREAS, city staff has worked with community volunteers including the Urban Forestry Code Revisions Citizen Advisory Committee and Tigard Tree Board to identify appropriate uses of the Tree Replacement Fund that will support the city’s broader urban forestry goals; and

WHEREAS, the consensus view expressed by the community volunteers to city staff was to use the Tree Replacement Fund for activities necessary for the planting of trees and three (3) years of early establishment of such trees to support the city’s broader urban forestry goals;

NOW, THEREFORE, BE IT RESOLVED by the Tigard City Council that:

SECTION 1: The Tree Replacement Fund shall be renamed the Urban Forestry Fund to reflect its broader purposes.

SECTION 2: The allowed uses of funds that have been or will be collected under the auspices of Ordinance 98-19 and Chapter 18.790 of the Tigard Development Code, deposited into the Tree Replacement Fund (now known as the Urban Forestry Fund), and available for city use shall be limited to only those tree planting and three (3) years of early establishment activities more fully described in Exhibit A.

RESOLUTION NO. 11 - \_\_\_\_\_

SECTION 3: The allowed uses of this fund will be reviewed as part of the Urban Forestry Code Revisions.

SECTION 4: This resolution shall be effective beginning Fiscal Year 2012 on July 1, 2011.

PASSED: This \_\_\_\_ day of \_\_\_\_\_, 2011.

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Craig Dirksen, Mayor

ATTEST:

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Carol A. Krager, Deputy City Recorder

## **Introduction**

The Urban Forestry Fund (formerly the Tree Replacement Fund) shall be available for city use to pay for the costs associated with completing only those activities listed below for tree planting site planning, tree planting site preparation, tree planting, and three (3) years of early tree establishment after planting whether on public or private property within the city limits of Tigard. The activities listed below are intended only for trees that have been or will be planted using Urban Forestry Fund. The activities listed below will only be implemented when determined necessary by the city for a particular tree planting project.

When considering where to implement particular tree planting projects, the city shall consider both short and long term costs and benefits, as well as how the projects will further the city's urban forestry goals. The city shall strive to identify partnerships for planting and three (3) years of early tree establishment after planting whenever possible, and record the stipulations of partnerships in writing. The city shall record and track information about each tree planting project in a publicly accessible inventory of trees and forests. The average cost to a plant and provide three (3) years of early establishment for each tree planted in a particular year shall be no more than 10% greater than the Tree Replacement Fee in the City of Tigard's Master Fees and Charges Schedule for that particular year unless otherwise approved by Tigard City Council.

## **Approved Tree Planting and Three (3) Years of Early Establishment Activities**

### **Tree Planting Site Planning**

- Site Survey – Including by not limited to a survey of soil conditions, topography, drainage, water sources, water pressure, water availability, above and below ground utilities, buildings, infrastructure, street lights, intersections, street signs, driveways, fire hydrants, existing trees, existing landscaping, existing pests and diseases, existing drainage, and any other existing site conditions that may be relevant to a particular tree planting project.
- Lab Tests – Including but not limited to the collection and preparation of soil and/or plant samples for analysis by a qualified testing laboratory in preparation for a tree planting project. The purpose of the tests may include but not be limited to determining soil texture, soil fertility, and existing pests and diseases.
- Site Plan Preparation – Preparation of accurately scaled landscape drawings that reflect both existing site conditions and future tree planting plans. Information displayed on the plans may include but not be limited to the site survey information listed above, as well as proposed tree planting locations, proposed irrigation installations, proposed soil amendments, proposed tree protection and erosion control materials and methods, proposed planting details/specifications, proposed irrigation details/specifications and other information relevant to a particular project.
- Permit Acquisition – Securing of federal, state, regional, local and any other permits required for the execution and/or completion of a particular tree planting project.

### **Tree Planting Site Preparation**

- Tree Protection – Including but not limited to the planning, installation, monitoring, and removal of tree protection methods and devices for existing site trees with the potential to be directly impacted by a particular tree planting project. Tree protection shall be in a manner consistent with generally accepted industry standards for tree care practices detailed in the most current version of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations. In addition, the tree protection shall be in accordance with all federal, state, regional, and local rules and regulations.
- Unwanted Plant Removal – Including but not limited to the removal of unwanted plants by physical, mechanical, biological and/or chemical means in order to prepare a particular site for tree planting in accordance with all federal,

# Exhibit A

state, regional, and local rules and regulations. Unwanted plant removal shall be the minimum necessary to prepare a particular site for tree planting, and shall not be for the purpose of large scale unwanted plant removal unrelated or indirectly related to tree planting.

- Drainage Installation – Including but not limited to the installation of drainage systems such as French drains, boring through hardpan soil layers, and otherwise amending/altering existing soil conditions to facilitate drainage in accordance with all federal, state, regional, and local rules and regulations if required for a particular tree planting project.
- Irrigation Installation & Removal – Including but not limited to the installation and removal of irrigation systems such as above or below ground sprinkler systems, as well as drip irrigation for the purpose of delivering water to trees if required for a particular tree planting project. Irrigation installation may include but not be limited to the additional requirements such as installation of water meters, backflow preventers, valves, pumps, sprinkler heads, laterals, automatic timers, and other equipment depending on the scope, requirements, and objectives for the particular tree planting project. Irrigation installation shall be in accordance with all federal, state, regional, and local rules and regulations, and the most current revision of the Irrigation Association’s, *Turf and Landscape Irrigation Best Management Practices*.
- Soil Preparation – Including but not limited to the loosening, tilling, import, removal, and/or finish grading of soil in order to prepare compacted soil areas for tree planting in accordance with all federal, state, regional, and local rules and regulations if required for a particular tree planting project. Grading and filling shall be the minimum necessary to prepare a particular site for tree planting, and shall not be for the purpose of mass grading or filling unrelated or indirectly related to tree planting. Removal of existing impervious surface and/or relocation of utilities when necessary.
- Soil Amendment – Including but not limited to the amendment of soils with inadequate or low fertility with organic materials, fertilizers, or other soil amendments at the required depth and ratio necessary to support tree growth if required for a particular tree planting project. Soil amendment also includes necessary loosening, tilling, import, removal, and/or finish grading as described in the Soil Preparation item above in order to properly amend soil for tree planting. Grading and filling shall be the minimum necessary to prepare a particular site for tree planting, and shall not be for the purpose of mass grading or filling unrelated or indirectly related to tree planting.
- Erosion Control – Including the planning, installation, monitoring, and removal of erosion control devices in accordance with all federal, state, regional, and local rules and regulations prior to tree planting site activities when required by a particular permit or project.

## Tree Planting

- Tree Selection and Purchase – Including the selection and purchase of the species, size, and number of trees identified for a particular tree planting project. Trees shall meet the standards detailed in the most recent edition of the American Standard for Nursery Stock (ANSI Z-60.1). Trees identified by the City of Tigard as “Nuisance Trees” shall not be selected, purchased, or planted.
- Tree Delivery and Storage – Including but not limited to the delivery and storage of trees and associated materials in a manner that protects the trees and associated materials from damage.
- Tree Planting – Including but not limited to the planting of trees in a manner consistent with generally accepted industry standards for tree care practices detailed in the most current version of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations. In addition, the tree planting shall be in accordance with all federal, state, regional, and local rules and regulations.

# Exhibit A

- Root Barrier Installation – Including but not limited to the installation of root barriers per the manufacturers' specifications for the purpose of protecting hardscape, infrastructure, utilities, and other features when required by a particular permit or project.
- Tree Staking and Guying – Including but not limited to the staking and guying of any new planted tree identified as requiring supplemental support in order to remain upright. Staking and guying shall be in a manner consistent with generally accepted industry standards for tree care practices detailed in the most current version of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations. Stakes and guys shall be monitored to ensure they are not causing tree damage, and shall be removed as soon as a tree is able to stand upright without supplemental support.
- Tree Protection from Wildlife – Including but not limited to the installation, monitoring, and removal of plant tubing or wire caging for the purpose of protecting newly planted trees from damage or death from wildlife if required for a particular tree planting project.
- Mulch Installation – Including but not limited to the installation of mulch in the form of wood chips, shavings, or other acceptable material around the bases of newly planted trees in a manner consistent with generally accepted industry standards for tree care practices.

## **Three (3) Years of Early Tree Establishment**

- Truck or Hand Watering of Trees – Including but not limited to the delivery and application of specified quantities and frequencies of water during specified time periods using a tanker truck, hoses, and/or other equipment when required for the survival of trees.
- Irrigation System Maintenance – Including but not limited to programming, monitoring, and maintenance of irrigation systems necessary for the application of specified quantities and frequencies of water during specified time periods required for the survival of the trees. Irrigation programming, monitoring, and maintenance shall be in accordance with the most current revision of the Irrigation Association's, *Turf and Landscape Irrigation Best Management Practices* if required for a particular tree planting project.
- Tree Pruning – Including but not limited to pruning of trees in a manner consistent with generally accepted industry standards for tree care practices detailed in the most current version of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations. Pruning objectives shall include the removal of dead, dying, and diseased tree parts, establishment of strong tree structure, development of a desirable form, abatement of tree hazards, and compliance with branch clearance requirements and other federal, state, regional, and local rules and regulations.
- Unwanted Plant Removal – Including but not limited to the removal of unwanted plants by physical, mechanical, biological and/or chemical means in accordance with all federal, state, regional, and local rules and regulations in order to limit competition and allow trees to survive and thrive if required for a particular tree planting project. Unwanted plant removal shall be the minimum necessary to allow trees to survive and thrive, and shall not be for the purpose of large scale unwanted plant removal unrelated or indirectly related to three (3) years of early tree establishment.
- Pest and Disease Control – Including but not limited to the control of tree pests and diseases using physical, mechanical, biological and/or chemical means in accordance with all federal, state, regional, and local rules and regulations in order to allow trees to survive and thrive if required for a particular tree planting project.
- Tree Inventory – Including but not limited the use of global positioning system (GPS) and geographic information system (GIS) technology to identify the location, species, planting date, three (3) years of early tree establishment activities, fund expenditures and other pertinent information for a publicly accessible tree and urban forest inventory.

# Exhibit A

- Tree Debris Disposal – Including but not limited to the collection and disposal of all debris generated from tree planting site preparation, tree planting, and three (3) years of early tree establishment in accordance with all federal, state, regional, and local rules and regulations.

**AIS-499**

**Item #: 3. D.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** Consent Item

**Agenda Title:** Approve Grant Application to the Office of Community Oriented Policing Services (COPS), Department of Justice COPS Hiring Program

**Prepared For:** Tom Imdieke

**Submitted By:** Tom Imdieke  
Police

**Item Type:** Motion Requested

**Meeting Type:** Consent Agenda

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**ISSUE**

Should the City Council approve a grant application to the Department of Justice for the Community Oriented Policing Services (COPS) Grant and receive up to \$780,000 over a three year period to fund three police officer positions?

**STAFF RECOMMENDATION / ACTION REQUEST**

Approve the application

**KEY FACTS AND INFORMATION SUMMARY**

The COPS Hiring Program is a competitive grant program that provides funding directly to law enforcement agencies having primary law enforcement authority to impact their community policing capacity and problem solving efforts.

The grant would provide 100 percent funding for entry-level salaries and benefits for three years for newly-hired, full-time sworn officer positions. There is no local match requirement during the three year period. At the conclusion of federal funding, grantees must retain all sworn officer positions awarded for a minimum of one year.

**OTHER ALTERNATIVES**

None

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

Not applicable

**DATES OF PREVIOUS COUNCIL CONSIDERATION**

Not applicable

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**Fiscal Impact**

**Cost:** \$780,000

**Budgeted (yes or no):** no

**Where Budgeted (department/program):** Not applicable

**Additional Fiscal Notes:**

The City would receive up to \$780,000 to fund the three positions over a three year period. There are no matching funds required during the initial three years and there is only the requirement that the jurisdiction must retain the positions for one additional year.

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**AIS-517**

**Item #: 3. E.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** Consent Item

**Agenda Title:** Contract Award - Pavement Management Program Slurry Seal Applications

**Prepared For:** Joseph Barrett

**Submitted By:**

Joseph Barrett  
Financial and  
Information Services

**Item Type:** Motion Requested

**Meeting Type:**

Local Contract  
Review Board

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**ISSUE**

Shall the Local Contract Review Board award a contract for the Pavement Management Program's slurry seal applications to Blackline, Inc. and authorize the City Manager to execute the contract?

**STAFF RECOMMENDATION / ACTION REQUEST**

Staff recommends that the Local Contract Review Board award the contract.

**KEY FACTS AND INFORMATION SUMMARY**

The yearly Pavement Management Program (PMP) protects the City's investment in the street infrastructure. The program typically includes a combination of minor maintenance projects (slurry seal applications) and major maintenance projects (pavement overlays).

Slurry seal applications are used throughout the country to restore deteriorating streets. Deterioration occurs as rain, sun, and freezing and thawing cycles eat away at the sticky asphalt binder that holds the pavement together.

In a slurry seal application, the street is cleaned, cracks are sealed, and a hot, liquid mixture of asphalt emulsion and sand is applied to the roadway. The mixture hardens as it cools. The process restores the asphalt binder near the pavement's surface and extends the useful life of the roadway.

An Invitation to Bid was issued on April 20, 2011 and advertised in both the Daily Journal of Commerce and The Tigard Times that same week. Bids were publicly opened at 2 p.m. on May 5 with the following results:

**Bidder's Name - Bid Total**

Blackline, Inc. - \$293,176

Valley Slurry Seal Co. - \$295,202

CA Pavement Co., Inc. - \$300,793

Intermountain Slurry Seal - \$309,076

Asphalt Maintenance Associates, Inc. - \$315,198

***City's Engineer's Estimate - \$340,172***

Staff has reviewed the bids and believes Blackline, Inc. to be a reputable company fully capable of performing the work required on this project. Therefore, staff recommends that the Local Contract Review Board award the Fiscal Year 2011-12 Pavement Management Program's slurry seal contract to Blackline, Inc.

The City will contract for pavement overlays under a separate contract.

**OTHER ALTERNATIVES**

The Local Contract Review Board could chose not to award the contract.

## COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

None

## DATES OF PREVIOUS COUNCIL CONSIDERATION

This is the first time this contract has come before the Local Contract Review Board. The Board has approved similar Pavement Management Program contracts in previous fiscal years.

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### Fiscal Impact

**Cost:** \$293,176

**Budgeted (yes or no):** Pending

**Where budgeted?:** Street Maintenance Fund

#### Additional Fiscal Notes:

The proposed contract for the slurry seal contract is for \$293,176. The City's approved Fiscal Year 2011-2012 budget has \$1,025,000 for the construction phase of the Pavement Management Program which would leave roughly \$730,000 for the pavement overlay portion of the program. Council will vote on adoption of the approved budget at their June 14th meeting. No work on this contract will begin prior to July 1, 2011 or without budget appropriations.

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**AIS-385**

**Item #: 3. F.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** Consent Item

**Agenda Title:** Contract Award for Auditing Services

**Submitted By:** Carol Krager  
City Management

**Item Type:** Motion Requested

**Meeting Type:**

Consent Agenda -  
LCRB

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**ISSUE**

Shall the Local Contract Review Board approve a contract with Talbot, Korvola, and Warwick (TKW) for auditing services?

**STAFF RECOMMENDATION / ACTION REQUEST**

Staff recommends the Local Contract Review Board approve a five-year agreement with TKW of a one-year contract with up to four annual extensions.

**KEY FACTS AND INFORMATION SUMMARY**

ORS 297.425 requires the city to have a financial statement audit annually. The most recent audit service contract, with the audit firm of Grove, Mueller, and Swank, expired when the firm completed the fiscal year 2009-10 financial statement audit. As a result, and in accordance with the City's Public Contracting Rules, staff issued a Request for Proposal for audit services in February of this year.

Proposals were received from five firms prior to the due date of February 24, 2011:

- Talbot Korvola & Warwick, LLP
- Merina & Company, LLP
- Moss Adams, LLP
- Pauly Rogers and Co, LLP
- Grove, Mueller & Swank.

A proposal review team reviewed and scored the proposals based upon the criteria detailed in the Request for Proposal and the top three firms: Talbot Korvola & Warwick, LLP, Moss Adams, LLP and Pauly Rogers and Co, LLP, were interviewed on March 30, 2011. The firm receiving the most combined points between the proposal review and interview was Talbot Korvola & Warwick, LLP. Based upon this process staff has determined that Talbot Korvola & Warwick, LLP best meets the overall needs of the city and as such, received staff's recommendation for contract award.

At the May 17, 2011 Council Workshop meeting, Council asked for a summary of the applicant review scores and pricing. That information is included as an attachment to this Agenda Item Summary.

**OTHER ALTERNATIVES**

The Local Contract Review Board could direct staff to hire a different firm or reissue the Request for Proposal.

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

In addition to meeting legislative requirements, an annual audit gives council and citizens reasonable assurance that city staff is preparing accurate annual financial reports and has adequate internal controls over financial transactions.

## **DATES OF PREVIOUS COUNCIL CONSIDERATION**

Workshop held on May 17, 2011 to discuss the annual audit contract and process.

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### **Fiscal Impact**

**Cost:** \$51,805

**Budgeted (yes or no):** Yes

**Where Budgeted (department/program):** Finance/Financial Operations

#### **Additional Fiscal Notes:**

Talbot Korvola & Warwick submitted a five-year proposal that totals \$259,845 over that five years. This includes the financial statement audit for the city, the financial statement audit for City Center Development Agency, and the federal grant audit required by the federal government.

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### **Attachments**

[Audit Proposal Scores & Pricing](#)

Request for Proposal Title:

Professional Auditing Services

Review Team Member:

Consolidated Reivew Scores

Vendor	Qualification Score (50%)	Approach Score (30%)	Pricing Score (20%)	1st Year Pricing	Estimated 1st Year Hours	1st Year Hourly Cost	Proposal Total Score	Interview Score (Six Interviewers)	Proposal Total Score	Final Ranking
Talbot, Korvola & Warwick, LLP	46	28	12	\$ 51,805	488	\$ 106.16	86	20	106	1
Merina & Company, LLP	31	23	12	\$ 40,000	335	\$ 119.40	66	0	66	4
Moss Adams, LLP	47	28	9	\$ 56,500	500	\$ 113.00	84	20	104	2
Pauly Rogers and Co, PC	36	23	19	\$ 31,700	334	\$ 94.91	78	12	90	3
Grove, Mueller & Swank, PC	33	20	14	\$ 32,500	269	\$ 120.82	66	0	66	4

**AIS-342**

**Item #: 4.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** 5 Minutes

**Agenda Title:** Quasi-Judicial Public Hearing: Comprehensive Plan Amendment, Sensitive Lands Reviews and Adjustment to Extend Wall St. to Fields Property

**Submitted By:** Cheryl Caines  
Community Development

**Item Type:** Resolution  
Public Hearing - Quasi-Judicial

**Meeting Type:** Council Business  
Meeting - Main

**ISSUE**

Consider the Planning Commission's recommendation to deny a proposed Comprehensive Plan Amendment, Sensitive Lands Reviews, and an Adjustment to extend Wall Street across Fanno Creek to the Fred Fields property that lies east of the library and southwest of the railroad tracks.

The applicant (Fred Fields) has proposed an extension of Wall Street across Fanno Creek. To construct the improvements requires: 1) a Comprehensive Plan Amendment to remove the Goal 5 protection from Tigard Significant Wetlands found on the site; 2) two Sensitive Lands Reviews for work within the floodplain and wetlands (fill and bridge/road construction); and 3) an Adjustment to the street standards in order to construct a narrower street section than required by code. The proposed narrower section eliminates planter strips/street trees and is proposed for the bridge portion of the road extension.

**STAFF RECOMMENDATION / ACTION REQUEST**

The Planning Commission recommends the City Council deny all four application requests (Comprehensive Plan Amendment, Sensitive Lands Review - wetlands, Sensitive Lands Review - floodplain, and Adjustment) based on its findings and pursuant to the staff report and subsequent addendum contained in the record.

**KEY FACTS AND INFORMATION SUMMARY**

The applicant is requesting a Type IV Comprehensive Plan Map Amendment to remove Goal 5 protection from Tigard Significant Wetlands and surrounding riparian corridor in order to extend Wall Street across City of Tigard property and Fanno Creek. The extension of Wall Street is proposed to provide access to the applicant's property that lies west of the railroad tracks. This property is not currently served by a public street or improved access.

A Type III Sensitive Lands Review is required for proposed work within the 100-year floodplain/floodway and Type II Sensitive Lands Review for the wetlands. The applicant is requesting a Type II adjustment to the street improvement standards in order to construct a narrower street section than required by code. This Adjustment would apply only to the bridge portion of the street. Because the sensitive lands and adjustment were requested in conjunction with the Comp Plan Amendment, each review follows the Type IV review process.

Two public hearings were held on August 16, 2010 and October 18, 2010 with the Tigard Planning Commission. Testimony was taken at both hearings. After deliberations, the Commission voted 7-0 to recommend that City Council deny all four applications. The Commissioners stated that the applicant had not provided evidence or enough detailed information to approve this proposal. The Commission's findings and recommendation are included in an attached memo to City Council (Attachment 1 - Exhibit A), along with a brief application history, list of key findings from the staff report, and a list of items included in the attachments.

This item was originally scheduled for December 14, 2010. On December 9, 2010 the applicant requested in writing that the hearing be continued until February 22, 2011. The public hearing was opened on December 14th and immediately continued to the February 22nd date as requested. The applicant requested a second continuance to May 24, 2011. Again the public hearing was opened on February 22nd and continued until May 24th. The

applicant has submitted a third written request to continue the public hearing until July 12, 2011 in order to pursue a second application for the bridge known as the "Pivot Road" application. The continuance request is attached (Attachment 4).

While this number of continuances is not typical, the code does not speak to the number or time limit on continuances of actions being processed as Type IV applications. However, the applicant has indicated that the continuances are to allow adequate time for the Pivot Road application to be decided. Once that occurs, hearings will either proceed for this application, or the application will be withdrawn.

## **OTHER ALTERNATIVES**

If the City Council does not accept the Planning Commission's recommendation to deny, then the application could be:

- 1) Approved - The City Council may find that the applicant has satisfied the applicable review criteria and met the burden of proof necessary to approve the request.
- or
- 2) Approved with Conditions - The City Council may find that the applicant can satisfy the applicable review criteria if certain non-discretionary items are conditioned to be submitted to the record.

Both alternatives would require that findings be developed to support the decision.

## **COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

The City has an on-going obligation to establish transportation priorities to be consistent with current circumstances and anticipated trends. The 2002 Tigard Transportation System Plan (TSP), which was in effect at the time this application was made, shows an east-west, Hall to Hunziker connection via Wall Street. This connection is shown to extend across the Fields property and the abutting Portland Western Railroad right-of-way. However implementation of the Hall-Hunziker connection is not guaranteed by its being identified in the 2002 TSP.

## **DATES OF PREVIOUS COUNCIL CONSIDERATION**

Per the applicant's request, this is a continuance of the December 14, 2010 hearing.

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### **Fiscal Impact**

**Cost:** Unknown  
**Budgeted (yes or no):** Yes/No  
**Where Budgeted (department/program):** Com. Dev/Public Works

#### **Additional Fiscal Notes:**

If the request is denied: the applicant may appeal the decision. If appealed, there will be staff time dedicated to the case and attorney costs to defend the decision. While the staff time is budgeted, use of the time for the appeal will detract from other tasks and priorities.

If the request is approved: Wall Street is a public street. Once the street and bridge are constructed, the maintenance and repairs would be the City's responsibility. The cost is unknown at this time.

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### **Attachments**

[Attachment 1 - Draft Resolution](#)

[Attachment 2 - Applicant Submittal Package](#)

[Attachment 3 - Public Comments to City Council](#)

[Attachment 4 - July 12, 2011 Continuance Request](#)

**CITY OF TIGARD, OREGON  
TIGARD CITY COUNCIL  
RESOLUTION NO. 10-**

A RESOLUTION TO DENY 1)COMPREHENSIVE PLAN AMENDMENT (CPA2009-00004), 2)SENSITIVE LANDS REVIEW (SLR2009-00004), 3)SENSITIVE LANDS REVIEW (SLR2009-00005), AND 4)ADJUSTMENT (VAR2010-00002), TO REMOVE GOAL 5 PROTECTION FROM .19 ACRE OF TIGARD SIGNIFICANT WETLAND AND EXTEND WALL STREET ACROSS FANNO CREEK TO ACCESS 25.41 ACRES OF LAND OWNED BY THE APPLICANT, FRED FIELDS.

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WHEREAS, the proposed construction of a 360-foot section of SW Wall Street, east of Hall Boulevard, will impact sensitive lands, including 100-year floodplain and locally significant wetlands; and

WHEREAS, Section 18.775.070 of the City of Tigard Community Development Code requires a sensitive lands permit for development within 100-year floodplain and Tigard significant wetlands; and

WHEREAS, Section 18.775.090 of the Community Development Code establishes special provisions for development within locally significant wetlands to address the requirements of Statewide Planning Goal 5 and its safe harbor provisions; and

WHEREAS, pursuant to Section 18.775.130 of the Community Development Code, any owner of property affected by Goal 5 safe harbor protection of significant wetlands may apply for a quasi-judicial comprehensive plan map amendment to be undertaken by means of a Type IV procedure; and

WHEREAS, pursuant to Section 18.390.060.G of the Community Development Code, a Type IV decision shall be based on consideration of Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes; any federal or state statutes or regulations found applicable; any applicable Metro regulations; any applicable comprehensive plan policies; and any applicable provisions of the City's implementing ordinances; and

WHEREAS, the Tigard City Council has found the following to be the applicable review criteria: Community Development Code Chapters: 18.370-Variances and Adjustments, 18.380-Zoning Map and Text Amendments, 18.390-Decision-Making Procedures, 18.510-Residential Zoning Districts, 18.745-Landscaping and Screening, 18.775-Sensitive Lands Review, 18.790-Tree Removal, 18.810-Streets and Utility Improvement Standards; Tigard Comprehensive Plan Goals: 1-Citizen Involvement, 2-Land Use Planning, 5-Natural Resources and Historic Areas, 6-Environmental Quality, 7-Hazards, 8-Parks, Trails and Open Space, 11-Public Facilities, & 12-Transportation; Tigard Municipal Code Chapter 9-Parks, Metro Functional Plan Titles 3 (Water Quality and Flood Management) & 13 (Nature in Neighborhoods), and Statewide Planning Goals 1-Citizen Involvement, 2-Land Use Planning, 5-Natural Resources, Scenic and Historic Areas and Open Spaces, 6-Air, Water and Land Resources Quality, 7-Areas Subject to Natural Hazards, 11-Public Facilities and Services, and 12-Transportation.

WHEREAS, the Tigard Planning Commission held public hearings on August 16, 2010 and October 18, 2010 and recommended denial of CPA2009-00004, SLR2009-0004, SLR2009-00005, and VAR2010-00002 by motion with a 7-0 vote in favor.

NOW, THEREFORE, BE IT RESOLVED by the Tigard City Council that:

SECTION 1: Applications for Comprehensive Plan Amendment, CPA2009-00004, Sensitive Lands Review, SLR2009-00004, Sensitive Lands Review, SLR2009-00005, and Adjustment, VAR2010-00002, are hereby denied by the City Council.

SECTION 2: The attached findings and conclusions (**Exhibit A, Exhibit B and Exhibit C**) are hereby adopted in explanation of the Council's decision.

SECTION 3: This resolution shall be effective immediately.

PASSED: By \_\_\_\_\_ vote of all Council members present after being read by number and title only, this \_\_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
Catherine Wheatley, City Recorder

APPROVED: By Tigard City Council this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Craig Dirksen, Mayor

Approved as to form:

\_\_\_\_\_  
City Attorney

\_\_\_\_\_  
Date



City of Tigard  
**M E M O R A N D U M**

TO: Mayor Dirksen and Tigard City Council Members

FROM: Cheryl Caines, Associate Planner

RE: Fields Wall Street Extension – Application History, Findings and Recommendation of the Tigard Planning Commission, and Explanation of Attachments

DATE: December 1, 2010

**Introduction**

Due to the volume of information found in the file, the complex history of the application, and the limited space available within the Agenda Item Summary (AIS), this memo was created to help guide the City Council through the Fields Wall Street extension case record. The memo provides a brief application history, the reasoning for the Planning Commission’s recommendation for denial, the key findings within the Staff Report, and a list of materials in the record. Some of these materials are attached to the AIS, while others are provided on disc to each of the council members.

**Application History**

October 2009 Mr. Fields submitted the current application. Staff determined the application was incomplete and sent a letter outlining the completeness items in October 2009.

February 2010 The applicant submitted revised materials and requested the City process the application based on the information provided to date as allowed through Oregon Revised Statute 227.178(4)(b). There remained several issues with the application including the proposal to use City property to meet zero-foot rise floodplain requirements through proposed cuts/fills without a property owner signature.

June 2010 – A revised narrative and plans were submitted removing cuts on City property that were proposed to balance the fill needed to construct the bridge abutments within the 100-year floodplain.

August/September 2010 – The first public hearing was held before the Tigard Planning Commission (August 16<sup>th</sup>). After staff and applicant presentations, the Commissioners asked questions of the applicant. The questions and discussion focused on the fact that the application materials did not provide adequate information about environmental issues and alternatives. Many of the application materials were the same as those used for Phase I of Wall Street reviewed several years ago. Ten individuals testified (one proponent, nine opponents). One opponent requested a continuance to review the new material that had been submitted. A schedule was agreed upon by all parties that included deadlines for submittal of new evidence, submittal of rebuttal evidence, submittal of rebuttal arguments, issuance of a revised staff report considering all information in the record, and a second public hearing. There were over 60 letters submitted by the public as new evidence; all opposing the proposal.

October 2010 – On October 8<sup>th</sup>, staff issued an addendum to the original staff report to address issues raised at and following the August 16<sup>th</sup> hearing. A second public hearing was held before the Planning Commission on October 18, 2010. After presentations by staff and the applicant, the Commission heard public testimony. Fifteen people testified; all opposed the proposal. The Commissioners deliberated the proposal. The Commissioners expressed that the owner is entitled to develop his property within the confines of the law; however, the applicant had not met the applicable criteria or burden of proof for a recommendation of approval. Many noted that this was not the right plan or optimal solution. The Commission voted 7-0 to recommend that City Council deny the applications (CPA2009-00004/SLR2009-00004, SLR2009-00005/VAR2010-00002).

### Planning Commission Analysis and Recommendation

At the October 18<sup>th</sup> hearing staff briefly presented the staff report addendum, and the applicant's representative also made a presentation, which focused on three issues from the written response submitted to the City on October 15, 2010 (Attachment 2). These three issues are:

- There are examples of streets and associated fill within floodplains in residential areas in Tigard; therefore, public support facilities must include streets. These examples include Tigard Street and 121<sup>st</sup> Avenue.
- Environmental, Social, Economic, and Energy Analysis (ESEE) - The environmental impacts are those impacts to wetland functions and values. The Commission should not focus on the public's perception of impacts, but rather on the positive wetland impacts of this project which will make the functions and values better.
- Alternatives - The "pivot road" plan is not viable because the City is not cooperating. Staff keeps talking about a longer bridge; this is not economically viable. The Milton Court access is also not viable according to our traffic engineer's analysis.

The Commissioners then asked questions of the applicant's representative, Phil Grillo, regarding the proposal and presentation. Mr. Grillo was asked to address the fact that the ODF&W comment letter states that endangered and threatened species are found on-site. *He responded by saying that Tigard has no criteria regarding these species. It was looked at by the applicant's environmental scientist, who said no study is required. The ESEE does not require addressing individual species but rather showing a balance. He said that ODF&W is not the regulating agency for threatened and endangered species; it is the federal government.*

Mr. Grillo was asked to summarize the reasons Milton Court was not a viable alternative for those in the audience who may not have had a chance to review the information submitted by the applicant. *He noted that the applicant does not have access to the subject property via Milton Court and that what could happen in the future is only speculation. Other reasons include: portions of Milton Court are within the floodplain, this alternative will impact natural resources (Metro property and trees), and that it would not meet some City street standards (cul-de-sac length, TSP, connectivity). Milton Court does not resolve the connectivity issue. The Commission responded by saying that the proposed plan does not solve the connectivity issue either; it dead ends and does not connect with Hunziker. Mr. Grillo disagreed and added that the Milton Court intersection with Bonita is failing according to the applicant's traffic engineer. Additional traffic only puts more burden on Bonita Road.*

The Planning Commission asked Mr. Grillo why not drop this application and pursue the "pivot road" alternative? *Mr. Grillo responded that unless the City cooperates and agrees to changes to the library site design, then it is not viable plan. Also there is still the issue of whether the development is associated with a public support facility. The Commission went back to Mr. Grillo's examples of roads built within residential floodplains and asked if the current Development Code, or another code, with no definition for public support facilities was in place when these roads were constructed. The standards have changed over time. What is the history? Are these examples applicable? Were the roads constructed by public or private entities? Mr. Grillo responded that some seem very old and some cement work looks more recent. He then pointed to a more recent example: (Woodruff Bridge on the Fanno Creek Trail).*

The Commissioners noted that the applicant's ESEE did not provide much information on the positive impacts of development and even less information on the social and energy aspects. *Mr. Grillo responded by saying the positive economic impact is development of the large site, which is close to downtown. This far outweighs the environmental and social impacts to .19 acre of wetlands. The Commission noted that there is no data to show*

this, no economic data or numbers to help them evaluate the social and economic positives and make comparisons with the negative impacts. The applicant's analysis and conclusions are based on assumptions and opinions. *Mr. Grillo said that the applicant doesn't have to provide data under an ESEE. Providing a site plan will not change anything; the site is zoned for R-25 residential development.*

The Commissioners asked if the applicant had addressed the list of concerns noted at the last hearing, in particular, conversing with the railroad. Is the applicant ready to address that? *Mr. Grillo noted that he had made some calls and was satisfied that an at-grade crossing is not in the immediate future. However, he added that the current impediments may not always exist.*

Following public testimony and the applicant's rebuttal, the Planning Commission closed the hearing and deliberated on the application. The Planning Commission recommended that City Council deny the applications based on the findings listed below and those found in the staff report.

- 1) The applicant's data shows a .4 foot rise in the water level, which does not meet the Tigard Community Development Code requirement found in 18.775.070 (Sensitive Lands Permits) that states the land form alteration or development will not result in any increase in the water surface elevation of the 100-year flood.
- 2) Section 18.775.070.2 states that land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except for those associated with community recreation, utilities, or public support facilities. The Commission was not persuaded by the applicant's definition of public support facilities; the definition was not supported. The applicant requested the zone change from commercial to residential with full knowledge of this issue and didn't address it at the time.
- 3) The applicant is requesting removal of Goal 5 protection from an on-site wetland through the process allowed under TDC 18.775.130.A (ESEE analysis). Commissioners found the analysis inadequate to approve the request for the following reasons:
  - There is evidence of endangered or threatened wildlife on-site. Although it is not part of the City process to address this fact, it is related to the social aspects and value to the community which is a component of the Environmental, Social, Economic, and Energy (ESEE) analysis required by code. Therefore, it should be addressed in relation to these components of the ESEE.
  - A comprehensive analysis on the cost to the community was not provided, for example tax revenue offsets, payroll benefits, and number of people employed as part of the ESEE analysis to show potential benefits of development.
  - The only positive social impact is that the residential development will be in close proximity to the downtown; however, that does not outweigh the public testimony given regarding the [negative] social impact.

**Staff Report and Addendum**

The Staff Report reviews the proposal against requirements of the Tigard Community Development Code, Tigard Comprehensive Plan, Tigard Municipal Code, Metro Urban Growth Management Plan, and Statewide Planning Goals. Therefore, the report is arranged to reflect this. An addendum to the staff report was issued on October 8, 2010 to address new evidence and issues raised at the August 16<sup>th</sup> hearing and information submitted following the hearing. The addendum findings are in addition to those within the original staff report and do not replace the original findings.

The reasons for recommending denial found in the staff report and addendum include:

- 1) A completed application form, which includes property owner signatures, is required by section 18.390.060.C.2.a. The application involves properties controlled by the City (tax lots 100 & 200), but City signature has not been obtained.
- 2) The applicant has not met the burden of proof necessary for the City to find and conclude compliance with the applicable criteria, regulations, policies, and goals within the Tigard Community Development Code (TDC), Tigard Municipal Code, Tigard Comprehensive Plan, Metro Functional Growth Management Plan, and Statewide Planning Goals.

**a) Development Code Criteria**

**i) Variances and Adjustments**

- The applicant did not provide facts to show what adverse impacts to the natural resources would be avoided by elimination of the planter strip and a narrower bridge deck.

**ii) Sensitive Lands**

*Wetlands*

- An Economic, Social, Environmental, Energy Analysis (ESEE) is required to show that the Goal 5 protection should be removed from the Tigard Significant wetland to construct the extension of Wall Street. The applicant's analysis fails to show that the positive economic impact outweighs the adverse impacts to the resource.
- There are alternatives to the proposed 320-foot bridge span that avoid or have less impact upon natural resources including a longer bridge span, alternative designs, and possible access from Milton Court across Metro property. The applicant has submitted an application for an alternative design (pivot road option), which is currently under separate land use review. The applicant argues that a primary access to Milton Court is not the best alternative for several reasons, including traffic issues at the Bonita Road/Milton Court access.

*Floodplain*

- The TDC requires no increase in the water surface elevation of the 100-year floodplain due to land form alteration or development. This has not been demonstrated by the applicant. In fact, the hydraulic analysis completed by West Consultants in 2003 shows an increase of .4 feet in the water surface elevation.
- The affected parcels are zoned R-12 and R-25. Land form alterations (any man-made change to improved or unimproved real estate) are only allowed within 100-year floodplain in areas designated as commercial and industrial on the comprehensive plan land use map, except that alterations or development associated with community recreation uses, utilities, or public support facilities are allowed. The proposal is not associated with any of these three uses. However, the applicant asserts that the proposal involves public support facilities.
- The applicant states that the fill and pilings for the street are public support facilities because they physically support the roadway on the bridge. Based on the context of the TDC, Staff interprets the code as using the term "public support facilities" to refer to items found along a street that play an ancillary role to the street system and development such as sidewalks, driveway aprons, electrical poles, etc., and not to refer to the fill and pilings proposed by the applicant.
- The applicant has not provided information on how the road and bridge structure will be anchored or constructed to be resistant to flood damage.

**iii) Street and Utility Improvements**

- Wall Street is a public street which requires dedication of a 72-foot-wide right-of-way (ROW). The majority of the dedication would be on City property. The necessary ROW dedication has not been secured by the applicant. However, there is a 60-foot-wide access easement granted to the applicant that lies within the north 60 feet of the 72-foot ROW.
- A temporary turnaround has not been proposed but is necessary to meet city code requirements.
- It is unknown if the design of the bridge could accommodate utilities, including water that will be above the floodplain or resistant to flood damage.

**b) Comprehensive Plan Goals and Policies**

- i)** This proposal does not comply with the goals and policies regarding protection of natural resources, land use planning regulations, and development within hazard areas (floodplain).
- ii)** The applicant states that many comprehensive plan goals pertaining to transportation, public facilities, and economic development are in conflict with those related to natural resources and environmental quality, and that a balance must be found between the conflicts. However, there are alternatives that permit access to the applicant's property while having less or avoiding impacts to natural resources. The applicant did not provide

sufficient findings that the proposal has less impact than these alternatives, which may comply with City goals.

**c) *Municipal Code Regulations***

Tree planting for vegetated corridor enhancement and tree removal on City property are proposed with this application. These actions both require approval from the Public Works Director, and the tree planting requires a maintenance agreement. Neither was provided with this application. In addition there is a question as to whether mitigation is required. Mitigation has not been proposed. Tree removal also requires a tree removal permit. The applicant requested these approvals under a separate but concurrent review (TRE2010-00002); these permits were denied.

**d) *Metro Standards and Statewide Planning Goals***

These standards and goals are not satisfied for many of the same reasons the Comp Plan goals and Development Code standards are not met. The applicant has not met the Metro standards regarding water quality and flood management. Compliance with statewide goals regarding land use planning, natural resources, water quality, and natural hazards has not been shown by the applicant.

**Agenda Item Summary (AIS) Attachments**

As noted above, there was a significant amount of information submitted to the record. Rather than attaching numerous documents, only the following items are attached to the AIS: 1) Draft Resolution and exhibits (including the staff report), 2) the applicant's application submittal (June 14, 2010), and 3) public comments to the City Council. All other materials submitted to the record are being provided to each Councilor for their reference either on disc or paper copies.

All of the documents within the record have been organized into a few large files; many include sub-files. Both the attachments and record files listed below will open within Adobe Reader. There are bookmarks along the left side of the screen which outline the documents found within the attachment or file. These bookmarks match the lists below. To go directly to a document, please click on the bookmark.

**Attachment 1 - Resolution**

Draft Resolution

Exhibit A – Memo to City Council with Planning Commission Findings

Exhibit B – Staff Report

Memo to Planning Commission (organization of the Staff Report and location of findings)

Staff Report

Attachment 1 (Incomplete Letter to applicant from Staff)

Attachment 2 (12-1-19 Letter from Phil Grillo regarding public support facilities)

Attachment 3 (Comment letter - Tualatin Valley Fire and Rescue)

Attachment 4 (Comment letter - Oregon Department of Fish and Wildlife – ODF&W)

Attachment 5 (Comment letter - Department of Land Conservation and Development)

Attachment 6 (Illustration showing 2002 Transportation System Plan connection)

Attachment 7 (Vicinity map)

Exhibit C – Addendum to Staff Report (following 8-16-10 hearing)

**Attachment 2 – Applicants Submittal Package**

**Attachment 3 – Public Comments to City Council**

Gudekunst comments

Davis comments

There were two public hearings on the proposal; therefore the materials are combined into two files based upon these hearings. All materials that were submitted prior to or at the August 16, 2010 hearing are in File 1. Materials submitted following that hearing, along with items submitted at the October 18, 2010 hearing are in File 2. \*\*Please note that Exhibit G is a version of the application submittal that includes plans showing the proposed cuts and fill on City property (open Exhibit G listed below, then open applicant's Exhibit L – Plan 2.6). These cuts were part of an earlier version of the submittal (February 2010).

### **File 1 - August 16, 2010 Hearing**

- Memo to Planning Commission (8-16-10 hearing exhibits and follow-up question)
- 8-16-10 Planning Commission Meeting Minutes
- Exhibit A (Comment letter - Mansfield)
- Exhibit B (Comment letter – Audubon Society)
- Exhibit C (Staff PowerPoint presentation)
- Exhibit D (Applicant's presentation materials)
- Exhibit E (Group McKenzie memo responding to Staff Report findings)
- Exhibit F (Arborist Study)
- Exhibit G (Applicant's original submittal prior to removal of cuts on City property)\*\*
- Exhibit H (Tree Removal Permit application submittal)
- Exhibit I (Zone Change Final Order)
- Exhibit J (Comment letter – Bielke)
- Exhibit K (Applicant's response to ODF&W comment letter)
- Exhibit L (Applicant's response to legal issues surrounding the file)
- Information showing proximity of Milton Court to Mr. Fields property

### **File 2 - October 18, 2010 Hearing**

- Memo to Planning Commission (new evidence 9-10-10 deadline)
- Public Comments (9-10-10 deadline)
- 9-8-10 e-mail from Susan Hartnett to Commissioner Vermilyea
- Attachment to Hartnett e-mail (excerpt from ODF&W letter)
- Staff Submittal (9-10-10 deadline)
- Applicant Submittal (9-10-10 deadline)
- ODF&W letter dated 9-10-10 (to address applicant's 8-12-10 response)
- Memo to Planning Commission (rebuttal evidence 9-17-10 deadline)
- Staff Submittal (9-17-10 deadline)
- Public Comments (9-17-10 deadline)
- File Correspondence (9-17-10 deadline)
- Memo to Planning Commission (10-8-10 PC packet)
- The Oregonian* article (9-6-10)
- Applicant's response to staff report addendum (received 10-15-10)
- E-mail to Commissioners forwarding applicant's response
- 10-18-10 Planning Commission meeting minutes
- Exhibit A – Bielke testimony
- Exhibit B – Lindstrom testimony
- Exhibit C – Whitney testimony



# City of Tigard

## MEMORANDUM

TO: Tigard Planning Commission

FROM: Cheryl Caines, Associate Planner *CC*

RE: Fields Wall Street Extension

DATE: August 6, 2010

### INTRODUCTION

The attached staff report evaluating the proposal to extend Wall Street across Fanno Creek to access Mr. Field's property is extensive. It comprises about 35 pages without attachments. The staff report is a detailed response to a complex application by Mr. Field's requesting the City to approve four concurrent requests – a Comprehensive Plan amendment, two sensitive lands reviews and an adjustment. This memo is intended to provide an understanding of the process and structure used by staff to make its recommendations. The following does not address all the issues raised in the staff report, but is meant only to provide an overview of the applications and their interdependence.

### ORGANIZATION OF THE STAFF REPORT

The Planning Commissioner's packet consists of a copy of the applicant's submittal (binder and full size plan set), staff report, and attachments. Please note that the applicant's narrative consists of the original narrative (following the table of contents) and an addendum (following the original narrative and before Exhibit A). The Staff Report refers to exhibits and attachments. Exhibits are found in the applicant's submittal, while attachments are included with the Staff Report. These attachments include the original incomplete letter sent to the applicant; a letter from the applicant's representative regarding public support facilities, comment letters from State and local agencies, and a vicinity map.

The Staff Report reviews the proposal against requirements of the Tigard Community Development Code, Tigard Comprehensive Plan, Tigard Municipal Code, Metro Urban Growth Management Plan, and Statewide Planning Goals. Therefore, the report is arranged to reflect this. The report also includes a brief history of Wall Street, a summary of key issues, and an analysis/conclusion.

### APPLICATIONS

The application consists of approvals four concurrent land use requests as follows:

1. A Comprehensive Plan amendment to remove Goal 5 protection from Fanno Creek's significant wetlands;
2. Sensitive lands review to do work in the Fanno Creek Wetland to construct the proposed Wall Street extension,

3. Sensitive lands review to do work in the Fanno Creek flood plain to construct the proposed Wall Street extension, and
4. An adjustment to the Tigard Development Code (TDC) street improvement standards to construct Wall Street to a narrower section than allowed by the TDC.

**Request 1: Comprehensive Plan amendment to remove Goal 5 protection**

The TDC does not allow issuance of sensitive lands permits in significant wetlands; therefore the applicant must request a Comprehensive Plan Amendment to remove the Goal 5 protection from the resource. An Economic, Social, Environmental, Social and Energy (ESEE) Analysis per Oregon Administrative Rules (OAR) 660-023-040 is required. The analysis looks at the economic, social, environmental, energy consequences that could result from a decision to allow, limit, or prohibit a use that conflicts with the Goal 5 resource. Staff's detailed evaluation, findings and conclusions are on pages 18-20 of the appended staff report. Comprehensive Plan criteria are also applicable to this request. In pages 24-30 staff has analyzed the application against applicable Tigard Comprehensive Plan policies and has determined that the application does not comply with the applicable criteria. In addition, applicable Metro standards and Statewide Planning Goals must also be addressed. Analyses of these criteria are found on pages 32-35 of the report.

**Request 2: Sensitive lands review to do work in the Fanno Creek Wetland to construct the proposed Wall Street extension.**

The applicant is proposing to do work within Fanno Creek's significant wetlands. An area of approximately .19 acres will be affected. Staff has previously recommended denial of the Comprehensive Plan amendment to remove significant wetlands protection due to the inadequacy of the Goal 5: ESEE analysis. The TDC also requires that any landform alterations not create site disturbances to an extent greater than the minimum required for the use. Staff has found that the applicant has not met the burden of proof to approve a Sensitive Lands Review for work within the wetland and riparian corridor. Staff's detailed evaluation, findings and conclusions are on pages 15-18 of the appended staff report.

**Request 3: Sensitive lands review to do work in the Fanno Creek flood plain to construct the proposed Wall Street extension.**

This project involves work in the hundred year floodplain. Staff finds that the applicant has not complied with standards regarding zero-rise, anchoring, resistance to and minimizing flood damage and the need to place fill within a floodplain area that is zoned residential. Staff's evaluation of the applicant's submittal for sensitive land review to do work within the floodplain is found on pages 12-15 of the staff report.

**Request 4: An adjustment to the Tigard Development Code (TDC) street improvement standards to construct Wall Street to a narrower section than allowed by the TDC**

The applicant has proposed a narrower street section and elimination of the planter strip on the bridge portion of the street extension. This requires an adjustment to the street improvement standards. Staff recommends denial of the adjustment to reduce the street section because the applicant has not provided adequate information to prove that the request meets the applicable criteria. Staff's detailed evaluations, findings and conclusions are on pages 7 & 8 of the appended staff report.

**Other TDC Criteria:** On pages 20-24 of the staff report, staff evaluates the proposal against the TDC development codes utility and improvement standards. In many instances the applicable criteria are not met.

**Municipal Code Regulations:**

Because the applicant is proposing removal and planting of new trees on city property, the requirements of Municipal Code chapter 9.06 are applicable. The applicant has not shown compliance with these regulations. A detailed analysis is found on pages 30-32.

CONCLUSION:

Staff has found that there is insufficient evidence to demonstrate that applicable criteria are met as is necessary to approve any of the four land use actions requested in Mr. Fields' application.

**STAFF REPORT TO THE  
 PLANNING COMMISSION  
 FOR THE CITY OF TIGARD, OREGON**



120 DAYS = NA

**SECTION I. APPLICATION SUMMARY**

**FILE NAME:** FIELDS WALL STREET EXTENSION  
**FILE NOS.:** Comprehensive Plan Amendment (CPA) CPA2009-00004  
 Sensitive Lands Review (SLR) SLR2009-00004  
 Sensitive Lands Review (SLR) SLR2009-00005  
 Adjustment (VAR) VAR2010-00002

**PROPOSAL:** The applicant is requesting concurrent recommendation of approval by the Tigard Planning Commission of four separate actions: 1) an amendment to the Comprehensive Plan to remove Goal 5 protection from Tigard Significant Wetlands and the riparian corridor surrounding Fanno Creek in order to extend Wall Street across City of Tigard property and Fanno Creek to his property, 2) two Sensitive Lands Review permits for proposed work within the 100-year floodplain and wetlands, and 3) an adjustment to the street improvement standards in order to construct a narrower street section than required by code. Tree removal permits to remove trees within the sensitive lands were submitted under a separate application (TRE2010-00002).

**APPLICANT:** Fred Fields  
 1149 SW Davenport Avenue  
 Portland, OR 97201  
**APPLICANT'S REP.:** Group Mackenzie  
 Attn: Rhys Konrad  
 P.O.Box 4310  
 Portland, OR 97293

**APPLICANT'S REP.:** Miller Nash L.L.P.  
 Phil Grillo  
 3400 U.S. Bancorp Tower  
 111 SW Fifth Ave.  
 Portland, OR 97204  
**PROPERTY OWNER 1:** Same as applicant.

**PROPERTY OWNER 2:** \*City of Tigard  
 13125 SW Hall Blvd.  
 Tigard, OR 97223  
 \*Owner has not signed application  
**PROPERTY OWNER 3:** Aslak Eikram  
 by John O. Hayhurst  
 7805 SW Edgewater East  
 Wilsonville, OR 97070

**LOCATION:** No address, Washington County Tax Assessor's Map 2S102DA, Tax Lot 690.  
 No address, Washington County Tax Assessor's Map 2S102DD, Tax Lot 100.  
 13560 SW Hall Blvd., Washington County Tax Assessor's Map 2S102DD, Tax Lot 200.  
 No address, Washington County Tax Assessor's Map 2S10100, Tax Lot 1200.

**ZONE:**

R-12: Medium-Density Residential District. The R-12 zoning district is designed to accommodate a full range of housing types at a minimum lot size of 3,050 square feet. A wide range of civic and institutional uses are also permitted conditionally.

R-25: Medium High-Density Residential District. The R-25 zoning district is designed to accommodate existing housing of all types and new attached single-family and multi-family housing units at a minimum lot size of 1,480 square feet. A limited amount of neighborhood commercial uses is permitted outright and a wide range of civic and institutional uses are permitted conditionally.

**COMP PLAN:**

Medium Density Residential and Medium High Density Residential.

**APPLICABLE REVIEW CRITERIA:**

Community Development Code Chapters: 18.370-Variances and Adjustments, 18.380-Zoning Map and Text Amendments, 18.390-Decision-Making Procedures, 18.510-Residential Zoning Districts, 18.745-Landscaping and Screening, 18.775-Sensitive Lands Review, 18.790-Tree Removal, 18.810-Streets and Utility Improvement Standards; Tigard Comprehensive Plan Goals: 1-Citizen Involvement, 2-Land Use Planning, 5-Natural Resources and Historic Areas, 6-Environmental Quality, 7-Hazards, 8-Parks, Trails and Open Space, 11-Public Facilities, & 12-Transportation; Tigard Municipal Code Chapter 9 - Parks, Metro Functional Plan Titles 3 (Water Quality and Flood Management) & 13 (Nature in Neighborhoods), and Statewide Planning Goals 1-Citizen Involvement, 2-Land Use Planning, 5-Natural Resources, Scenic and Historic Areas and Open Spaces, 6-Air, Water and Land Resources Quality, 7-Areas Subject to Natural Hazards, 11-Public Facilities and Services, and 12-Transportation.

**SECTION II. STAFF RECOMMENDATION**

Staff recommends that the Planning Commission recommend **DENIAL** of the proposed Comprehensive Plan Amendment, Sensitive Lands Review, and Adjustment to the City Council.

**SECTION III. BACKGROUND INFORMATION**

**Wall Street History**

December 2001 the City and the applicant (Mr. Fred Fields) entered into an Option Agreement in for the City to purchase property from Mr. Fields to construct a new public library. In October 2002, the parties entered into a Purchase and Sale Agreement. These documents reference the establishment of an extension road from Hall Boulevard to Mr. Fields adjacent property that lies generally eastward of the property that is now the library property.

October 2002 the current Transportation System Plan (TSP), a subdocument of the Tigard Comprehensive Plan, was adopted by resolution. The TSP lays out the city's transportation improvement needs over a 20 year planning period. In order to alleviate, and mitigate for growing congestion problems, the plan identifies possible improvements and connections. One of these connections includes the construction of Wall Street between Hall Boulevard and Hunziker Street.

January 2003 a 42 unit condominium project (Fanno Pointe) was approved on the site to the south of what is now Wall Street. Approval was granted with temporary access from SW Hall Boulevard, but the project's ultimate access would be from Wall Street.

April 2003 the City received approval to construct the Tigard Public Library. The City was studying possible alternative alignments of Wall Street between Hall Boulevard and Hunziker Street at the time of this approval. Access to the library was approved through an interim driveway from Hall Boulevard until such time that the first phase of the Wall Street extension could be completed. Around this same time negotiations began with Mr. Fields and City Council asked Staff to prepare a preliminary engineering report to form a Local Improvement District (LID) to extend Wall Street to Hunziker, which would require an at-grade crossing of the Pacific Western Railroad tracks. The LID proposal originally consisted of two phases. Phase 1 was to extend Wall Street to serve the library and Fanno Pointe Condominiums. Phase 2 was to complete the Wall Street connection to Hunziker.

March 2004 the City submitted a proposal to construct Phase 1 of the Wall Street extension and request approval for the future construction of Phase 2 of Wall Street. At the time of submittal, approval had not been obtained from Clean Water Services or the Army Corps of Engineers for work within the vegetated corridor and floodplain. In addition, the City had not obtained approval from Portland & Western Railroad for an at-grade crossing of the railroad tracks. After several discussions with Staff, the application was revised to eliminate approval for Phase 2.

Fall 2005, Phase 1 was further revised to reduce the proposed roadway length from 425 feet to 350 feet in order to avoid development within the 100-year floodplain. The redesign included a retaining wall along the eastern edge of the condominium access to minimize the wetland impact from .25 acre to .11 acre.

December 2005 the City granted Mr. Fields a 60-foot wide easement for construction of utilities and roadway on the property purchased from Mr. Fields. This easement follows the Wall Street alignment.

June 2006 land use approvals for Phase 1 were granted. The approval included sensitive lands review and a comprehensive plan amendment to remove protection of the impacted areas of "Locally Significant" wetlands for the construction of Wall Street, Phase 1. Construction was completed the following year.

August 2007 City Council prepared a memorandum of understanding between Mr. Fields, the Tigard-Tualatin School District and the City to work together on a property exchange that involved the District's bus storage facility on Hall Boulevard for a site owned by Mr. Fields off Hunziker. Mr. Fields would then have access to his property via a route not requiring a bridge across Fanno Creek. The discussions ended when the District decided to retain its Hall Boulevard property.

July 2008 Mr. Fields requested an amendment to the Comprehensive Plan and Zoning Map to amend his property's zoning designation from Light Industrial (I-L) to Medium High Density Residential (R-25). A concurrent application was made for a Comprehensive Plan amendment and Sensitive Lands Review to extend Wall Street across Fanno Creek. The application for Wall Street was withdrawn. The zone change was approved by Council in June 2009.

October 2009 Mr. Fields submitted the current application. Staff determined the application was incomplete and sent a letter outlining the completeness items in October 2009 (Attachment 1). The applicant submitted revised materials in February 2010 and requested the City process the application based on the information provided to date as allowed through Oregon Revised Statute 227.178(4)(b). There remained several issues with the application including the proposal to use City property to meet zero-foot rise floodplain requirements through proposed cuts/fills without a property owner signature.

## **Proposal Description**

The applicant is requesting a Type IV Comprehensive Plan Map Amendment to remove Goal 5 protection from Tigard Significant Wetlands and surrounding riparian corridor in order to extend Wall Street across City of Tigard property and Fanno Creek. The extension of Wall Street will provide access to the applicant's property that lies west of the railroad track. This property is not currently served by a public street or improved access. A Type III Sensitive Lands Review is required for proposed work within the 100-year

floodplain/floodway and Type II Sensitive Lands Review for the wetlands. The applicant is requesting a Type II adjustment to the street improvement standards in order to construct a narrower street section than required by code. This adjustment would apply only to the bridge portion of the street. Because the sensitive lands and adjustment were requested in conjunction with the Comp Plan Amendment, each review follows the Type IV review process. Tree removal is proposed to construct the street extension as shown in the application (Arborist Report – Exhibit T). Removal of non-hazardous trees within sensitive lands requires tree removal permits. The applicant has requested a separate but concurrent review of the Tree Removal Permits (TRE2010-00002).

During the review but prior to public notice, the applicant revised the plans to eliminate specific excavation areas which may have provided zero-rise for the fill. The cuts (involving more than 1,100 cubic yards of material) were proposed on City property, and the applicant has not secured the City's signature on the application as the property owner. Other work proposed on City property includes mitigation/enhancement of vegetated corridors, which is required to meet Clean Water Services standards. As previously noted, an access easement was granted to the applicant across City property, but according to documentation provided, this easement appears to be narrower than the required 72-foot right-of-way required for a collector street. The easement appears to be the north 60 feet of the 72-foot right-of-way. It is not clearly shown on the plans provided.

#### *Wetlands*

The extension of Wall Street will impact wetlands designated as "Locally Significant" on the Tigard "Wetland and Streams Corridor Map." These impacts are due to the construction of the sections of road leading up to the bridge abutments and required fill slopes. A man made pond (East pond) and wetlands near Fanno Creek will be impacted to construct the bridge wingwall on the west side of the bridge and the road and fill slopes for the remainder. According to the applicant the proposed impact for Phase 2 will total 8,447 square feet (0.19 acres). Wetland mitigation for the Phase 2 impact was completed as part of Phase 1. A deed restriction was recorded in 2009 for the wetland mitigation. The proposed work appears to be located outside of the restricted area. To complete the proposed work that is located within significant wetlands, the applicant must satisfy the requirements for a Sensitive Lands Review for wetlands, including removal of the Goal 5 protection for the wetland. These criteria are discussed further under the portion of the report addressing section 18.775 (Sensitive Lands).

#### *Floodplain*

Floodplain is also present on the proposal site. Impacts to the floodplain include the addition of structural fill in the areas east and west of the proposed bridge, the construction of wingwalls and retaining walls at both ends of the bridge, and the installation of steel support pilings for the bridge sections. Total impacts will be 2,010 cubic yards prior to mitigation (over a .56 acre footprint). The applicant has stated that mitigation, which is required for a zero rise finding, will occur off-site and that 940 cubic yards of cut volume from Phase 1 may be utilized. Sensitive Lands review for work within the floodplain is required and is addressed further under section 18.775 (Sensitive Lands) portion of this report.

#### *Drainageways*

A 320-foot bridge is proposed to span Fanno Creek. No in water work is proposed within Fanno Creek. The proposed piles for the bridge and fill for the retaining walls and wingwalls are not located within Fanno Creek. A sensitive lands review for drainageways is not required.

#### *Tree Removal (permits requested under separate application, see explanation below)*

The applicant is seeking to remove 26 trees to construct the street extension. All trees within sensitive lands require permits for removal unless deemed hazardous by a certified arborist. According to the arborist's report, 9 of the trees are dead or hazardous. A tree removal permit has been requested for the remaining 17 trees under separate but concurrent review (TRE2010-00002); therefore the tree removal permit criteria are not addressed within this report. However, the requirements for tree removal on City property found in Municipal Code chapter 9 are addressed in this report.

Twenty-one (21) of the trees to be removed are located on City property. Signatures of the property owner are required on the Tree Removal Permit application form, but the City has not signed the application. Secondly, the applicant has not satisfied the applicable tree removal permit criteria. In addition the permit applications have been submitted in the absence of approvals required for construction of the Wall Street extension. For these reasons the tree removal permit has been denied.

### Site & Vicinity Information

The site consists of four tax lots affected by the proposed street extension. The proposed bridge and road that will provide access to the applicant's site (tax lot 1200) will mainly be constructed on properties owned by the City (tax lots 100 & 200). A 60-foot wide access easement has been granted to the applicant by the City on these two properties, which follows the general alignment of the proposed Wall Street extension. A small portion of the Wall Street extension will be constructed on the applicant's parcel, where it is proposed to dead end in anticipation of future development on the property. Mitigation for the impacts to the vegetated corridor around Fanno Creek and on-site wetlands are proposed on all three previously mentioned parcels and tax lot 690, which is small parcel located just north of tax lot 100 and is owned by a third party (A. Eikram).

Tax Lots 1200 and 690 are vacant. A wooded area with dense trees is found along the western and southern boundaries of tax lot 1200 and about half is an open field. Tax lots 100 and 200 are developed with the Tigard Public Library. Sensitive lands exist on the project site including the 100-year floodplain, drainageways (Fanno Creek), wetlands, and Significant Habitat Area. The applicant's property currently has no improved street access, only an unimproved access easement across City property from Wall Street and an existing easement across another City property to the north used to maintain the property.

Three of the four properties are zoned R-12 (Medium Density Residential) and the applicant's property is zoned R-25. Surrounding properties are zoned R-12 and R-7 to the south and west, and I-L (Light Industrial) or I-P (Industrial Park) to the north and east. The vacant site to the south zoned I-L is owned by Metro, has mapped significant habitat area, and is used as open space. Beyond the immediate area, properties to the south and west are developed with residences. Sites to the north and east are predominantly developed with industrial uses.

### Site History

A search of City records show several land use applications having to do with four separate projects. In 1994 a sewer trunk line was installed between McDonald Street and Fanno Creek across tax lot 200. This required a sensitive lands review (SLR94-0001) for work within the floodplain. In 2003 the Tigard Library project was approved (CUP2003-00001, et al.) on tax lots 100 and 200. A Comprehensive Plan Amendment (CPA2004-00001, et al.) was approved in June 2006 to construct Phase 1 of the Wall Street extension to serve the library and Fanno Place condominiums. Tree removal permits (TRE2008-00001, TRE2008-00002 & TRE2008-00016) were approved in September 2008 to remove groups of trees from the applicant's property. The zoning was changed for the applicant's tax lot (1200) in July 2009 from I-L to R-25 through a Comprehensive Plan Amendment (CPA2008-00008) and Zone Change (ZON2008-00002). No other records were found.

### Key Issues

- 1) The application involves properties controlled by the City (tax lots 100 & 200). The application requires signatures of property owners. The City has not signed the application.
- 2) All four applications are being reviewed concurrently. The four applications are interdependent.
- 3) The applicant has not met the burden of proof necessary for the City to find and conclude compliance with the applicable criteria.
  - a) **Development Code Criteria**
    - i) Variances and Adjustments
      - The applicant did not provide facts about what adverse impacts to the natural resources would be avoided by a narrower bridge deck.
    - ii) Sensitive Lands
      - Wetlands*
        - An Economic, Social, Environmental, Energy Analysis (ESEE) is required to show that the Goal 5 protection should be removed from the Tigard Significant wetland to construct the extension of Wall Street. The analysis fails to show that the positive economic impact outweighs the adverse impact to the resource. It does not address access options that could be constructed outside the resource nor long term effects on constructing a street within a natural area that is currently mostly isolated from vehicles, people, and other disturbances.

- Alternatives to the 320-foot bridge span that avoid or have less impact upon natural resources include a longer bridge span or access from Milton Court across Metro property. The TDC requires that any landform alteration not create site disturbances to an extent greater than the minimum required for the use. The applicant has not shown that there are no other alternatives to the proposed roadway extension/bridge.

#### *Floodplain*

- Land form alterations (any man-made change to improved or unimproved real estate) are only allowed within 100-year floodplain in areas designated as commercial and industrial on the Comprehensive Plan land use map, except that alterations or development associated with community recreation uses, utilities, or public support facilities are allowed, as defined in Chapter 18.120 of the TDC. The affected parcels are zoned R-12 and R-25; therefore the proposed earthwork and construction is not permitted.
- "Public support facility" is not a defined term in the TDC. The applicant argues that the fill and pilings for the street are public support facilities because they physically support the roadway on the bridge. Based on the context of the TDC, Staff interprets the code as using the term "public support facilities" to refer to items found along a street that play an ancillary role to the street system and development such as sidewalks, driveway aprons, electrical poles, etc., and not to refer to the fill and piling proposed by the applicant.
- The TDC requires no increase in the water surface elevation of the 100-year floodplain due to land form alteration or development. This has not been demonstrated by the applicant. In fact, the hydraulic analysis completed by West Consultants in 2003 shows an increase of .4 feet in the water surface elevation.
- Cuts necessary to reach this zero-foot rise have not been proposed. The applicant has stated that a plan will be provided, but no specific locations were identified.
- If constructed, Wall Street would be a public street used as access/egress for residential development (including emergency vehicles). The applicant has not provided information on how the road and bridge structure will be anchored or constructed to be resistant to flood damage.

#### iii) Street and Utility Improvements

- Wall Street is a public street which requires dedication of 72-foot wide right-of-way (ROW). The majority of the dedication would be on city property. The necessary ROW dedication has not been secured by the applicant. There is a 60-foot wide access easement granted to the applicant. This easement lies within the north 60 feet of the proposed ROW.
- A temporary turnaround has not been proposed but is necessary to meet city and fire code requirements.
- The applicant states that no utilities are proposed with this application, but one way to provide water to the applicant's property is a public line installed on the proposed bridge. This line must be flood-proof, but the applicant has not addressed this issue since utilities are not proposed. It is unknown if the design of the bridge could accommodate utilities that will be above the floodplain or resistant to flood damage.

#### b) *Comprehensive Plan Goals and Policies*

- i) This proposal does not comply with the goals and policies surrounding protection of natural resources, water quality, land use planning regulations, and development within hazard areas (floodplain).
- ii) The applicant states that many comprehensive plan goals surrounding transportation, public facilities, and economic development are in conflict with those related to natural resources and environmental quality, and that a balance must be found between the conflicts. However, there are alternatives that permit access to the applicant's property while having less or avoiding impact to natural resources. These include a longer bridge span than the 320-foot span proposed and access from Milton Court. The applicant did not provide sufficient findings that the proposal has less impact than these alternatives. How can a proposal that compromises natural resource and other Comp Plan goals be approved, if there are alternatives that comply with the goals?

#### c) *Municipal Code Regulations*

Tree planting for vegetated corridor enhancement and tree removal on City property are proposed with this application. These actions both require approval from the Public Works Director, and the tree planting requires a maintenance agreement. Neither was provided with this application. In addition there is a question as to whether mitigation is required. Mitigation has not been proposed.

**d) Metro Standards and Statewide Planning Goals**

These standards and goals are not satisfied for many of the same reasons the Comp Plan goals and Development Code standards are not met. The applicant has not met the Metro standards regarding water quality and flood management. Compliance with statewide goals regarding land use planning, natural resources, water quality, and natural hazards has not been shown by the applicant.

**SECTION IV. APPLICABLE REVIEW CRITERIA & REPORT LAYOUT**

- A. Zoning Map and Text Amendments  
18.380
- B. Additional Applicable Development Code Standards
  - 18.370 Variances and Adjustments
  - 18.390 Decision Making Procedures
  - 18.775 Sensitive Lands Review
  - 18.790 Tree Removal
  - 18.810 Street & Utility Improvement Standards
- C. Applicable Comprehensive Plan Policies
- D. Municipal Code Requirements
- E. Applicable Metro Standards
- F. Applicable Statewide Planning Goals

**SECTION V. APPLICABLE REVIEW CRITERIA AND FINDINGS**

**A. ZONING MAP AND TEXT AMENDMENTS :**

Quasi-judicial amendments. 2. The Commission shall make a recommendation to the Council on an application for a comprehensive plan map amendment. A recommendation or a decision to approve, approve with conditions or to deny an application for a quasi-judicial amendment shall be based on all of the following standards: 1) Demonstration of compliance with all applicable comprehensive plan policies and map designations; 2) Demonstration of compliance with all applicable standards of any provision of this code or other applicable implementing ordinance; and 3) Evidence of change in the neighborhood or community or a mistake or inconsistency in the comprehensive plan or zoning map as it relates to the property which is the subject of the development application.

The proposed application involves a comprehensive plan map amendment. Therefore, the Planning Commission shall make a recommendation to Council on the proposed comprehensive plan map amendment, sensitive lands review, and adjustment.

Conditions of approval. A quasi-judicial decision may be for denial, approval, or approval with conditions as provided by Section 18.390.050. A legislative decision may be approved or denied.

**B. ADDITIONAL APPLICABLE DEVELOPMENT CODE STANDARDS**

**Variances and Adjustments (18.370)**

Adjustments for street improvement requirements (Chapter 18.810). By means of a Type II procedure, as governed by Section 18.390.040, the Director shall approve, approve with conditions, or deny a request for an adjustment to the street improvement requirements, based on findings that the following criterion is satisfied: Strict application of the standards will result in an unacceptably adverse impact on existing development, on the proposed development, or on natural features such as wetlands, bodies of water, significant habitat areas, steep slopes or existing mature trees. In approving an adjustment to the standards, the Director shall determine that the potential adverse impacts exceed the public benefits of strict application of the standards.

FINDINGS: The applicant has requested an adjustment to the street improvement requirements to construct a narrower street section by eliminating the planter strips on the bridge portion of Wall Street. The applicant must show how the wider street results in unacceptable adverse impacts on existing or proposed development or natural features and how these impacts exceed the public benefit of strict application of the standards. The following reasons are listed by the applicant for the requested adjustment: strict application would result in additional wetland and vegetated corridor impacts, inconsistency with the proposed location of Wall Street that has been reviewed within the submitted material and inconsistency with a previously approved (Joint Fill) permit. In addition, the applicant states that the adjustment does not impact the public benefit as the proposed street extension will still provide vehicular, pedestrian and bicycle access. The Joint Fill permit referenced by the applicant is now expired and is no longer valid.

The applicant has provided inadequate facts for Staff to evaluate this request. No evidence is proposed to support the applicant's assertion that unacceptably adverse impacts on the natural areas will result from a wider bridge deck. Nor has the applicant explained the nature and character of any such impacts and how the impacts are unacceptable.

CONCLUSION: The applicant has provided conclusions, but no facts or findings to support the conclusions. The requirements for a street improvement adjustment have not been fully satisfied.

### **Decision Making Procedures (18.390)**

Chapter 18.390.020 describes the four types of decision-making procedures. Type I procedures apply to ministerial permits and actions containing clear and objective approval criteria and are decided by the Director. Type II procedures apply to quasi-judicial permits and actions that contain some discretionary criteria and are also decided by the Director but include provisions for public notice and opportunities for appeals. Type III procedures apply to quasi-judicial permits and actions that contain predominantly discretionary approval criteria. Type III-PC actions are decided by the Planning Commission with appeals to the City Council. Type III-HO actions are decided by the Hearings Officer with appeals to City Council. In cases where both the Hearings Officer and Planning Commission are involved, the Planning Commission has preferential jurisdiction, per Tigard Development Code (TDC) Section 18.390.080(D)(2)(a). Type IV procedures apply to legislative matters which involve the creation, revision, or large-scale implementation of public policy. Type IV matters are considered initially by the Planning Commission with final decisions made by the City Council.

FINDINGS: This application includes all three types of decision-making reviews. Pursuant to 18.390.080.D.2, whenever an applicant requests more than one approval and more than one approval authority is required to decide the applications, the proceedings can be consolidated so that one approval authority shall decide all applications in one proceeding and the hearings shall be held by the approval authority having original jurisdiction over one of the applications under Section 18.390.100C in the following order of preference: the Council, the Commission, the Hearings Officer, or the Director. Therefore, this application will follow the procedures for Type IV reviews, with a recommendation being forwarded from the Planning Commission to City Council, who shall make the final decision on all applications contained herein.

**Chapter 18.390.050 B2e states that applications shall include an impact study to quantify the effect of the development on public facilities and services.**

FINDINGS: The applicant's narrative includes an impact study that addresses the impacts on the transportation system, the drainage system, the parks system, the water system, the sewer system, and the noise impacts of the development.

**Chapter 18.390.060G states that for legislative map and text amendments (Comprehensive Plan and Development Code) the recommendation by the Commission and the decision by the Council shall be based on consideration of the following factors:**

- ◆ Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes Chapter 197;
- ◆ Any federal or state statutes or regulations found applicable;
- ◆ Any applicable Metro regulations;
- ◆ Any applicable Comprehensive Plan policies; and
- ◆ Any applicable provisions of the City's implementing ordinances.

**FINDINGS:** This report addresses the applicable standards listed above in the review section covering the proposed comprehensive plan amendment as it applies to applicable Statewide Planning Goals, Federal or state regulations, Metro regulations, City's Comprehensive Plan policies and provisions of the City's Development Code.

**CONCLUSION:** The Decision Making Procedures are being followed as required. All four applications are being reviewed through a Type IV process, an impact study was provided by the applicant, and all applicable criteria have been considered and area addressed within this staff report.

### Landscaping and Screening (18.745)

**All development projects fronting on a public street, private street or a private driveway more than 100 feet in length approved after the adoption of this title shall be required to plant street trees in accordance with the standards in Section 18.745.040.C. Certain trees can severely damage utilities, streets and sidewalks or can cause personal injury. Approval of any planting list shall be subject to review by the Director.**

**FINDINGS:** The applicant has indicated planting 2" caliper Oregon White Oaks as streets trees along Wall Street (except where the planter strip has been eliminated due to the bridge crossing). This requirement has not been met because trees were not shown on the plan. The maximum allowed spacing for Oregon White Oak (large stature trees) is 30' and planting of trees is required on the bridge because the applicant has not provided findings to support the adjustment request to construct a narrower street section and eliminate the planter strip on the proposed bridge. Therefore, Staff cannot find that this criterion has been met.

**Section 18.745.060 contains the provisions for re-vegetation where natural vegetation has been removed through grading. Such areas are to be replanted as set forth in this section to prevent erosion after construction activities are completed.**

Areas proposed to be disturbed with grading and excavation activities will be planted and re-vegetated in accordance with the planting plan developed to meet CWS standards listed in R&O 07-05 Appendix A. The methods for species removal and re-planting will be consistent with CWS standards, which meet or exceed the City standards.

**CONCLUSION:** The Landscaping and Screening standards have not been met because the proposed street trees (Oregon White Oak) are not shown on the plan in accordance with the required spacing standards.

### Sensitive Lands Review (18.775)

The development site includes area of drainageways, associated wetlands, floodplain, and vegetated corridor (stream and wetland buffers). Development of sites that include these areas requires review through the sensitive lands criteria as described below. Fanno Creek is located on-site, but no impacts are proposed to the creek channel. Work proposed within Tigard Significant wetlands and the floodplain includes the placement of structural fill, wingwalls, support piles, and enhancement of the vegetated corridor.

Sensitive lands permits can be Type I, II, or III applications depending on the type of sensitive land impacted, type of proposed improvement, and/or the amount of ground disturbance. The applicant asserts that a Type I review is required for the street extension because it is a public support facility. There

is more discussion later as to why the road and supports are not public support facilities (Pages 13 & 14). A Type II review is required for disturbance of areas designated as significant on the City of Tigard "Wetland and Streams Corridor Map", and a Type III review is required for ground disturbance(s) or land form alterations in all floodway areas. The affected areas are within significant wetlands and floodway, and the approval criteria are addressed below.

#### **18.775.040 General Provisions for Floodplain Areas**

##### **Special flood hazard:**

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study of the City of Tigard," effective February 18, 2005, with accompanying Flood Insurance Rate Maps effective February 18, 2005, is hereby adopted by reference and declared to be a part of this chapter. This Flood Insurance Study is on file at the Tigard Civic Center.

**FINDINGS:** The applicant and staff have reviewed these maps and agree that this site is within one of the identified special flood hazard areas. The application is being reviewed under this premise.

##### **Base flood elevation data:**

When base flood elevation data has not been provided in accordance with Section 18.775.040.B above, the Director shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 18.775.040.M and 18.775.040.N below).

**FINDINGS:** The Flood Insurance Study and accompanying Flood Insurance Rate Maps effective February 18, 2005 were consulted by the applicant to verify the 100-year floodplain elevation in the project area. The applicant then cross-referenced with the hydraulic analysis completed by OBEC Consulting Engineers, performed as part of the Alternatives Analysis (Exhibit K) to confirm the floodplain elevation and impacts related to the proposed roadway and bridge extension. As shown in Exhibit O, the research was conclusive that the floodplain elevation is consistent between both sources (141.4). The elevation is confirmed.

##### **Test of reasonableness:**

Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that the potential for flood damage to the proposed construction will be minimized. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these sensitive land areas may result in higher insurance rates.

**FINDINGS:** Base flood elevation data is available and has been established at 141.4 feet by the FEMA Flood Insurance Maps. Therefore, this standard does not apply.

##### **Resistant to flood damage:**

All new construction and substantial improvements, including manufactured homes, shall be constructed with materials and utility equipment resistant to flood damage.

**FINDINGS:** The applicant states that this provision does not apply because the improvements do not include structures or buildings. Improvements are defined by the TDC as "any permanent structure that becomes part of, placed upon, or is affixed to property" and structure is defined as "...piece of work artificially built up or composed of parts joined together in some definite manner"; therefore the provision does apply to all parts of the bridge structure. The applicant did state that the road will be constructed of materials resistant to flood damage, but no specifics were given. In addition, utility equipment must also be flood resistant. Utilities for future development may need to be provided on the bridge. This standard is not met.

**Minimize flood damage:**

All new construction and substantial improvements, including manufactured homes, shall be constructed using methods and practices that minimize flood damage.

FINDINGS: Again the applicant states that this provision is not applicable to the proposed road extension. The provision is applicable to the bridge structure. The applicant states that the roadway materials will be resistant to flood damage, but no specifics were given on what construction methods or practices will be used. This standard is not fully met.

**Equipment protection:**

Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

FINDINGS: The proposal does not involve equipment or service facilities. This criterion does not apply.

**Water Supply Systems:**

All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.

FINDINGS: The applicant states that the roadway extension does not include water supply systems. One way to supply water to the site for future development is on the bridge. It is unknown if the current bridge design will accommodate a future water supply system, or if the system can be designed to minimize or eliminate infiltration of floodwater if below the flood elevation level.

**Anchoring:**

All new construction, all manufactured homes and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

FINDINGS: The applicant again states that the provision is not applicable to the proposal, but the street is a substantial improvement. The bridge is proposed to provide access for emergency vehicles to future residential development on the applicant's property, including during a major flood event. No specifics were outlined to show how the anchoring requirement will be met. This standard is not satisfied.

**Sanitary sewerage systems:**

New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharge from the systems into floodwater.

FINDINGS: No new sanitary systems are proposed with this proposal. Therefore this criterion is not applicable.

**On-site water disposal systems:**

On-site water disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

FINDINGS: There are no on-site water disposal systems proposed with this application; therefore this standard does not apply.

**Residential Construction:**

1. New construction and substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor, including the basement, elevated at least one foot above base flood elevation; 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria: a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding

shall be provided; b. The bottom of all openings shall be no higher than one foot above grade; and c. Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of flood waters. 3. Manufactured homes shall be securely anchored to an adequately anchored permanent foundation system. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

FINDINGS: Residential construction is not proposed with this development. This standard does not apply.

**Nonresidential Construction:**

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation, or together with attendant utility and sanitary facilities, shall: 1. Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water; 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; 3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in Section 18.775.030.E.2; and 4. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 18.775.040.L.2. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

FINDINGS: Non-residential construction with floors or basements is not proposed with this development. This standard does not apply.

CONCLUSION: Based on the analysis above, the General Provisions for Floodplain Areas are not met. The applicant has not provided specifics on construction methods to be used to minimize flood damage to the structure/abutments, and anchoring to prevent collapse, floatation, or lateral movement of the structure. In addition, information was not provided on how future utilities will be resistant to flood damage.

**18.775.070 Sensitive Lands Permits**

Within the 100-year floodplain. The Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:

Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;

FINDINGS: The applicant states that OBEC Consulting Engineers/West Consultants were retained by the City previously to analyze hydraulic impacts of bridge alternatives (applicant's Exhibit K). This analysis was done as part of a 2002 City proposal to cross Fanno Creek. The applicant states that the analysis concludes that a 320-foot bridge will span the floodway and would meet City/FEMA requirements related to no rise with a balance of earthwork volumes. Because this report did not directly address the requirements of 18.775.070, a memorandum was prepared by Matt Butts, a P.E. with Group MacKenzie. Mr. Butts speaks to the City's zero-foot rise requirement by stating that the net fill due to Phase 2 is approximately 1,069 CY, and that there are excavation areas within the project vicinity to satisfy the needed cut volumes to preserve floodplain storage. These areas of storage are not shown, and the applicant has not provided the necessary information to reach positive findings on zero-rise. This criterion is not satisfied.

**Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;**

FINDINGS: The sites involved are zoned R-12 (Medium Density Residential) and R-25 (Medium High Density Residential). Proposed affected areas within the floodplain are zoned R-12, which is a residential zone. According to this standard, land form alterations or developments within the 100-year floodplain are allowed only in commercial and industrial zones. The only exception is for community recreation, utilities, or public support facilities. The applicant argues that the proposed fill and pilings for the road are public support facilities.

Standard 18.775.070.B.2 says that a definition of public support facilities can be found in TDC Chapter 18.120- Definitions, but one is not provided. The applicant points to how the term is used in standard 18.775.020.E.1.a (administrative sensitive lands review), which reads: "...the City Engineer shall review the installation of public support facilities such as underground utilities and construction of roadway improvements including sidewalks, curbs, streetlights, and driveway aprons by means of a Type I procedure..." The applicant states that inclusion of the phrase "construction of roadway improvements" strongly indicates that roadways are allowed in residential floodplains and that support structures for bridges are public support facilities. This interpretation would allow the proposed extension of Wall Street since the roadway is above the floodplain elevation and supported by pilings, structural fill, and wingwall/retaining walls.

The applicant then points to the term public facilities as used in the purpose statement of Chapter 18.810 of the Street and Utility Improvements chapter of the TDC. This statement reads "to provide construction standards for the implementation of public and private facilities and utilities such as streets, sewers, and drainage". The applicant states that streets are public facilities; therefore the support structures for Wall Street are public support facilities.

The applicant argues the definition of support as something physical, while Staff argues the term is used to show an ancillary role, which is better supported in the context of the code. Staff points to the fact that the items listed in 18.775.020.E.1 only include facilities found along streets, all of which play a supportive role in the street and transportation system. The City of Aurora, Oregon uses the term "public support facilities" within its Land Development Code (Title 16) and defines the term as "services which are necessary to support uses allowed outright in the underlying zone and involves only minor structures such as power lines and poles, phone booths, fire hydrants, as well as bus stops, benches and mailboxes which are necessary to support principal development". Again the examples used are all things found along a street.

In response to Staff's prior completeness review request of the applicant to show how the term "public support facilities" has been previously interpreted, the applicant points to a land use approval to construct a portion of the Fanno Creek Trail within the floodplain (SLR2009-00002). This decision permitted the installation of a sidewalk, elevated boardwalk, and bridge across Fanno Creek, within the 100-year floodplain. Most of the work occurred on property that was zoned (I-L - Light Industrial), but a portion of the bridge is located within land (library property) zoned R-12 (Medium Density Residential). The applicant draws parallels between the pedestrian bridge and the proposed Wall Street vehicular bridge, which is 180 meters downstream from the pedestrian bridge.

In a letter dated December 1, 2009 from the applicant's attorney, Phil Grillo, it is stated that both the staff report and the Hearing's Officer's findings for the trail application treat pathways as roads. Staff contends Mr. Grillo's use of terms like roadway, streets, trails, and pathways were taken out of context. These terms were used by Staff to show no land use review is typically required for these facilities unless within sensitive lands in response to testimony about a change of use requirement or to show that the proposed improvements were not commercial, industrial, or non-residential structures that require lowest floor flood-proofing.

In SLR2009-00002, the Hearing's Officer concluded that the surface of the boardwalk met the requirements of 18.775.070.B.5 that pedestrian/bicycle pathways be above the elevation of an average annual flood.

When addressing the standard regarding fill within residential floodplain, Staff found that the proposed improvements were allowed because the sidewalk is a public support facility and the trail is a community recreation facility. The sidewalk (public support facility) is located on land zoned Light Industrial. As noted above only a small portion of the bridge (community recreation) is located within residential floodplain. The applicant is trying to compare a 62-foot long, 8-foot wide pathway bridge that involved approximately 4 cubic yards of fill with the extension of a collector street bridge (320 feet) that involves approximately 2,010 cubic yards of fill. While bicycle/pedestrian pathways have some transportation attributes, they are also community recreation. The applicant has not proven the term public support facilities applies to the proposed fill and pilings required for the extension of Wall Street.

**Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;**

FINDINGS: The applicant's hydraulic analysis prepared by WEST Consultants, Inc. (applicant's Exhibit K) shows an increase in the water surface elevation of the 100-year flood. These increases are shaded in Table 1 – Results for the Base Flood Event (see footnote #2). This footnote reads that “the shaded area above corresponds to where the 100-year water surface elevations would be increased as a result of the proposed bridge plan.” In this case, the elevation for the proposed 320-foot span would increase the elevation between 0.1 and 0.4 feet. This standard is not met.

**The land form alteration or development plan includes a pedestrian/bicycle pathway in accordance with the adopted pedestrian/bicycle pathway plan, unless the construction of said pathway is deemed by the Hearings Officer as untimely;**

FINDINGS: Wall Street is classified as a collector street in the City's TSP. The proposal includes bicycle lanes and sidewalks on both sides in accordance with the requirements for a collector and in accordance with the Master Bicycle and Pedestrian Plans found in the City's Transportation System Plan (TSP). This criterion is met.

**Pedestrian/bicycle pathway projects within the floodplain shall include a wildlife habitat assessment that shows the proposed alignment minimizes impacts to significant wildlife habitat while balancing the community's recreation and environmental educational goals;**

FINDINGS: No new pedestrian/bicycle pathways are proposed with this application. This standard does not apply.

**The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS permits and approvals shall be obtained; and**

FINDINGS: An updated Clean Water Services (CWS) Service Provider Letter has been issued and has been included in the application packet (Exhibit P). However the plans have been modified and proposed areas of excavation are unknown at this time. It cannot now be determined that CWS standards can be satisfied. The applicant has included a copy of the previously issued Joint Fill Permit from the Army Corps and Division of State Lands (DSL), which have since expired. The applicant notes that a renewed Joint Fill permit will be obtained, but a valid permit was not submitted with this application. This standard is not met.

**Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the comprehensive plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle pathway plan.**

FINDINGS: Portions of the nearby Fanno Creek trail have already been constructed. No additional dedications for pedestrian/bicycle pathways are required with this application.

**CONCLUSION:** Based on the analysis above the criteria for sensitive lands permit within a 100-year floodplain are not met. The applicant has not provided information that shows no increase in the flood elevation levels, has proposed fill within a floodplain in a residential zone which is not permitted, and has not obtained current/updated approvals from necessary agencies such as U.S. Army Corps of Engineers, DSL, and possibly CWS.

**Within wetlands:**

**The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:**

**The proposed land form alteration or development is neither on wetland in an area designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map nor is within the vegetative corridor established per "Table 3.1 Vegetative Corridor Widths" and Appendix C: Natural Resources Assessments" of the CWS "Design and Construction Standards", for such a wetland;**

**FINDINGS:** The subject site contains areas designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map and a vegetative corridor of 50 feet from the edge of the wetland. The vegetative corridor for this wetland is a CWS water quality buffer and is not subject to the safe harbor provisions of Goal 5. Work is proposed within Tigard significant wetlands totaling .19 acres (8,447 square feet); therefore the applicant has requested to remove the Goal 5 protection from the impacted area as required by section 18.775.130 of the TDC.

The impact is due to construction of the eastern and western sections of the road that lead up to the bridge abutments and required fill slopes. According to the applicant, there will be minor impacts to the man-made pond (East Pond) and wetlands located east of Fanno Creek to construct the bridge wingwall on the west side of the bridge and the roadway and fill slopes for the rest of the alignment.

No work is proposed within Fanno Creek. The improvements proposed within the vegetated corridors for Fanno Creek and the significant wetlands have been approved with conditions by CWS (see the Service Provider Letter, Exhibit P, in the application packet), but the applicant may need a revised CWS letter if floodplain excavation occurs in areas other than those shown on the CWS approved plans.

**The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;**

**FINDINGS:** The applicant states the Alternatives Analysis demonstrates that the proposed impacts are the minimum practicable for the project and that no other alternatives exist. There are other alternatives, including a longer bridge that spans the entire floodway and avoids the wetland. Another alternative is to gain access across Metro property to the south from Milton Court. These alternatives were not discussed in the Alternatives Analysis (Exhibit K), only within the applicant's narrative. The amount of disturbance to the wetlands for each alternative was not provided. A longer bridge would not impact the wetland and there are no mapped Tigard significant wetlands on the Metro site. The applicant has not shown how the proposed land form alteration will create the minimum disturbance to the wetland for the use.

**Any encroachment or change in on-site or off-site drainage which would adversely impact wetland characteristics have been mitigated;**

**FINDINGS:** The applicant states that the only change in drainage associated with this proposal is the conveyance of stormwater associated with the road and bridge. The stormwater is directed to a water quality facility, where the treated stormwater will be directed into the wetland mitigation area. The applicant states that this will ensure wetland hydrology on the site is maintained and that it does not adversely impact existing wetlands. A letter to the applicant from Shawn Eisner, Wetland Scientist with Pacific Habitat Resources, does not speak directly to the issue of draining into the wetland. In addition a new permit from DSL must be obtained. There is inadequate information to find this criterion is met.

Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in accordance with Chapter 18.745, Landscaping and screening.

FINDINGS: The applicant has submitted a Grading/Erosion Control Plan (sheet R2.2). Fencing is shown on the plans, but the applicant did not provide details about what other measures are being taken nor how these measures will protect the water resource during construction. The applicant states that all disturbed areas that are not covered with impervious surface will be planted upon completion of construction. CWS has conditionally approved a mitigation planting plan for Phase 2, which the applicant has included in the packet.

**All other sensitive lands requirements of this chapter have been met;**

FINDINGS: The proposed project involves 100-year floodplain which has been addressed previously, but Staff found that all of the requirements have not been met. These unmet standards include no increase in flood elevation levels (18.775.070.B.1 & 3), anchoring of structures, resistance to and minimizing flood damage (18.775.040.E, F, & I), and fill within a residential zone (18.775.070.B.2).

**The necessary U.S. Corp of Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained.**

FINDINGS: An updated Clean Water Services (CWS) Service Provider Letter has been issued and has been included in the application packet (Exhibit P). However the plans have been modified and proposed areas of excavation are unknown at this time. It cannot now be determined that CWS standards can be satisfied. The applicant has included a copy of the previously issued Joint Fill Permit from the Army Corps and Division of State Lands (DSL), which has since expired. The applicant notes that a renewed Joint Fill permit will be obtained, but a valid permit was not submitted with this application. This standard is not met.

**The provisions of Chapter 18.790, Tree Removal shall be met;**

FINDINGS: A tree plan is not required because the request does not involve a subdivision, partition, planned development, conditional use permit, or site development review. Tree removal is proposed within the sensitive lands. A total of 26 trees will be removed. Seventeen (17) are non-hazardous and require tree removal permits. The applicant has requested the tree removal permits be under separate but concurrent review (TRE2010-00002). The applicant has met the applicable approval criteria regarding tree canopy and erosion control, nor provided the property owner signatures needed to approve the tree removal permits. Therefore, this standard is not satisfied.

**Physical Limitations and Natural Hazards, Floodplains and Wetlands, Natural Areas, and Parks Recreation and Open Space policies of the Comprehensive Plan have been satisfied.**

FINDINGS: Applicable Comprehensive Plan policies are addressed under Section "C" of this report. As discussed there, all Comprehensive Plan goals and policies are not completely satisfied. Therefore, this standard is not met.

**In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safeharbor provisions of the Goal 5 administrative rule (OAR 666-023-0030) pertaining to wetlands, all wetlands classified as significant on the City of Tigard "Wetlands and Streams Corridors Map" are protected. No land form alterations or developments are allowed within or partially within a significant wetland, except as allowed/approved pursuant to Section 18.775.130.**

FINDINGS: The proposed extension of Wall Street impacts .19 acres of wetlands designated as significant on the City of Tigard "Wetlands and Streams Corridor Map." The applicant has requested a Comprehensive Plan Amendment under a Type IV procedure to remove Goal 5 protection from the impacted area, as required by section 18.775.130. This amendment is addressed later in this report. The findings indicate that the removal criteria are not met and that the Goal 5 protection cannot be removed.

In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of the bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.

1. The standard width for "good condition" vegetated corridors along the Tualatin River is 75 feet, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard "Wetlands and Streams Corridors Map") is located within the 75-foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.

FINDINGS: The site is not adjacent to the Tualatin River. This criterion is not applicable.

2. The standard width for "good condition" vegetated corridors along Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50 feet, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard "Wetlands and Streams Corridors Map") is located within the 50-foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.

FINDINGS: According to the CWS Service Provider Letter, the vegetated corridor condition is marginal or degraded. Therefore, this standard is not applicable.

3. The minimum width for "marginal or degraded condition" vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50% of the standard width, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130.

FINDINGS: As noted above, the vegetated corridor is in marginal or degraded condition. The applicant states that the required 50-foot vegetated corridor has been shown on the plans in accordance with CWS standards utilizing a professional survey and wetland delineation. However, the applicant does not address if any reductions are proposed or by how much the width is reduced.

4. The determination of corridor condition shall be based on the Natural Resource Assessment guidelines contained in the CWS "Design and Construction Standards."

FINDINGS: According to the CWS Service Provider Letter, the vegetated corridor condition is marginal or degraded.

5. The standard setback distance or vegetated corridor area applies to all development proposed on property located within or partially within the vegetated corridors, except as allowed below:

- a. Roads, pedestrian or bike paths crossing the vegetated corridor from one side to the other in order to provide access to the sensitive area or across the sensitive area, as approved by the City per Section 18.775.070 and by CWS "Design and Construction Standards";
- b. Utility/service provider infrastructure construction (i.e. storm, sanitary sewer, water, phone, gas, cable, etc.), if approved by the City and CWS;
- c. A pedestrian or bike path, not exceeding 10 feet in width and meeting the CWS "Design and Construction Standards";
- d. Grading for the purpose of enhancing the vegetated corridor, as approved by the City and CWS;
- e. Measures to remove or abate hazards, nuisances, or fire and life safety violations, as approved by the regulating jurisdiction;
- f. Enhancement of the vegetated corridor for water quality or quantity benefits, fish, or wildlife habitat, as approved by the City and CWS;
- g. Measures to repair, maintain, alter, remove, add to, or replace existing structures, roadways, driveways, utilities, accessory uses, or other developments provided they are consistent with City and CWS regulations, and do not encroach further into the vegetated corridor or sensitive area than allowed by the CWS "Design and Construction Standards."

FINDINGS: The proposal is to extend a public street, which would be exempt under "g" above if the development were consistent with City regulations. A Service Provider Letter was issued by CWS approving the original plan, which included cut/fill within specific locations within the floodplain for zero-rise. The plans have since been modified by the applicant. There is no specific information provided to how the zero-rise requirement will be met. The applicant is proposing a separate plan that will show a balance cut and fill. Since a revised letter may be required, it is unknown at this time if the revised proposal will meet CWS regulations; therefore this standard is not met.

**6. Land form alterations or developments located within or partially within the Goal 5 safeharbor setback or vegetated corridor areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek that meet the jurisdictional requirements and permit criteria of the CWS, U.S. Army Corps of Engineers, Division of State Lands, and/or other federal, state, or regional agencies, are not subject to the provisions of Section 18.775.090.B, except where the:**  
**a. Land form alterations or developments are located within or partially within a good condition vegetated corridor, as defined in Sections 18.775.090.B.1 and 18.775.090.B.2; b. Land form alterations or developments are located within or partially within the minimum width area established for marginal or a degraded condition vegetated corridor, as defined in Section 18.775.090.B.3. These exceptions reflect instances of the greater protection of riparian corridors provided by the safe harbor provisions of the Goal 5 administrative rule.**

FINDINGS: The proposal is subject to the jurisdictional requirements and permit criteria of regional agencies like CWS, Army Corps and DSL. The proposal is not exempt from 18.775.B.3 because proposed land form alterations are located within the minimum width area for a marginal or degraded vegetated corridor.

#### **ESEE Analysis (Environmental, Social, Economic and Energy)**

**Any owner of property affected by the Goal 5 safeharbor (1) protection of significant wetlands and/or (2) vegetated areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek may apply for a quasi-judicial comprehensive plan amendment under Type IV procedure. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove Goal 5 protection from the property, but not to remove the requirements related to the CWS Stormwater Connection Permit, which must be addressed separately through an Alternatives Analysis, as described in Section 3.02.5 of the CWS "Design and Construction Standards." The applicant shall demonstrate that such an amendment is justified by preparing an Environmental, Social, Economic and Energy (ESEE) consequences analysis in accordance with OAR 660-23-040 or demonstrate that the sensitive area site no longer meets applicable significance thresholds defined by the Goal 5 administrative rule, relative to other comparable resources within the Tigard Planning Area.**

FINDINGS: The applicant has chosen to provide an ESEE consequence analysis to remove the Goal 5 protection from the impacted significant wetland (see applicant's Exhibit R). According to Oregon Administrative Rule (OAR) 660-023-040, "this is an analysis that looks at the economic, social, environmental, and energy consequences that could result from a decision to allow, limit, or prohibit a conflicting use. Findings shall demonstrate that requirements under each of the steps have been met. An ESEE analysis need not be lengthy or complex, but should enable reviewers to gain a clear understanding of the conflicts and consequences to be expected." FYI - OAR 660-023-0010 defines resource site as a particular area where resources are located. A site may consist of a parcel or lot or portion thereof or may include an area consisting of two or more contiguous lots or parcels.

**1. The analysis shall consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and the comparison with other comparable sites within the Tigard Planning Area;**

FINDINGS: The applicant has outlined positive and negative consequences for allowing and prohibiting the conflicting use, but did not discuss the impacts of limiting the use on the resource site. Also, the analysis does not look at comparable sites within the Tigard Planning Area.

**2. The ESEE analysis must demonstrate to the satisfaction of the Tigard City Council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;**

FINDINGS: The applicant concludes that allowance of the impact would result in relatively minor impacts to the resource, while permitting the development of the applicant's property. According to the applicant, prohibiting the impact limits the opportunities for vegetative corridor enhancement provided by the applicant and avoids legal questions related to takings by not permitting access to the site. In addition, the applicant notes that completion of the street extension will help accomplish the eventual connection of Hall Boulevard with Hunziker Street (shown in the TSP).

However, the proposal to complete this portion of the Wall Street extension is purely speculative as to the development of the applicant's property. While physical access to the site increases the likelihood of the site to be developed, it does not guarantee it. Because Wall Street is a public street, once constructed, the community then takes on the cost to maintain, repair, and alter the facility, including any necessary environmental permitting costs. Vegetative corridor enhancement can occur with or without development and is not reliant upon this proposal to occur. Connection of Hall to Hunziker is currently shown on the TSP, but at this time there is no approved at-grade crossing of the railroad. Previous applications for a crossing were not approved. The applicant points out the mitigation for the temporary construction impacts, but does not discuss the long term impacts of constructing a road through the resource. The applicant's wetland scientist, Shawn Eisner, states that the resource will still have the connection for wildlife to pass under the bridge, but what effects will the introduction of cars, people, pollutants, including garbage, have upon an area that is inaccessible to these things now? A comment letter from Elizabeth Ruther with Oregon Department of Fish and Wildlife (Attachment 4) also underscores the inadequacy of the applicant's ESEE in relation to on-going, permanent effects on species and habitat.

**3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning area that can meet the specific needs of the proposed use;**

FINDINGS: The applicant outlines how there are no alternative access options to serve the site. The proposed extension is aligned with the access easement granted from the City to the applicant. This alignment minimizes impacts to wetlands and the 100-year floodplain. In addition, the applicant states that all other alternative access options have been exhausted. The applicant then concludes that there are no other sites in Tigard that can meet the specific needs of the proposed use. Yet the applicant does not discuss the option to provide a longer bridge span that will avoid the impact to the wetland and still provide access to the site for development. There is buildable land on which to construct the road and meet the need for access to the site.

**4. The ESEE analysis shall be prepared by a team consisting of a wildlife biologist or wetlands ecologist and a land use planner or land use attorney, all of whom are qualified in their respective fields and experienced in the preparation of Goal 5 ESEE analysis;**

FINDINGS: The applicant states that the ESEE was prepared by a wetland scientist and wetland biologist with Pacific Habitat Services and a certified planner with Group Mackenzie.

**5. If the application is approved, then the ESEE analysis shall be incorporated by reference into the Tigard Comprehensive Plan, and the "Tigard Wetland and Stream Corridor Map" shall be amended to remove the site from the inventory.**

FINDINGS: Denial of the application is being recommended. If the final decision is to approve the application, then the "Tigard Wetland and Stream Corridor Map" shall be amended to remove the site from the inventory.

**CONCLUSION:** The applicant has not proven that the positive impacts outweigh the adverse impacts. Also the applicant did not thoroughly consider the alternative of a longer bridge span and access from Milton Court, which would allow access to the site and avoid impact to the Tigard significant wetland. Therefore, the applicant failed to provide sufficient evidence to demonstrate compliance with the OAR 660-23-040 requirements of the ESEE.

### Tree Removal (18.390)

18.790.050 states that tree removal permits shall be required only for the removal of any tree which is located on or in a sensitive land area as defined by Chapter 18.775. The permit for removal of a tree shall be processed as a Type I procedure, as governed by Section 18.390.030, using the criteria found in 18.790.050.A.

**FINDINGS:** The applicant has proposed the removal of 17 trees within sensitive lands. A Tree Removal Permit is required to remove non-hazardous trees from areas designated as sensitive lands. The applicant has requested separate but concurrent review of the tree removal permit (TRE2010-00002). The permit was denied on August 9, 2010 because the application form had not been signed by all property owners and the approval criteria regarding erosion control and tree canopy were not adequately addressed. A tree plan is not required with this application under 18.790 since the proposal does not involve a partition, subdivision, conditional use permit, site development review, or planned development.

### Utility and Improvement Standards

Chapter 18.810 provides construction standards for the implementation of public and private facilities and utilities such as streets, sewers, and drainage. The applicable standards are addressed below:

#### **Streets:**

**Improvements:** Section 18.810.030.A.4 states that any new street or additional street width planned as a portion of an existing street shall meet the standards of this chapter.

**Minimum Rights-of-Way and Street Widths:** Section 18.810.030E and Figure 18.810.1 require a 5-lane arterial to have right-of-way varying from 100 feet to 104 feet, a 3-lane collector to have right-of-way varying from 70 to 74 feet, and a local street to have a 54-foot right-of-way. Other improvements required include sidewalks, bike lanes if designated as bike routes, underground utilities, street lighting, storm drainage, planter strips and street trees.

**FINDINGS:** Wall Street is a collector street as designated in the TSP and requires 72 feet of right-of-way. A significant portion of the street is on the Tigard Library property, on which the applicant has a 60-foot access easement. This easement is of inadequate width to accommodate the improvements (street, sidewalk, planter strips, utilities, etc.) required for a collector street.

Additional requirements for the street include sidewalks, bike lanes, storm drainage, street lights, planters, and street trees. The applicant has proposed a 72-foot right of way with sidewalks, bike lanes, street lighting, storm drainage, planter strips, and street trees. The one exception is the bridge portion of the street. The applicant has requested an adjustment to permit construction of a narrower bridge section (50 feet vs. 72 feet without the planter strips and street trees. The criteria for the adjustment have not been met, which is discussed in more detail under the Variances and Adjustments section of this report. Because the application does not meet the criteria for an adjustment, then the required improvements are not proposed. In addition, the necessary right-of-way has not been dedicated; therefore, the applicant's proposal does not satisfy these standards.

**Future Street Plan and Extension of Streets:** Section 18.810.030.F states that a future street plan shall be filed which shows the pattern of existing and proposed future streets from the boundaries of the proposed land division. This section also states that where it is necessary to give access or permit a satisfactory future division of adjoining land, streets shall be extended to the boundary lines of the tract to be developed and a barricade shall be constructed at the end of the street. These street stubs to adjoining properties are not considered to be cul-de-sacs since they are

intended to continue as through streets at such time as the adjoining property is developed. A barricade shall be constructed at the end of the street by the property owners which shall not be removed until authorized by the City Engineer, the cost of which shall be included in the street construction cost. Temporary hammerhead turnouts or temporary cul-de-sac bulbs shall be constructed for stub streets in excess of 150 feet in length.

**FINDINGS:** A future street plan is only required in conjunction with a subdivision or partition application; therefore a plan is not required with this submittal. Extension of Wall Street is proposed across City property to the applicant's property in anticipation of future development. A temporary hammerhead or cul-de-sac must be constructed as the terminus for the extended Wall Street. In addition signs must be posted west of the bridge to indicate a dead-end street, and a temporary easement shall be delineated and dedicated to the City to accommodate the temporary turnaround until such time as Wall Street is extended or the property is developed with interior roadways to provide that turnaround capability. The applicant has not proposed any such turnaround; therefore this standard is not met.

**Street Alignment and Connections:** Section 18.810.030.H.1 states that full street connections with spacing of no more than 530 feet between connections is required except where prevented by barriers such as topography, railroads, freeways, pre-existing developments, lease provisions, easements, covenants or other restrictions existing prior to May 1, 1995 which preclude street connections. A full street connection may also be exempted due to a regulated water feature if regulations would not permit construction.

Section 18.810.030.H.2 states that all local, neighborhood routes and collector streets which abut a development site shall be extended within the site to provide through circulation when not precluded by environmental or topographical constraints, existing development patterns or strict adherence to other standards in this code. A street connection or extension is precluded when it is not possible to redesign, or reconfigure the street pattern to provide required extensions. Land is considered topographically constrained if the slope is greater than 15% for a distance of 250 feet or more. In the case of environmental or topographical constraints, the mere presence of a constraint is not sufficient to show that a street connection is not possible. The applicant must show why the constraint precludes some reasonable street connection.

**FINDINGS:** Although the TSP shows Wall Street connecting with SW Hunziker Street, a full connection is not possible at this time. Extension beyond the applicant's property is prevented by the existing railroad tracks to the east. The roadway has been designed to accommodate a future at-grade crossing. Previous requests by the City for an at-grade crossing of the railroad right-of-way have not been approved. Approval of an at-grade crossing would be required for further extension of Wall Street in the future.

**Grades and Curves:** Section 18.810.030.N states that grades shall not exceed ten percent on arterials, 12% on collector streets, or 12% on any other street (except that local or residential access streets may have segments with grades up to 15% for distances of no greater than 250 feet). Centerline radii of curves shall be as determined by the City Engineer.

**FINDINGS:** The applicant states that the extension is designed to not exceed a grade of 12%. A profile of SW Wall Street (see sheet R2.1) shows a slope of .5% or less. The proposed extension complies with this requirement.

**Streets adjacent to railroad right-of-way.** Wherever the proposed development contains or is adjacent to a railroad right-of-way, provision shall be made for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land. The distance shall be determined with due consideration at cross streets or the minimum distance required for approach grades and to provide sufficient depth to allow screen planting along the railroad right-of-way in nonindustrial areas.

**Access to arterials and collectors.** Where a development abuts or is traversed by an existing or proposed arterial or collector street, the development design shall provide adequate protection for residential properties and shall separate residential access and through traffic, or if separation is

not feasible, the design shall minimize the traffic conflicts. The design shall include any of the following: 1) A parallel access street along the arterial or collector; 2) Lots of suitable depth abutting the arterial or collector to provide adequate buffering with frontage along another street; 3) Screen planting at the rear or side property line to be contained in a non-access reservation along the arterial or collector; or 4) Other treatment suitable to meet the objectives of this subsection; 5) If a lot has access to two streets with different classifications, primary access should be from the lower classification street.

**FINDINGS:** One of the four parcels involved is adjacent to a railroad right-of-way. Another parcel is traversed by an existing collector street (Wall Street). However, these standards apply to a proposed development project, which this application does not include. The applicant notes that the future development on the applicant's site will need to address standards for streets adjacent to railroad right-of-way and access to collectors.

**Easements:** Easements for sewers, drainage, water mains, electric lines or other public utilities shall be either dedicated or provided for in the deed restrictions, and where a development traversed by a watercourse, or drainageway, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the watercourse.

**FINDINGS:** The proposed street extension includes an 8-foot public utility easement on either side of the proposed right-of-way. The easement has not been legally entered into by the affected property owners and recorded; therefore this standard is not met.

**Sidewalks:** Section 18.810.070.A requires that sidewalks be constructed to meet City design standards and be located on both sides of arterial, collector and local residential streets. Private streets and industrial streets shall have sidewalks on at least one side.

**FINDINGS:** Six foot sidewalks are shown along both sides of the proposed street (sheet R8.1). These meet City design requirements.

**Planter strips:** A planter strip separation of at least five feet between the curb and the sidewalk shall be required in the design of streets, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant portions of the street; it would conflict with the utilities, there are significant natural features (large trees, water features, significant habitat areas, etc) that would be destroyed if the sidewalk were located as required, or where there are existing structures in close proximity to the street (15 feet or less). Additional consideration for exempting the planter strip requirement may be given on a case-by-case basis if a property abuts more than one street frontage.

**FINDINGS:** Planter strips are proposed along the Wall Street extension with the exception of the bridge portion of the street. The applicant has requested an adjustment to exclude the planter strip and construct a narrower street section in order to lessen the impact on the adjacent natural areas. Staff has recommended denial of the adjustment because the applicant did not provide adequate findings and meet the burden of proof. This is discussed further under the Variances and Adjustments section of this report. If the criteria for the adjustment are not met, this standard is not met.

**Sanitary Sewers: Sewers Required:** Section 18.810.090.A requires that sanitary sewer be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in Design and Construction Standards for Sanitary and Surface Water Management (as adopted by Clean Water Services in 1996 and including any future revisions or amendments) and the adopted policies of the comprehensive plan. Section 18.810.090.C states that proposed sewer systems shall include consideration of additional development within the area as projected by the Comprehensive Plan.

**FINDINGS:** An existing sanitary sewer line runs along the western boundary of the applicant's property. All adjacent lots are served. There is no need to extend sewer with the roadway; connections for future development will be addressed at the time of application.

## Storm Drainage

**General Provisions:** Section 18.810.100.A requires developers to make adequate provisions for storm water and flood water runoff.

**Accommodation of Upstream Drainage:** Section 18.810.100.C states that a culvert or other drainage facility shall be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the development. The City Engineer shall approve the necessary size of the facility, based on the provisions of Design and Construction Standards for Sanitary and Surface Water Management (as adopted by Clean Water Services in 2000 and including any future revisions or amendments).

**FINDINGS:** The City's Design Review Engineer has reviewed the proposal and determined that no facilities to accommodate upstream drainage are required with this proposal to extend a public street.

**Effect on Downstream Drainage:** Section 18.810.100.D states that where it is anticipated by the City Engineer that the additional runoff resulting from the development will overload an existing drainage facility, the Director and Engineer shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with the Design and Construction Standards for Sanitary and Surface Water Management (as adopted by Clean Water Services in 2000 and including any future revisions or amendments).

In 1997, Clean Water Services (CWS) completed a basin study of Fanno Creek and adopted the Fanno Creek Watershed Management Plan. Section V of that plan includes a recommendation that local governments institute a stormwater detention/effective impervious area reduction program resulting in no net increase in storm peak flows up to the 25-year event. The City will require that all new developments resulting in an increase of impervious surfaces provide onsite detention facilities, unless the development is located adjacent to Fanno Creek. For those developments adjacent to Fanno Creek, the storm water runoff will be permitted to discharge without detention.

**FINDINGS:** The applicant has provided preliminary stormwater calculations completed by Group Mackenzie. The report states that proposed stormwater infrastructure will meet the City and CWS standards, but the applicant has not submitted final calculations. Detention is not required because the property is adjacent to Fanno Creek. Neither the fee-in-lieu of detention has been paid nor has a CWS Stormwater Connection Permit been obtained. This requirement is not satisfied.

**Bikeways and Pedestrian Pathways:** 1) As a standard, bike lanes shall be required along all arterial and collector routes and where identified on the City's adopted bicycle plan in the Transportation System Plan (TSP). Bike lane requirements along collectors within the Downtown Urban Renewal District shall be determined by the City Engineer. 2) Developments adjoining proposed bikeways identified on the City's adopted pedestrian/bikeway plan shall include provisions for the future extension of such bikeways through the dedication of easements or rights-of-way, provided such dedication is directly related to and roughly proportional to the impact of the development. 3) Any new street improvement project shall include bicycle lanes as required in this document and on the adopted bicycle plan.

**FINDINGS:** Bike lanes are required on Wall Street. The street is a collector and bike lanes are identified on the Master Bicycle Plan in the TSP. The application includes the provision of bike lanes that meet this standard.

### Utilities:

Section 18.810.120 states that all utility lines, but not limited to those required for electric, communication, lighting and cable television services and related facilities shall be placed underground, except for surface mounted transformers, surface mounted connection boxes and

meter cabinets which may be placed above ground, temporary utility service facilities during construction, high capacity electric lines operating at 50,000 volts or above, and:

The developer shall make all necessary arrangements with the serving utility to provide the underground services;

The City reserves the right to approve location of all surface mounted facilities;

All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and

Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

**Exception to Under-Grounding Requirement:** Section 18.810.120.C states that a developer shall pay a fee in-lieu of under-grounding costs when the development is proposed to take place on a street where existing utilities which are not underground will serve the development and the approval authority determines that the cost and technical difficulty of under-grounding the utilities outweighs the benefit of under-grounding in conjunction with the development. The determination shall be on a case-by-case basis. The most common, but not the only, such situation is a short frontage development for which under-grounding would result in the placement of additional poles, rather than the removal of above-ground utilities facilities. An applicant for a development which is served by utilities which are not underground and which are located across a public right-of-way from the applicant's property shall pay a fee in-lieu of under-grounding.

**FINDINGS:** The applicant states that all utilities are available on the east side of Fanno Creek and that no new utilities are proposed.

**CONCLUSION:** The Street and Utility Improvement standards are not met. The applicant has not secured the right-of-way needed to construct the private street nor easements on City property for the proposed public utility easements, the fee-in-lieu of detention is not satisfied, a CWS Stormwater Permit has not been obtained, the design excluding planter strips does not meet the collector street section standard that is required if the adjustment is denied, and an approved temporary turnaround that meets City requirements has not been proposed.

## **C. APPLICABLE COMPREHENSIVE PLAN POLICIES**

The City has an acknowledged Comprehensive Plan consistent with the statewide planning goals. The applicable Comprehensive Plan goals and policies are addressed in this section of the staff report.

### **CITIZEN INVOLVEMENT**

**Goal 1.1 Provide citizens, affected agencies and other jurisdictions the opportunity to participate in all phases of the planning process.**

**Policy 2 The City shall define and publicize an appropriate role for citizens in each phase of the land use planning process.**

**Goal 1.2 Ensure all citizens have access to:**

- A. opportunities to communicate directly to the City; and**
- B. information on issues in an understandable form.**

**Policy 1. The City shall ensure pertinent information is readily accessible to the community and presented in such a manner that even technical information is easy to understand.**

**Policy 2. The City shall utilize such communication methods as mailings, posters, newsletters, the internet, and any other available media to promote citizen involvement and continue to evaluate the effectiveness of methods used.**

**Policy 6. The City shall provide opportunities for citizens to communicate to Council, boards and commissions, and staff regarding issues that concern them.**

FINDINGS: The applicant's representative sent out notices to surrounding property owners and neighborhood representatives, posted a sign on the property, and held a neighborhood meeting on June 12, 2008 in accordance with the City of Tigard's neighborhood meeting notification process. According to the minutes of the neighborhood meeting, 18 people attended. Discussion related to future development of the site, impacts on sensitive lands, the extension of Wall Street, and alternative access points to the site.

In addition, the City has mailed notice of the Planning Commission hearing to property owners within 500 feet of the subject site, interested citizens, and agencies and published notice of the hearing pursuant to TDC 18.390.050 for Type IV Procedures.

With these public involvement provisions and the applicant's documented participation, this application is consistent with applicable Citizen Involvement policies.

## **LAND USE PLANNING**

**Goal 2.1 Maintain an up-to-date Comprehensive Plan, implementing regulations and action plans as the legislative foundation of Tigard's land use planning program.**

**Policy 14. Applicants shall bear the burden of proof to demonstrate that land use applications are consistent with applicable criteria and requirements of the Development Code, the Comprehensive Plan and, when necessary, those of the state and other agencies.**

FINDINGS: The analysis in this staff report illustrates the inconsistencies of the proposal with the applicable code standards, goals and policies. The applicant has not shown how the proposed plan amendment is consistent with the Development Code, Comprehensive Plan, Municipal Code and requirements of other agencies. The applicant has not met the burden of proof required to approve the application requests.

**Policy 15. In addition to other Comprehensive Plan goals and policies deemed applicable, amendments to Tigard's Comprehensive Plan/Zone Map shall be subject to the following specific criteria:**

**G. Demonstration that the amendment does not detract from the viability of the City's natural systems.**

**Policy 22. The City shall identify, designate, and protect natural resources as part of its land use program.**

FINDINGS: Fanno Creek runs through portions of the subject property. Wetlands and floodplain associated with Fanno Creek and Pinebrook Creek also are on the site. The City has implemented standards for development in these areas through the Sensitive Lands chapter of the TDC (18.775). The applicant has requested sensitive lands approval to construct the street extension (including floodplain and significant wetland), but the applicant has not satisfied the requirements as discussed under the Sensitive Lands section of this report. Therefore the proposal is not in compliance with policies 15 and 22 of Goal 2.1.

**Goal 2.2 To enlarge, improve and sustain a diverse urban forest to maximize the economic, ecological, and social benefits of trees.**

**Policy 3. The City shall continue to regulate the removal of trees, within environmentally sensitive lands and on lands subject to natural hazards.**

FINDINGS: The applicant has proposed the removal of 17 non-hazardous trees within sensitive lands to construct the extension of Wall Street. Tree removal permits are required for this removal by the

Development Code. The applicant has requested the required permits under a separate but concurrent application.

**Policy 4. The City shall require the replacement and/or installation of new street trees, unless demonstrated infeasible, on all new roads or road enhancement projects. Trees should be planted within planter strips, or at the back of sidewalks if planter strips are not feasible or would prohibit the preservation of existing trees.**

FINDINGS: Street trees are proposed on the street extension with the exception of the bridge. This policy is implemented through the landscaping standard in the Development Code. The landscaping standards have not been met (see further discussion under the Landscaping and Screening section of this report).

**Policy 5. The City shall establish and enforce regulations to protect the public's investment in trees and vegetation located in parks, within right-of-ways, and on other public lands and easements.**

FINDINGS: The Tigard Municipal Code (Chapter 9) regulates trees and vegetation in parks, within right-of-ways and on public lands. The applicant has not complied with those regulations as discussed under section "D" (Municipal Code Regulations) of this report.

## **NATURAL RESOURCES AND HISTORIC AREAS**

**Goal 5.1 Protect natural resources and the environmental and ecological functions they provide and, to the extent feasible, restore natural resources to create naturally functioning systems and high levels of biodiversity.**

FINDINGS: The applicant states that many other comprehensive plan goals surrounding transportation, public facilities, and economic development are in conflict with those related to natural resources and environmental quality, and that a balance must be found between the conflicts. To illustrate a means to find the balance, the applicant details positive impacts to Pinebrook Creek and associated wetlands by mitigation done for Phase 1 of the Wall Street extension. These impacts included improved wetland/creek function by increased water storage, reductions in water temperatures, and improved animal habitat areas. The applicant draws the conclusion that the construction of Wall Street will also have more positive impacts to the resources, but has not provided adequate data to support this conclusion. *The sensitive lands chapter of the TDC implements the regulation of Tigard's natural resources and the applicant has not satisfied all the criteria to support the proposed street extension. Specific policies regarding protection of natural resources are addressed below.*

**Policy 7. The City shall protect and restore riparian and upland habitats to the maximum extent feasible on public and private lands.**

**Policy 8. The City shall protect and, to the extent feasible, restore the diverse ecological and non-ecological functions and services of streams, wetlands, and associated riparian corridors.**

**Policy 13. The City shall identify, preserve, and create linkages between wildlife habitat areas, to the extent feasible, as a key component of parks, open space, and surface water management plans.**

FINDINGS: The applicant outlines how the proposed alignment (Alternative 9) was chosen as the Wall Street alignment because it minimized the impacts to wetlands, floodplains, and natural resources to the greatest extent practicable. In addition, the applicant points out how the unavoidable impacts are being mitigated and riparian area enhancement will include removal of invasive species and installation of native plants. The applicant states that restored habitats will support habitat connectivity in adjoining areas. Although these temporary impacts of construction are shown to be mitigated, the applicant does not address the permanent impact of a bridge, carrying cars and people, through the habitat area. The long term affects of these impacts, and what, if any, mitigation will occur for these impacts is not addressed by the applicant. The applicant does not illustrate how a 320-foot bridge is a better option than the alternatives that include a longer bridge span or access from Milton Court. Therefore, the applicant has

not demonstrated that the proposed extension of Wall Street protects natural resources to the greatest extent feasible, and these policies are not met.

## **ENVIRONMENTAL QUALITY**

### **Goal 6.2 Ensure land use activities protect and enhance the community's water quality.**

**Policy 1. The City shall require that all development complies with or exceeds regional, state, and federal standards for water quality.**

**FINDINGS:** Compliance with these standards is assured through obtaining permits from the appropriate regulating agencies. Such approval has been obtained from CWS. The applicant has only provided an outdated Army Corps/DSL Section 404 permit. In addition the applicant has not obtained a DEQ 1200C permit; therefore the applicant does not show compliance with state and federal standards.

**Policy 3. The City shall encourage the use of low impact development practices that reduce stormwater impacts from new and existing development.**

**FINDINGS:** The applicant states that the extent to which low impact measures can be used for public road construction is somewhat limited, but such solutions were selected for this project. One such solution included the choice to construct a 320-foot span bridge rather than a shorter span, thus preserving existing vegetation in the floodway. In addition the applicant has proposed the use of water pre-treatment and bioswales for stormwater. However, the applicant has not discussed in detail other possible low impact alternatives, such as a longer bridge span or access from Milton Court. *This policy is implemented by the storm drainage regulations of the TDC. These standards have not been completely met by the applicant as discussed under the Streets and Improvements section of this report.*

**Policy 4. The City shall protect, restore, and enhance, to the extent practical, the natural functions of stream corridors, trees, and water resources for their positive contribution to water quality.**

**FINDINGS:** The required wetland mitigation for Phase 2 was completed as part of Phase 1, and mitigation proposed with this application is limited to that required for impacts to vegetated corridors. There is no direct impact to Fanno Creek, but the applicant is proposing to remove several trees under separate permit from the natural area to construct the improvements. The applicant states that mitigation and proposed plantings of native species will have positive effects on water quality because vegetative improvements tend to increase water quality by increasing nutrient uptake and filtering capacity of floodwaters.

**Policy 5. The City shall require measures to minimize erosion and storm run-off from development sites during and after construction.**

**FINDINGS:** The applicant has submitted an erosion control plan; this plan has received approval with conditions from CWS. In addition, a CWS Service Provider Letter was submitted with the application. Inspections will occur throughout construction to monitor compliance. Plantings required by the regulating agencies will ensure erosion control over the long term.

**Policy 7. The City shall investigate and use, to the extent practical, measures that limit the community's effective impervious area.**

**FINDINGS:** A new street requires increased impervious area to the community. The applicant states that the impervious area proposed is the least possible to meet the collector street standards required by code and is minimized through treatment of runoff created by the new street. One option not considered by the applicant is an alternative access from Milton Court. As noted, Wall Street must be built to collector standards because it is a public street. A narrower, private street could possibly be constructed from Milton Court to access the site. The applicant did not provide information to show how the two possibilities would compare.

## HAZARDS

**Goal 7.1 Protect people and property from flood, landslide, earthquake, wildfire, and severe weather hazards.**

**Policy 4. The City shall design and construct public facilities to withstand hazardous events with a priority on hazard protection of public services and facilities that are needed to provide emergency response services.**

**Policy 7. The City shall comply with the Federal Emergency Management Agency (FEMA) flood regulations, which include standards for base flood levels, flood proofing, and minimum finished floor elevations.**

**FINDINGS:** Wall Street is a public street and will provide emergency response access to future development on the applicant's site. Therefore, it is important that this facility be protected from flood damage. The regulations found in the Sensitive Lands chapter require details on how structures will be anchored and built of materials resistant to flood damage. The applicant addresses both those regulations and policy 7 by stating no structures are proposed and that flood proofing is not applicable. Under policy 4 the applicant explains how the bridge spans the floodway and how the roadway and bridge deck will be above the 100-year floodplain elevation. However, the supports (wing and retaining walls and pilings) for the bridge and roadway are part of the bridge structure and the applicant has not shown how these are resistant to flood damage.

**Policy 8. The City shall prohibit any land form alterations or developments in the 100-year floodplain which would result in any rise in elevation of the 100-year floodplain.**

**Policy 9. The City shall not allow land form alterations or development within the 100-year floodplain outside the zero-foot rise floodway unless: A. The streamflow capacity of the zero-foot rise floodway is maintained; and B. Engineered drawings and/or documentation shows there will be no detrimental upstream or down-stream effects in the floodplain area.**

**Policy 10. The City shall work with Clean Water Services to protect natural drainageways and wetlands as valuable water retention areas and, where possible, find ways to restore and enhance these areas.**

**Policy 11. The City shall comply with Metro Title 3 Functional Plan requirements for balanced fill and removal in the floodplain.**

**FINDINGS:** The site contains areas of 100-year floodplain and construction of Wall Street requires fill within the floodplain. The applicant has chosen a bridge that spans the entire floodway to limit impact to the floodplain. Excavation is proposed to provide zero-rise within the floodway, but detailed drawings with exact locations have not been provided at this time. The applicant points to a hydraulic analysis done by WEST Consultants in June 2003, which shows no detrimental upstream effects, but this document does not consider the revised elements of the 2009 application. The methods to obtain a zero-rise are not known at this time and were not part of the 2003 analysis.

## PARKS, RECREATION, TRAILS, AND OPEN SPACE

**Goal 8.1 Provide a wide variety of high quality park and open spaces for all residents, including both:**

**A. developed areas with facilities for active recreation; and**

**B. undeveloped areas for nature-oriented recreation and the protection and enhancement of valuable natural resources within the parks and open space system.**

**Policy 17. The City shall maintain and manage its parks and open space resources in ways that preserve, protect, and restore Tigard's natural resources, including rare, or state and federally listed species, and provide "Nature in the City" opportunities.**

**FINDINGS:** Two of the four affected parcels are owned by the City of Tigard. The natural areas found on these sites are part of the City's open space. The proposed extension lies within Fanno Creek Park. The applicant states that the extension of Wall Street is acknowledged in the 2003 Master Fanno Creek

plan, but this plan is not a regulating document. As noted under the Sensitive Lands section of this report and within an ODFW comment letter, the applicant has not adequately addressed the long term effects upon this open space and wildlife habitat nor how, or if, they can be mitigated.

Development within parks is not directly addressed within the TDC or Municipal Code with the exception of trees in parks. These regulations have been addressed in this staff report (Section D – Municipal Code Regulations); the applicant has not fully complied with all of the regulations for trees within parks. Tree removal and protection on City property requires approval by the Public Works Director, and the applicant has not obtained the required approval.

## **PUBLIC FACILITIES AND SERVICES**

**Goal 11.1 Develop and maintain a stormwater system that protects development, water resources, and wildlife habitat.**

**Policy 1. The City shall require that all new development:**

- A. construct the appropriate stormwater facilities or ensure construction by paying their fair share of the cost;**
- B. comply with adopted plans and standards for stormwater management; and**
- C. meet or exceed regional, state, and federal standards for water quality and flood protection.**

**FINDINGS:** Stormwater from the proposed street extension will be treated by a new bioswale near the east end of the bridge and an existing water quality facility found on the Tigard Library site, which was constructed in Phase 1. Preliminary calculations were provided. The Sensitive Lands and Street and Utility Improvement standards of the TDC regulate stormwater and resources. Water quality and flood protection requirements are not met because the applicant has not obtained the necessary approvals from CWS (Stormwater Connection Permit), Army Corps of Engineers, and DSL as previously discussed within this report.

**Policy 6. The City shall maintain streams and wetlands in their natural state, to the extent necessary, to protect their stormwater conveyance and treatment functions.**

**FINDINGS:** The proposed street spans Fanno Creek, but does impact a Tigard Significant wetland and vegetated corridor. The applicant has not satisfied the requirements necessary to remove protection from this wetland in order to construct the proposed improvements. This was discussed in more detail under the Sensitive Lands portion of this report.

**Goal 11.4 Maintain adequate public facilities and services to meet the health, safety, education, and leisure needs of all Tigard residents.**

**Policy 4. The City shall require that all new development:**

- A. can be provided fire and police protection;**
- D. have a street layout and design that is accessible by emergency vehicles; and**

**FINDINGS:** Wall Street is a public street. The extension will serve future development on the applicant's site; however a future connection to Hunziker Street is uncertain. The proposed design meets the collector street requirements, but as noted previously, the applicant has not provided proof to show resistance to flood damage or anchoring. That factor is discussed in more detail under the Sensitive Lands portion of this report.

## **TRANSPORTATION SYSTEM**

The 2001 Tigard Transportation System Plan (TSP) updates the comprehensive plan and policies. However, it does not fully replace all elements of the comprehensive plan adopted prior to the 2001 TSP. Goal #4, Policy #1 of the Tigard TSP correlates to the following comprehensive plan policy:

### **Goal 12.1 Transportation System**

**FINDINGS:** The policies under this goal outline how transportation facilities must enhance livability, incorporate all modes of transportation (motor vehicle, bike, pedestrian, mass transit, and other modes), achieve safety and performance measures, and provide accessibility and efficiency for users.

Design requirements within the Streets and Utilities section of the TDC implement these policies. If preliminary approval is given for the construction of Wall Street, then the detailed street design will be reviewed during the PFI phase of the permitting process.

**Goal 12.2 Trafficways**

**Policy 6. The City shall adopt the following transportation improvement strategy in order to accommodate planned land uses in the Tigard Triangle:**

**E- Analysis indicates that there is a long term (20-30 years) need for Dartmouth Road to continue over Highway 217 and potentially south to Hall Boulevard as well as for extending the collector-distributor roads from the Highway 217/72nd Avenue interchange through the Highway 217/Highway 99W interchange. The Highway 217 corridor analysis to be performed by Metro and ODOT should consider the advantages and disadvantages of these improvements. The Dartmouth extension to Hall Boulevard should be constructed only if further system improvements to Hall Boulevard are made concurrently. If additional capacity is not added to Hall Boulevard south of where the Dartmouth extension would be connected, the effectiveness of this connection would be diminished. Alternatively, another roadway could be constructed that provides a connection from the Dartmouth extension to Hall Boulevard in the vicinity of McDonald Street.**

**FINDINGS:** Although the above connection is not shown on the current TSP, it is assumed that the extension of Wall Street as proposed could facilitate the connection from Hall Boulevard to Dartmouth Street. The proposed extension is in compliance with the collector designation on the TSP for Wall Street, and does not preclude the future extension of Wall Street to connect with Dartmouth. This policy is met.

**CONCLUSION:** With the exception of the Transportation goal, the proposal does not comply with the Tigard Comprehensive Plan goals and policies. The goals not met include those pertaining to natural resource protection, floodplain management (hazards), and water quality.

**D. APPLICABLE MUNICIPAL CODE REGULATIONS**

Because the applicant is removing and planting trees on City property and proposing work within the root zone of trees on City property. The regulations of Tigard Municipal Code Chapter 9 (Trees on City Property) apply. Provisions regarding planting and protection of trees are addressed below. Regulations regarding tree removal are addressed as part of the Tree Removal Permits requested under a separate application.

**9.06.030 Tree Planting**

**(1) Tree Planting**

**A. No person other than the City shall plant a tree on City property without the written approval of the Public Works Director or designee. In approving tree plantings, the Public Works Director or designee may impose conditions of approval;**

**B. Any City department responsible for City property shall consult with the Public Works Director or designee before planting trees on City property;**

**C. The Public Works Director or designee may grant approval of tree-planting on City property under subsection a of this section only if the applicant has submitted a tree plan showing compliance with the standards set forth in the Tree Manual, and has signed a maintenance agreement consistent with the standards set forth in the Tree Manual. The requirement for a maintenance agreement may be waived if the tree-planting is voluntary and not required by any City code provision or condition of approval;**

**D. All tree plantings on City property shall be undertaken in a manner consistent with the approval of the Public Works Director or designee and the standards set forth in the Tree Manual;**

**E. Only trees listed in the Street Tree List or those specifically approved by the Public Works Director or designee may be planted as street trees.**

FINDINGS: The applicant has submitted a Landscape Plan (R2.5) that shows plantings to occur on the project site, including City property. The proposed planting schedule includes trees, shrubs and other plants required to meet CWS requirements. The City Arborist has reviewed the landscape plan and notes that more detail is required. Specifics needed include details on tree planting location and species, along with a maintenance schedule. These specifications must conform to section 030 and 050 of the Tigard Tree Manual or as otherwise approved by the Public Works Director. It is difficult for the City to evaluate compliance, and monitor long term growth of the trees on City property without a detailed plan. In addition, a signature of approval from the Public Works Director on the tree planting plan and a three year maintenance agreement are required. The applicant has agreed to comply with all these regulations within the narrative but the information was not provided. Due to the lack of specifics and detailed plans, Staff has determined the proposal does not comply with these regulations.

### **9.06.030 Tree Planting**

#### **(1) Tree Planting**

**A. No person other than the City shall plant a tree on City property without the written approval of the Public Works Director or designee. In approving tree plantings, the Public Works Director or designee may impose conditions of approval;**

**B. Any City department responsible for City property shall consult with the Public Works Director or designee before planting trees on City property;**

**C. The Public Works Director or designee may grant approval of tree-planting on City property under subsection a of this section only if the applicant has submitted a tree plan showing compliance with the standards set forth in the Tree Manual, and has signed a maintenance agreement consistent with the standards set forth in the Tree Manual. The requirement for a maintenance agreement may be waived if the tree-planting is voluntary and not required by any City code provision or condition of approval;**

**D. All tree plantings on City property shall be undertaken in a manner consistent with the approval of the Public Works Director or designee and the standards set forth in the Tree Manual;**

**E. Only trees listed in the Street Tree List or those specifically approved by the Public Works Director or designee may be planted as street trees.**

FINDINGS: The planting plan (R2.5) and schedule provided do not give specific tree planting location, and species. A maintenance program for trees to be planted on City property was not proposed. The planting plan and maintenance program must conform to section 030 and 050 of the Tigard Tree Manual or as otherwise approved by the Public Works Director. It is difficult for the City to evaluate compliance, and monitor long term growth of the trees on City property without a detailed plan. The applicant also has not obtained the approval from the Public Works Director for a planting plan and has not entered into a three year maintenance agreement for those trees. The applicant has not shown compliance with the regulations for tree planting on City property.

### **9.06.040 Tree Care and Maintenance**

#### **(1) General Provisions**

**A. All trees planted pursuant to the written approval of the Public Works Director or designee under Section 9.06.040 shall be cared for and maintained according to the standards set forth in the City Tree Care Manual.**

FINDINGS: As noted above, the applicant has not provided written approval from the Public Works Director for the proposed tree removal and tree planting. In addition, the applicant has not proposed nor

entered into a 3-year maintenance agreement with the City as required by the Tree Care Manual. This proposal does not comply with this regulation.

### **9.06.050 Tree Protection**

(1) **Care of Trees on City Property.** The City shall follow the Tree Manual in caring for and protecting trees on City property.

(2) These requirements shall provide for the proper protection of tree roots, trunk(s) (or stem(s)), branches, and foliage within a tree's critical root zone for any tree on City property during any type of construction activity or project (excavation, demolition or any other type of disturbance);

FINDINGS: A tree protection plan has been provided by the applicant. There are inconsistencies between the Arborist Report and the Tree Protection/Removal Plan (EX-1). It has not been determined whether or not trees 56, 57, and 58 will be preserved. Also, the tree protection recommendations and tree protection fence dimension (to scale) per the 1-8-2010 arborist report should be included on sheet EX-1. In addition, the location of all staging, stockpiling, and access area should be shown on the plans and the project arborist should provide a signature of approval on the tree protection/removal plan certifying that it is consistent with their recommendations. The applicant has not provided the necessary information to determine if trees will be protected from all site activities for construction of the street extension.

### **9.06.070 Removal of Trees from City Property**

(1) **Removal of Trees from City Property other than Right of Way Prohibited.** No person other than the City or a person acting under contract with the City shall remove a tree from any City park or any City-owned property without written approval of the Public Works Director or designee. Any person removing a tree from City property other than right of way shall provide mitigation as specified in the Tree Manual.

FINDINGS: A tree removal plan was submitted, but the removal plan has not been approved by the Public Works Director. Most of the trees to be removed are within proposed right-of-way (ROW) with the exception of trees 56, 57, and 58. Mitigation is required for removal of these three trees. The ROW for the street has not yet been dedicated and it is unknown at this time whether that will occur. The applicant has not proposed mitigation for any trees to be removed. This requirement is not satisfied since the removal plan has not been approved by the Public Works Director and a mitigation plan has not been provided.

CONCLUSION: The applicant has not shown compliance with the Municipal Code regulations regarding protection and removal of existing trees, mitigation, and maintenance of planted trees on City property. The applicant has not provided approval from the Public Works Director, mitigation for proposed tree removal and a detailed planting plan that meet the requirements of the Tigard Tree Manual, and an executed maintenance agreement for planted trees.

## **E. APPLICABLE METRO STANDARDS**

### **Metro Urban Growth Management Plan**

#### *Title 3 – Water Quality and Flood Management*

This title aims to reduce flood and landslide hazards, control erosion, and reduce water pollution.

FINDINGS: The performance standards of this title are addressed through the City's sensitive lands requirements of Section 18.755, Comprehensive Plan Goals (6 & 7), and Clean Water Service Requirements. Sections C and D of this report address these requirements and staff concludes that the requirements are not met. Therefore, compliance with Title 3 has not been demonstrated.

#### *Title 6 – Regional Accessibility (Regional Transportation Plan)*

This title addresses the coordination of transportation and land use planning by requiring improvements to

local street grids, mode split targets in regional centers, and the revisions to level of service standards.

**FINDINGS:** The Wall Street connection from Hall Boulevard to Hunziker Street is shown on the Street Improvement Plan (Figure 8-19) and connectivity plan (Figure 8-12) in the City's 2003 TSP, which has been adopted by the City Council and acknowledged by DLCD. Therefore, the applicant's proposal to extend Wall Street from its current terminus into the applicant's property is within compliance with the City adopted TSP. However the ability to achieve this connection due to the resistance of the Portland & Western railroad for a crossing is uncertain.

#### *Title 13 – Nature in Neighborhoods*

The purpose of this title is to conserve, protect, and restore a continuous ecologically viable streamside corridor system that is integrated with upland wildlife habitat and the surrounding urban landscape.

**FINDINGS:** Standards were adopted into the TDC in 2006 to comply with this title. Most of the standards were adopted into the Sensitive Lands chapter (18.775). These standards did not establish development restrictions, only provided flexibility to encourage habitat friendly development. A copy of the proposal and a request for comments was sent to Metro representatives and no comments were received.

**CONCLUSION:** The applicant has not met the applicable standards of the Metro Urban Growth Management Plan, specifically Title 3, Water Quality and Flood Management.

### **F. APPLICABLE STATEWIDE PLANNING GOALS**

#### **Statewide Planning Goal 1 – Citizen Involvement:**

This goal outlines the citizen involvement requirement for adoption of Comprehensive Plans and for changes to the Comprehensive Plan and implementing documents.

**FINDINGS:** This goal has been met by complying with the Tigard Development Code notice requirements set forth in Chapter 18.390. Notice has been published in the Tigard Times Newspaper prior to the public hearing. In addition a notice was posted on the City website.

#### **Statewide Planning Goal 2 – Land Use Planning:**

This goal outlines the land use planning process and policy framework. The Comprehensive Plan was acknowledged by DLCD as being consistent with the statewide planning goals.

**FINDINGS:** The Tigard Development Code implements the Comprehensive Plan. The Development Code establishes a process for, and policies to review changes to the Comprehensive Plan. The City's plan provides analysis and policies with which to evaluate a request for amendment consistent with Goal 2. Through this fact based analysis it has been determined that the applicant has not satisfied all the requirements of the TDC and has not complied with all of the City's Comprehensive goals and policies.

#### **Statewide Planning Goal 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources**

This goal outlines the protection of natural resources and conservation of scenic, historic and open spaces.

**FINDINGS:** This site includes both open space and natural resources. The regulations outlined in the Sensitive Lands chapter (18.775) of the TDC protect these areas, along with the goals and policies found in Goal 5 of the City's Comprehensive Plan. As discussed previously in this report, the applicant does not comply with the implementing codes or City goals. The applicant has not met the burden of proof to remove the protection from the Tigard Significant wetland. Insufficient information was provided for alternatives such as a longer bridge span or access from Milton Court to determine if the proposed 320-foot bridge has the least impact on natural resources. Long term affects of the bridge were also not discussed in relation to habitat and wildlife species found in the area.

### **Statewide Planning Goal 6 – Air, Water and Land Resources Quality**

This goal presents guidelines on how to maintain and improve the quality of the air, water and land resources of the state.

**FINDINGS:** The proposal is to extend a street across Fanno Creek with impact to an adjacent wetland and associated floodplain. The applicant has proposed a water quality facility to treat stormwater from the street prior to being released into the wetlands. However the applicant has not shown full compliance with the Sensitive Lands (18.775) and stormwater (18.810) regulations of the City, which regulate the water quality goal.

### **Statewide Planning Goal 7 – Areas Subject to Natural Hazards**

This goal requires local governments to adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property from natural hazards, including floods, earthquakes, landslides, wildfires, etc.

**FINDINGS:** Because the site is located within a floodplain, this goal is applicable to the proposal. The Sensitive Lands chapter (18.775) of the TDC and Goal 7 of the Comprehensive Plan address development within a floodplain. The applicant has addressed these requirements, but has not shown full compliance as previously addressed in this report. The reasons for this include: the applicant has not met the burden of proof for zero-rise within the floodplain and anchoring/flood resistance of the bridge, fill, wingwalls, pilings, etc.

### **Statewide Planning Goal 8 – Recreation**

This goal ensures the recreational needs of the citizens of the state and visitors are satisfied and, outlines how to provide for the siting of necessary recreational facilities including destination resorts where appropriate.

**FINDINGS:** As noted by the applicant, this goal's main focus is large-scale resort opportunities, which is not applicable to this application. However, this proposal does impact a large tract of Tigard open space that is part of Fanno Creek Park and currently is relatively undisturbed. As noted under the review of Tigard Comprehensive Plan Goal 8.1, the applicant does not provide information on how the long term impacts proposed will be mitigated within this open space and natural area.

### **Statewide Planning Goal 11 – Public Facilities**

This goal requires that jurisdictions plan and ensure adequate and appropriate extension of public facilities and services to direct urban and rural development. These facilities include, but are not limited to, sewer, water and transportation.

**FINDINGS:** The applicant has proposed extension of Wall Street to provide road access to the site. Because the proposal includes sensitive lands and the applicant has not met the criteria to permit construction of the access, Staff is recommending denial of the request. Utilities such as water and sewer will be addressed with future development of the site and are available on-site or near the applicant's property. However, there is some question as to whether flood-proof utilities can be provided on the proposed bridge design.

### **Statewide Planning Goal 12 – Transportation**

This goal outlines provisions to insure a safe, convenient and economic transportation system. Transportation plans must consider all modes of transportation, meet local, regional, and state transportation needs and plan requirements, conserve energy, and facilitate the flow of goods and services.

**FINDINGS:** The current TSP outlines the transportation system requirements and improvements to be made and currently shows Wall Street extending from Hall Boulevard to Hunziker Street; therefore the transportation goal is satisfied.

**CONCLUSION:** The proposal does not comply with statewide planning goals 2 – Land Use Planning, 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources, 6 – Air, Water and Land Resources Quality, and 7 – Areas Subject to Natural Hazards.

**SECTION V. ADDITIONAL CITY STAFF AND OUTSIDE AGENCY COMMENTS**

**The City of Tigard Arborist and Engineering Division** reviewed the proposal and comments have been incorporated into this report.

**The City's Public Works** department had no comments or concerns on the proposal.

**The Tigard Building Division and Police Department** were both sent copies of the proposal but neither responded to the request for comments.

**Clean Water Services** reviewed the proposal and noted that a CWS Storm Water Connection permit must be obtained by the applicant.

**Oregon Department of Land Conservation and Development (DLCD)** Amanda Punton of DLCD has reviewed the proposal and sent a comment letter which is attached as Attachment 3. The letter was sent to help the City navigate overlapping review requirements and clarifies how Metro Title 13 was not intended to meet Goal 5 for wetlands. Ms. Punton states that the applicant had submitted an ESEE analysis as required that speaks more generally of the wetland resource as a whole (including significant fish and wildlife habitat). She states that it is reasonable to conclude that the analysis was submitted to address the proposed changes to the wetland protection measures of Goal 5.

**Oregon Department of Fish and Wildlife (ODFW)** Elizabeth Ruther has reviewed the proposal and sent a letter (Attachment 4). Ms. Ruther states that ODFW does not support removal of Goal 5 protection from the resource area because the applicant has not demonstrated consistency with Goal 5 and its administrative rule. Matters of concern regarding the Alternatives Analysis include the applicant's failure to address species and habitats of special conservation concern, long term impacts caused by habitat fragmentation, and the increased noise, traffic, and associated pollution. She also notes that the Metro Council has designated this area as a Class 1 riparian (highest value) and a High Habitat Conservation Area. ODFW encourages the City to work with the landowner and Metro to consider a conservation easement or outright purchase of the property to benefit the Fanno Creek Linkages Project and safeguard the area for future generations and wildlife.

**Tualatin Valley Fire and Rescue** has reviewed the proposal and endorses the proposal predicated on certain criteria and conditions of approval (Attachment 5). These criteria address the issue of access for future development of the site and when a secondary access is needed for development.

**Metro Land Use and Planning, ODOT (Region 1), Oregon Division of State Lands, and Oregon Department of Environmental Quality, U.S. Army Corps of Engineers, Portland & Western R/R, Burlington Northern/Santa Fe R/R, Oregon Electric R/R, and Southern Pacific Trans. Co. R/R** were mailed a copy of the proposal but provided no comment.

## SECTION VI. STAFF ANALYSIS, CONCLUSION, AND RECOMMENDATION

### **ANALYSIS:**

The applicant has requested a Comprehensive Plan Review (CPA) to remove the Goal 5 protection from a Tigar Significant Wetland in the project area, a Sensitive Lands Review (SLR) for wetlands, a Sensitive Lands Review (SLR) for the 100-year floodplain, and an Adjustment (VAR) to the street requirements in order to construct a narrower street section and eliminate the planter strip on the bridge deck. The applicant has failed to provide the facts and findings necessary to meet the burden of proof required for the proposal. Staff is recommending a denial of all four applications associated with this request.

The applicant has failed to meet the Comprehensive Plan goals and policies applicable to the CPA including those associated with water quality, protection of natural resources, land use planning, and hazards (floods). The applicant's ESEE analysis and information on alternatives such as a longer bridge span and access from Milton Court do not provide sufficient information for Staff to determine if the proposed 320-foot bridge is the best alternative and protects natural resources as much as possible while still allowing Mr. Fields to access his property. Facts about long term impacts of the placement of the bridge in this location upon the natural resources, habitat, and wildlife, particularly sensitive species, were not provided. In addition land form alteration is not permitted in floodplain zoned residential, except for public support facilities and community recreation. The parcels involved are zoned R-12 and R-25. The applicant has asserted that the fill and pilings support Wall Street, which is a public facility; therefore the proposal is permitted. Staff contends that public support facilities play a supportive role to the roadway system. This is supported by the context in which the term is used in 18.775.020.E.1.a, case history, and by previous definitions of the term within the Development Code.

Much of the applicant's information related to alternatives and affects on the resources was prepared in 2003 and 2005 for the application of the Wall Street extension and were revised once the City's application was scaled back to only include Phase 1. For example, the alternatives analysis (Exhibit K) has a good deal of information explaining how the alignment of Wall Street to connect with Hunziker was chosen and the reasoning behind that choice. However, the applicant's alternative analysis did not provide such detail for the longer bridge span or access from Milton Court.

The criteria for Sensitive Lands Review for the floodplain were not met because the applicant has proposed a plan that does not meet the zero-rise requirement within the 100-year floodplain. Over 2,000 cubic yards of fill are necessary for the street extension, but a specific plan to meet zero-rise was not provided. In addition, this extension is intended to serve future residential development on the applicant's property. The applicant did not submit information to show that wingwalls, fill, and pilings below the 100-year flood elevation are flood proofed and anchored to prevent movement or collapse. Wall Street is a public street and would provide emergency service access to future residential units. It is important that these residences can be served, especially during times of flooding.

Denial is also recommended for the Sensitive Lands Review for the wetland due to the fact that Staff cannot recommend the removal of the wetland's Goal 5 protection. In addition, the applicant did not clearly show that the proposed 320-foot bridge is the minimum impact to achieve access to the applicant's property when also considering other alternatives such as a longer bridge or an access from Milton Court.

Finally the adjustment to the street improvement standards for a 72-foot street section and planter strips on the bridge deck are recommended for denial. The applicant asserts a narrower section would have fewer impacts on natural resources, but does not describe the adverse impacts. Without demonstrating the nature and extent of the impacts that are to be forgone if the adjustment is permitted, it is impossible for the applicant to establish that the foregone impacts are unacceptable, and that public interest is served by not strictly enforcing the subject standard, as is required to grant the adjustment. Secondly, recommending approval for an adjustment to avoid impacts to a resource while also recommending approval of the 320-foot bridge span and street extension which also causes impacts seems contradictory. How are the impacts for the bridge acceptable, while those for a wider street section not acceptable?

The applicant wishes to obtain a developed street access to his property. One option is the extension of Wall Street, a public street, across Fanno Creek. The applicant's proposed alignment of this extension 72-

foot ROW is the same general alignment of a 60-foot access easement conveyed to the applicant by the City of Tigard across City property. The 2003 TSP shows the extension of this collector street providing a connection between Hall Boulevard and Hunziker Street to relieve congestion and improve circulation, but since the railroad crossing is not possible, the completion of this connection is uncertain. Therefore the proposal to construct the street for development of the applicant's property is speculative in nature. The applicant points to development of the site as a positive impact that counters any adverse impact on the natural resources. However there is no guarantee that the development will happen and there are other options that would have no or much less impact to the natural resources in the area and still allow access to the applicant's property.

## SECTION VII. CONCLUSION

Based on the foregoing findings and analysis, staff finds that the proposed Comprehensive Plan, Sensitive Lands Reviews, and Adjustment are inconsistent with applicable provisions of the Tigard Development Code (Chapters 18.390, 18.745, 18.775, 18.790, & 18.810), Comprehensive Plan (Goals 2-Land Use Development, 5-Natural Resources and Historic Areas, Goal 6-Environmental Quality, Goal 7-Hazards, Goal 8-Parks, Recreation, Trails, and Open Space, and 11-Public Facilities and Services), Tigard Municipal Code (Chapter 9.06-Trees on City Property), Statewide Planning Goals 2, 5, 6, and 7, and Metro Urban Growth Management Plan Title 3.

## SECTION VIII. RECOMMENDATION

Staff recommends that the Planning Commission recommend denial of the proposed comprehensive plan amendment, sensitive lands reviews, and adjustment to City Council.

Cheryl A. Caines  
PREPARED BY: Cheryl Caines  
Associate Planner

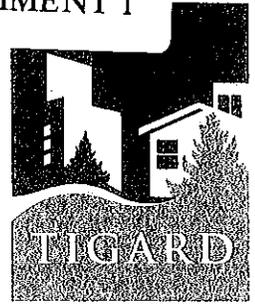
August 9, 2010  
DATE

Ron Bunch  
REVIEWED BY: Ron Bunch  
Community Development Director

August 9, 2010  
DATE

### Attachments:

1. 10/30/09 Incomplete Letter to applicant from Staff
2. 12/01/09 Letter from Phil Grillo to Staff regarding public support facilities
3. 03/08/10 Letter from Tualatin Valley Fire and Rescue (TVF&R)
4. 03/12/10 Letter from Oregon Department of Fish and Wildlife (ODFW)
5. 04/06/10 Letter from Department of Land Conservation and Development (DLCD)
6. Illustration showing 2002 TSP connection and surrounding area
7. Vicinity Map



October 30, 2009

Rhys Konrad  
Group Mackenzie  
1515 SE Water Ave., Suite 200  
Portland, OR 97214

Dear Mr. Konrad:

**RE: Notice of Incomplete Application Submittal – Fields Wall Street Extension  
(CPA2009-00004, SLR2009-00004, & SLR2009-00005)**

The City has not received the information necessary to begin the review of your Comprehensive Plan Amendment/Sensitive Lands Review for the extension of Wall Street. The project site is located at the end of Wall Street, east of the Hall Boulevard intersection. This letter is to inform you of Staff's concerns regarding the application and materials necessary to deem the application complete and to provide the best information for decision makers and the public.

1. **Application Form.** The project involves property owned by others than the applicant, Mr. Fields. Owner signatures will need to be obtained for those affected properties.
  - City of Tigard (2S102DD-00100 & 00200 and 2S102DA-00600)
  - A. Eikrem (2S102DA-00690)
  
2. **Narrative.** - Please address the following codes/plans:
  - *Comprehensive Plan – state how the proposal will promote these goals and policies.*
    - Goal 5.1, Policies 7 & 8
    - Goal 7.1, Policies 4 & 7
    - Goal 8.1, Policy 17
    - Goal 11.1, Policies 1 & 6
    - Goal 11.4, Policy 4-D
    - Goal 12.1, Policies 1, 2, 3-G & 5-A
    - Goal 12.2, Policy 6-E

- *Tigard Community Development Code*  
18.775 Sensitive Lands:  
18.775.040 - E, F and I  
18.775.040.H (if water lines will be carried across the bridge)  
18.775.090.B.5 – it is unclear how the response relates to the criterion
- *Tigard Municipal Code*  
Chapter 7.40.090 Greenway Maintenance  
Chapter 9.06 Trees on City Property.
- *Metro Urban Functional Growth Management Plan*  
Title 13 – Nature in Neighborhoods

### 3. **Supporting Documents.**

- ESEE – please provide on the document the names and titles of those who prepared it. Also provide the facts, findings, and conclusions in the narrative to show how 18.775.130.A criteria are met. Does this updated analysis consider changes that may have occurred since the original ESEE was completed for Phase 1?
  - Alternatives Analysis – Page 8 of the analysis is not legible. Please ensure that future copies of this page are legible for readers. Was the wildlife biologist/wetlands ecologist involved with analyzing the environmental impact of the two new alternatives?
  - Department of State Lands Removal/Fill Permit – Permit 31719-RF has expired and you state that a new permit will be requested. The supporting documents for this permit were prepared several years ago and will likely be required by the permitting agency. Please provide copies of updated supporting documents.
4. **Adjustment.** An adjustment has been requested to the street improvement requirements. A fee of \$310.50 (\$621 x 50%) is required.
5. **Tree Removal Permits.** The plan shows removal of trees within sensitive lands. Removal permits are required. Please address the relevant criteria under 18.790.050 and pay the proper fee of \$94.00 each (\$188 x 50%).
6. **Public Facility Items.** Please provide the information required by the Development Review Engineer, as shown on the attached sheet (Attachment 1).
7. **Arborist Comments.** Please provide the information required by the City Arborist, as shown on the attached sheet (Attachment 2).
8. **Areas of Concern.**
- The narrative reads, under 18.775.070.B.2, that code references are cited to support your interpretation of the term “public support facilities.” There is one citation, no discussion of how this term has been previously interpreted by the City, and how the proposed interpretation is different.

- Is this design the most environmentally friendly? The applicant is requesting exceptions/adjustments to the street design to avoid impacts to natural areas, but then is proposing fill within these same natural areas.
- Beginning on page 8 of the narrative, you briefly outline the impacts to the on-site sensitive areas. These impacts are a key concern of the stakeholders. Please ensure that impacts to the natural areas and wildlife are clearly outlined. Document where and from whom this information was obtained.

If you have any questions about the above comments, please contact me at (503) 718-2437 or [cherylc@tigard-or.gov](mailto:cherylc@tigard-or.gov).

Sincerely,



Cheryl Caines  
Associate Planner

c: CPA2009-00004 Land Use File  
Fred Fields, owner  
Dick Bewersdorff, Planning Manager  
Ron Bunch, Community Development Director

**PUBLIC FACILITY PLAN  
COMPLETENESS CHECKLIST**

**Project:** Fields Wall St. Extension  
**Date:** 10-27-09

**GRADING**

<input type="checkbox"/>	Existing and proposed contours shown.	
<input type="checkbox"/>	Are there grading impacts on adjacent parcels?	
<input type="checkbox"/>	Adjacent parcel grades shown.	
<input type="checkbox"/>	Geotech study submitted?	

**STREET ISSUES**

<input checked="" type="checkbox"/>	Right-of-way clearly shown.	<b>1. ROW required for a collector street is 58 feet minimum. This includes 2-12-foot travel lanes, two 6-foot bike lanes, two 5-foot planters and a 6-foot sidewalk on each side. If the proposed section eliminates the planter strips on the bridge, there needs to be strong justification for doing so and approval of an adjustment is required. 2. For a 3-lane section, the ROW needs to be 70 feet wide. 3. Dedicate required ROW on the Fields property outside City property boundary. 3. Dedicate an 8-foot Public Utility Easement on both sides of the dedicated ROW for placement of franchise utilities. 4. Street segment within City property will have to be dedicated as ROW as well with appropriate PUE's on both sides.</b>
<input type="checkbox"/>	Centerline of street(s) clearly shown.	
<input type="checkbox"/>	Street name(s) shown.	
<input type="checkbox"/>	Existing/proposed curb or edge of pavement shown.	
<input type="checkbox"/>	Street profiles shown.	
<input type="checkbox"/>	Future Street Plan: Must show street profiles, topo on adjacent parcel(s), etc.	
<input type="checkbox"/>	Traffic Impact and/or Access Report	
<input type="checkbox"/>	Street grades compliant?	
<input checked="" type="checkbox"/>	Street/ROW widths dimensioned and appropriate?	<b>Show 58-foot ROW with improvements as listed above. Adequate justification needs to be provided for reducing the ROW width less than 58 feet.</b>
<input type="checkbox"/>	Private Streets? Less than 6 lots and width appropriate?	
<input checked="" type="checkbox"/>	Other:	<b>1. Final plans should show street lighting and street trees. 2. Franchise utilities shall be placed underground where possible and designed to cross with the bridge installation. 3. Adequate turnaround needs to be shown for vehicles that cross the bridge. Turnaround sufficient to meet TVF&amp;R requirements needs to be provided with the development of the lot.</b>

**SANITARY SEWER ISSUES**

REVISED: 10/28/09

<input checked="" type="checkbox"/>	Existing/proposed lines shown.	<b>Sewer is available on-site to serve the property. There is no need to extend sewer lines with the street.</b>
<input type="checkbox"/>	Stubs to adjacent parcels required/shown?	

**WATER ISSUES**

<input checked="" type="checkbox"/>	Existing/proposed lines w/ sizes noted?	<b>Street improvements shall include water service lines as part of the bridge installation.</b>
<input checked="" type="checkbox"/>	Existing/proposed fire hydrants shown?	<b>Fire hydrant locations should be shown as part of the development of the lot, whenever that occurs.</b>
<input type="checkbox"/>	Proposed meter location and size shown?	
<input checked="" type="checkbox"/>	Proposed fire protection system shown?	<b>Adequate fire protection measures need to be shown as part of development. They do not need to be provided with the street extension only.</b>

**STORM DRAINAGE AND WATER QUALITY ISSUES**

<input checked="" type="checkbox"/>	Existing/proposed lines shown?	<b>Storm drainage needs to be addressed for the east side of the bridge. The distance across the bridge eastward is too long to the nearest catchbasin. Revise the storm drain plans to reduce that distance.</b>
<input checked="" type="checkbox"/>	Preliminary sizing calcs for water quality/detention provided?	<b>1. Final plans shall include calculations for water quality so that adequacy of treatment facility can be determined. 2. Pay fee for detention.</b>
<input type="checkbox"/>	Water quality/detention facility shown on plans?	
<input type="checkbox"/>	Area for facility match requirements from calcs?	
<input type="checkbox"/>	Facility shown outside any wetland buffer?	
<input type="checkbox"/>	Storm stubs to adjacent parcels required/shown?	

The submittal is hereby deemed  COMPLETE

INCOMPLETE

By: Agustín P. Duenas

Date: 10/28/09

## Fields Wall Street Extension

Completeness Item	Met	Not Met	N/A	Comments
9.06.030: Tree Planting		X		-Not addressed in narrative. -The applicant is proposing to plant trees on City property as indicated on sheet R2.5 in areas E, F, G, and I. Therefore, the requirements in sections 9.06.030 of the Municipal Code and section 050 of the Tigard Tree Manual shall be addressed and met.
9.06.040: Tree Maintenance		X		-Not addressed in narrative. -The applicant is proposing to plant trees on City property as indicated on sheet R2.5 in areas E, F, G, and I. They will also be required to maintain their plantings per City standards. Therefore, the requirements in sections 9.06.040 of the Municipal Code and section 060 of the Tigard Tree Manual shall be addressed and met.
9.06.050: Tree Protection		X		-Not addressed in narrative. -The applicant is proposing construction activities on City property in close proximity to existing trees. Therefore, the requirements in sections 9.06.050 of the Municipal Code and sections 070 and 090(2) of the Tigard Tree Manual shall be addressed and met.
9.06.070: Tree Removal		W		-Not addressed in narrative. -The applicant is proposing to remove trees on City property. Therefore, the requirements in sections 9.06.070 of the Municipal Code and section 090 of the Tigard Tree Manual shall be addressed and met. -Note: Mitigation will not be required
18.745: Landscaping and Screening		X		Not addressed in narrative.
18.745.030: General Provisions		X		Not addressed in narrative.
18.745.040: Street Trees		X		-Not addressed in narrative. -Street trees are not shown on the plans for the non-bridge portion of the

Todd Prager  
City Arborist  
October 14, 2009

				roadway. I recommend continuing the species selection used for "Phase 1".
18.745.050: Buffering and Screening			X	
18.745.060: Re-vegetation		X		Not addressed in narrative.
18.790.030: Tree Plan Requirement			X	
18.790.050: Permit Applicability		X		-Not addressed in narrative. -No tree removal permit applications provided.

Todd Prager  
City Arborist  
October 14, 2009



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RECEIVED PLANNING

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CITY OF TIGARD

**Phillip E. Grillo**  
phil.grillo@millernash.com  
(503) 205-2311 direct line

December 1, 2009

**BY FIRST-CLASS MAIL AND  
ELECTRONIC MAIL**

Ms. Cheryl Caines  
Associate Planner  
City of Tigard  
Department of Community Development  
Current Planning Division  
13125 S.W. Hall Boulevard  
Tigard, Oregon 97223

Subject: Fred Fields' Access Application (CPA2009-00004, SLR2009-00004, & SLR2009-00005)

Dear Cheryl:

I am writing on behalf of the applicant, Fred Fields, to provide you with additional information concerning TDC 18.775.070(B)(2), as it applies in this case.

As you know, this standard has been the subject of ongoing discussions between the City and the applicant's team. Based on our recent discussions, I am uncertain what your current position is with regard to the meaning of this standard and how you would interpret and apply it in our case. Your letter dated October 30, 2009, to Mr. Konrad indicates that you are interpreting TDC 18.775.070(B)(2) to prohibit the proposed access bridge in the floodplain, because the site is zoned for residential use.

The surface of Mr. Fields' access street and the bridge will be located well above the floodplain elevation and will therefore be located outside the floodplain. I believe this complies with your position that under TDC 18.775.070(B)(2), the street cannot be located in the floodplain. The only development or landform alterations that are proposed to occur in the floodplain are the support facilities that extend below the street and bridge, and that are necessary to elevate the street and bridge above the floodplain. These supports constitute "public support facilities," which under TDC 18.775.070(B)(2) are allowed in residentially zoned floodplains.



Ms. Cheryl Caines  
December 1, 2009  
Page 2

As you know, Wall Street is a public street shown in the Tigard Transportation Systems Plan ("TSP"). The planned extension of that street will be located exclusively on City-owned land or within the public right-of-way, as will the support needed to elevate those facilities (e.g., footings and fill). These footings and fill are necessary to support the principal development, namely the planned extension of Wall Street as described in the City's TSP.

The proposed Wall Street extension and bridge were designed by an engineering firm (DeHass) that was employed by the City for that purpose. As part of the process of selecting a design for the bridge and street, the City looked at many alternatives and selected the design prepared by DeHass. This design was selected by the City to minimize impacts to the natural area and the floodplain, while at the same time ensure that the roadway extension could reasonably be constructed. Overall, this planned street extension has been anticipated for many years. It is not only required by the City's TSP, it is also necessary for Mr. Fields to access his property.

The supports that are needed to elevate this planned street extension above the floodplain constitute "public support facilities," and are therefore allowed in residential zones pursuant to TDC 18.775.070(B)(2). Without the exception for "public support facilities," it would be impossible to build planned transportation facilities in residentially zoned lands, unless the floodplains were relatively narrow. That being said, we agree that the surface of planned transportation facilities should be located above the floodplain elevation, especially in residentially zoned lands. Locating the surface of streets or pathways above the floodplain elevation is necessary for public safety to facilitate access during flood emergencies. But "public support facilities," such as footings and fill, often need to be located in the floodplain in order to elevate planned transportation facilities, like public streets and pathways, above the floodplain. As you know, many planned transportation facilities already cross, or are planned to cross, the floodplain. Accordingly, any ambiguities in TDC 18.775.070(B)(2) should be interpreted in a way that makes planned public transportation facility crossings possible by allowing them to be elevated by footings and fill in the floodplain, when needed.

The issue of whether footings and fill can be located in the floodplain under TDC 18.775.070, if they are used to elevate a planned transportation facility above the floodplain, came before you and the City's land use hearings officer earlier this year in the Fanno Creek Trail & Bridge case (SLR 2009-00002, decided July 22, 2009, attached). By coincidence, the planned pathway extension proposed in the Fanno Creek Trail & Bridge case is located on the same City-owned property as the proposed Wall



Ms. Cheryl Caines  
December 1, 2009  
Page 3

Street extension, namely Tax Lot 2S102DA-0041. The similarities in the two projects do not end there. For example:

- The Fanno Creek Trail & Bridge case involved a proposed extension of a planned transportation facility on residentially zoned land, just as the planned Wall Street extension project does in our case.

- The Fanno Creek Trail & Bridge case involved a proposed crossing of the creek with a bridge. The travel surface of the bridge is located above the floodplain and is supported by footings and fill located in the floodplain, just as the planned Wall Street extension project does in our case.

- The Fanno Creek Trail & Bridge case involved the extension of a planned transportation facility shown on the City's TSP, just as the planned Wall Street extension project does in our case.

In the City's staff report in the Fanno Creek case, staff noted that "Most of the work is proposed within the 100-year floodplain and floodway." (Staff report at 2 of 15.) Grading is shown in the floodplain on the maps attached to the staff report. Even though most of the work proposed in that case would occur within the floodplain, staff clearly stated that: "Land form alterations within the 100-year floodplain are permitted within the commercial and industrial zones. Community Recreation and Public Support Facilities are permitted within residential zones as an exception. The trail and sidewalk therefore, are permitted within the R-12 zoning. This standard is met." (Staff report at 6 of 15.) The staff report definitively states that "The proposed improvement on this site (sidewalk widening and signal installation) is classified as a Public Support Facility." (Staff report at 11 of 15.) In the hearings officer's detailed opinion, he agreed with staff's conclusion and elaborated on the issue in response to opposing testimony provided at the hearing.

The hearings officer's findings are particularly noteworthy and highly relevant to our case because they explain the City's interpretation of the sensitive lands provisions in TDC 18.775.070 as they relate to planned transportation facilities located in the floodplain. In that case, the hearings officer carefully explained how the provisions in the sensitive lands section of the code work together with the City's TSP to allow planned transportation facilities to be constructed through the floodplain, even on residentially zoned lands. With regard to planned transportation facilities located in the floodplain, the hearings officer found as follows:



Ms. Cheryl Caines  
December 1, 2009  
Page 4

"i. The opponents interpretation that the elevation standard of TDC 18.775.070.B(5) applies to the entire boardwalk structure, would likely preclude all pathways that cross any portion of the floodplain below the average annual flood elevation. With the exception of relatively narrow floodplain areas, it would be impossible to extend a bridge or boardwalk over such areas without using support that extend below the elevation of the average annual flood. However the City's adopted transportation plan clearly shows pathways crossing floodplain areas." (See hearings officer decision at 20, attached.)

"ii. The appellants argue that, because this criterion is included in the sensitive lands section of the Code, it must be intended to protect sensitive lands by prohibiting structures that could catch debris or increase flood levels. However, this standard is not necessary to achieve those purposes. A surface pathway below the elevation of the average annual flood would have no effect on flood levels or debris flows. These problems only arise with elevated pathways located on fill or a boardwalk, bridge or other structure. Compliance with the "no-rise" standard of TDC 18.775.070.B(1) is sufficient to ensure that any structure supporting a pathway will not impact flood heights." (See hearings officer decision at 20.)

"d. Therefore the hearings officer finds that the elevation requirement of TDC 18.775.070 B(5) only applies to the surface of the boardwalk, where the "pathway" is located. As discussed above, the surface of the boardwalk can be located above the average annual flood. Therefore the applicant can comply with TDC 18.775.070.B(5)." (See hearings officer decision at 21.)

In other words, when dealing with planned transportation facilities in floodplains, the hearings officer made a clear distinction between the need to locate the surface of planned public transportation facilities above the floodplain elevation and the competing need for public support facilities to extend below the floodplain elevation to support these transportation facilities. As he correctly concluded, unless the provisions of TDC 18.775.070 are interpreted in this way, it would be "impossible" to construct planned transportation facilities through the floodplain, except in relatively narrow floodplain areas.

Roads are treated the same under the TDC as pathways. Both the staff report and the hearings officer decision in the Fanno Creek Trail & Bridge case treat pathways as roads under the TDC. Regarding nonresidential construction in the floodplain, the staff report concludes that "[t]his standard does not apply as this development is for roadway purposes." (Staff report at 6 of 15.) Staff testified before the



Ms. Cheryl Caines  
December 1, 2009  
Page 5

hearings officer that "[t]rails are treated as streets" under the TDC. (See hearings officer decision at 13.) The hearings officer found that "trails \* \* \* are treated as transportation facilities, similar to a road" under the TDC. (See hearings officer decision at 15.) Mr. Fields' bridge proposal should be treated the same as the City's bridge proposal.

In the Fanno Creek Trail & Bridge case, the width of the floodplain was approximately 400 feet. Even so, the City approved a 60-foot span bridge, and allowed the applicant (itself) to place footings and fill within the floodplain under TDC 18.775.070 in order to support the bridge. (See attached photos.) In our case, the width of the floodplain is wider. The width of the floodplain at the planned crossing is approximately 500 feet. Likewise, the span of our proposed bridge is approximately 320 feet, which is much longer than the relatively short bridge proposed in the Fanno Creek case. Forcing Mr. Fields to remove the needed footings and fill from the floodplain and build a much longer bridge without footings or fill in the floodplain, in order to span this extremely wide floodplain, would be completely inconsistent with the hearing officer's reasoning and decision in the Fanno Creek Trail & Bridge case, and would be in direct conflict with the applicable law.

The purpose of TDC 18.775.070(B)(2) is not to make required transportation facilities impossible to build on residentially zoned land, or to make them so costly that they cannot be built. Nor is its purpose to keep all development and landform disturbances out of the floodplain. Its purpose is to keep the transportation facility safe by keeping the surface above the floodplain elevation in residentially zoned areas so that people and emergency vehicles can access homes during flood emergencies. As is explained by the hearings officer, other provisions in TDC 18.775 expressly protect the floodplain, such as the "no-rise" standard of TDC 18.775.070(B)(1) and the "anchoring" requirements of TDC 18.775.040(I). (See hearings officer decision at 21.)

In closing, we ask that you interpret and apply any ambiguous provision in TDC 18.775.070 in a way that is consistent with the hearings officer's reasoning in the above-mentioned case. The hearings officer's decision is consistent with the applicable law. That decision was not appealed by the City or by any other party. In fact, City staff argued persuasively in favor of the position ultimately adopted by the hearings officer. Issues raised in that case have already been resolved. The hearings officer's reasoning in that case is practical, lawful, and applicable to Mr. Fields' application. We should not be treated any differently by the City in this case, than the City treated itself in that case. Mr. Fields is trying to do precisely what the City just did in the Fanno Creek case, namely extend a long-planned transportation facility through a floodplain by using a



MILLER NASH<sup>LLP</sup>  
ATTORNEYS AT LAW

PORTLAND, OREGON  
SEATTLE, WASHINGTON  
VANCOUVER, WASHINGTON  
CENTRAL OREGON  
WWW.MILLERNASH.COM

Ms. Cheryl Caines  
December 1, 2009  
Page 6

design that keeps the roadway surface out of the floodplain. Such a design is implemented by elevating the surface of the planned transportation facility and the bridge itself above the floodplain by locating some footings and fill inside the floodplain, but outside the stream channel.

As the hearings officer concluded, the ambiguous provisions of TDC 18.775.070 should be and have been interpreted and applied in a way that enables the travel surface of transportation facilities to be above the floodplain, but allows footings and fill ("public support facilities") to be located in the floodplain as needed to support a reasonably sized bridge that protects the stream channel. As the attached photos clearly show, that is exactly what the hearings officer approved in the Fanno Creek case, and it is exactly what Mr. Fields is asking for in this case. The hearings officer recognized that planned transportation facilities must be allowed to cross floodplains in a practical and financially viable way, and interpreted ambiguous provisions in TDC 18.775.070 consistent with that purpose. We hope that you will too.

Please let me know if you have any further questions with regard to this issue, and thank you again for your careful consideration.

Very truly yours,

Phillip E. Grillo

cc: Mr. Fred Fields  
Mr. Tim Ramis, City Attorney

120 DAYS = 12/22/2009 (139 day extension)  
DATE OF FILING: 6/22/2009  
DATE MAILED: 6/22/2009



**CITY OF TIGARD**  
Washington County, Oregon  
**NOTICE OF FINAL ORDER BY THE HEARINGS OFFICER**

Case Numbers:	<b>SENSITIVE LANDS REVIEW (SLR) 2009-00002</b> <b>SENSITIVE LANDS REVIEW (SLR) 2009-00003</b> <b>MINOR MODIFICATION (MMD) 2009-00007</b> <b>MINOR MODIFICATION (MMD) 2009-00013</b>
Case Name:	<b>FANNO CREEK TRAIL &amp; BRIDGE/HALL BLVD. CROSSING</b>
Applicant's Name/Address:	City of Tigard 13125 SW Hall Boulevard Tigard, OR 97223
Owner's Name/Address:	City of Tigard 13125 SW Hall Boulevard Tigard, OR 97223
Address of Property:	13125 and 13500 SW Hall Boulevard Tigard, OR 97223
Tax Map/Lot Nos.:	Washington Co. Tax Assessor's Map No. 2S102DA, Tax Lots 00401 and 00600.

A FINAL ORDER INCORPORATING THE FACTS, FINDINGS AND CONCLUSIONS **APPROVING A REQUEST FOR SENSITIVE LANDS REVIEW AND MINOR MODIFICATIONS**, THE CITY OF TIGARD HEARINGS OFFICER HAS REVIEWED THE APPLICANT'S PLANS, NARRATIVE, MATERIALS, COMMENTS OF REVIEWING AGENCIES, THE PLANNING DIVISIONS STAFF REPORT AND RECOMMENDATIONS FOR THE APPLICATION DESCRIBED IN FURTHER DETAIL IN THE STAFF REPORT. THE HEARINGS OFFICER HELD A PUBLIC HEARING ON **MAY 11, 2009** TO RECEIVE TESTIMONY REGARDING THIS APPLICATION. THIS DECISION HAS BEEN BASED ON THE FACTS, FINDINGS AND CONCLUSIONS CONTAINED WITHIN THIS FINAL ORDER.

**Request:** ➤ The applicant requested approval to construct portions of the Fanno Creek trail. Construction involves installation of a sidewalk and signalized crosswalk on Hall Boulevard north of the Fanno Creek Bridge. A boardwalk is approved through the floodplain and vegetated corridor of nearby wetlands and Fanno Creek on the eastern side of Hall Boulevard, and a pedestrian bridge over Fanno Creek is approved east of Hall Boulevard to connect the new boardwalk with the existing trail north of the Tigard library. **At the May 11, 2009 public hearing, the Hearings Officer ultimately held open the record until July 13, 2009 (9 weeks), and then approved the request, subject to conditions of approval.**

Zones: CBD: Central Business District; I-L: Light Industrial District; and R-12: Medium-Density Residential District.  
Applicable Review Criteria: Community Development Code Chapters 18.330, 18.360, 18.390, 18.510, 18.520, 18.530, 18.745, 18.775 and 18.810.

**Action:** ➤  Approval as Requested  Approval with Conditions  Denial

**Notice:** Notice was published in the newspaper and mailed to:  
 Owners of Record within the Required Distance  Affected Government Agencies  
 Interested Parties  The Applicants and Owners

The adopted findings of fact and decision can be obtained from the Planning Division/Community Development Department at the City of Tigard Permit Center at City Hall.

**Final Decision:**

**THIS DECISION IS FINAL ON JULY 22, 2009 AND BECOMES EFFECTIVE ON AUGUST 6, 2009 UNLESS AN APPEAL IS FILED.**

**Appeal:**

The decision of the Review Authority is final for purposes of appeal on the date that it is mailed. Any party with standing as provided in Section 18.390.040.G.1. may appeal this decision in accordance with Section 18.390.040.G.2. of the Tigard Community Development Code which provides that a written appeal together with the required fee shall be filed with the Director within ten (10) business days of the date the notice of the decision was mailed. The appeal fee schedule and forms are available from the Planning Division of Tigard City Hall, 13125 SW Hall Boulevard, Tigard, Oregon 97223.

**THE DEADLINE FOR FILING AN APPEAL IS 5:00 PM ON AUGUST 5, 2009.**

**Questions:** If you have any questions, please call the City of Tigard Planning Division at (503) 639-4171.

BEFORE THE LAND USE HEARINGS OFFICER  
FOR THE CITY OF TIGARD, OREGON

Regarding an application by the City of Tigard for ) FINAL ORDER  
sensitive lands review and other approvals for construction)  
of a section of the Fanno Creek, trail north of Fanno Creek) SLR2009-00002<sup>1</sup>  
and east of Hall Boulevard, in the City of Tigard, Oregon ) (Fanno Creek Trail)

A. SUMMARY

1. The applicant, City of Tigard, requests sensitive lands review and minor modification of the Conditional Use Permit ("CUP") approval for the Tigard Library to construct a segment of the Fanno Creek trail located north of Fanno Creek and east of Hall Boulevard, at 13125 and 13500 SW Hall Boulevard; also known as tax lots 401 and 600, WCTM 2S102DA (the "site"). The proposed trail segment will connect the existing trail sections north of the Library, which currently ends at the south bank of Fanno Creek, with the existing trail section on the west side of Hall Boulevard, north of Fanno Creek and south of the Tigard City Hall. The applicant proposed to install a bridge across Fanno Creek, an elevated boardwalk through the floodplain and vegetated corridor of nearby wetlands north of Fanno Creek, a sidewalk on the east side of Hall Boulevard north of Fanno Creek and a signalized crosswalk on Hall Boulevard between the end of the proposed sidewalk and the existing trail section west of Hall Boulevard. Additional basic facts about the site and surrounding land and applicable approval standards are provided in the Staff Report to the Hearings Officer dated April 29, 2009 (the "Staff Report"), incorporated herein by reference.

2. Tigard Hearings Officer Joe Turner (the "hearings officer") held a duly noticed public hearing on May 11, 2009 to receive and consider public testimony in this matter. At the public hearing City staff recommended conditional approval of the application. Representatives of the applicant testified in support of the application. Two persons testified in opposition. At the end of the hearing, the hearings officer ordered the record held open. Ultimately, at the parties' request, the hearings officer held open the record until July 13, 2009. See the June 26, 2009 "Order Opening the Record." Exhibit 9. The principal issues in this case include the following:

- a. Whether the City is required to include copies of prior development approvals on and near this site in the record for this case;
- b. Whether changes to the design of the bridge supports constitute a significant change in the application;
- c. Whether changes in the plans require additional review by DSL;

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<sup>1</sup> This decision also addresses SLR2009-00003, MMD2009-00007 and MMD2009-00013.

- d. Whether this application qualifies as a minor modification of the CUP approval for the library;
- e. Whether a traffic study and/or access report is required for this project;
- f. Whether the pathway will be located above the elevation of the average annual flood;
- g. Whether the boardwalk and bridge are subject to the flood proofing requirements of TDC 18.775.040.M;
- h. Whether the boardwalk and bridge can comply with the anchoring requirements of TDC 18.775.040.I;
- i. Whether the City is required to find that the project complies with CWS's Design and Construction Standards;
- j. Whether Goal 5, the Tualatin Basin "Limit" Decision and the City's "Significant Habitat Areas Map" are applicable approval criteria for this application;
- k. Whether the wildlife assessment is adequate;
- l. Whether the applicant is required to stabilize the banks of Fanno Creek on the site;
- m. Whether the applicant is required to remove the trees on the site;
- n. Whether the provisions of the comprehensive plan are an applicable approval criteria for this application;
- o. Whether the applicant is required to construct frontage improvements on Hall Boulevard abutting the site; and
- p. Whether the hearings officer can limit grading on the site.

3. Based on the findings and discussion provided or incorporated in this final order, the hearings officer concludes that the applicant sustained the burden of proof that the proposed sensitive lands review and minor modifications do or will comply with the applicable criteria of the Community Development Code, provided development that occurs after this decision complies with applicable local, state, and federal laws and with conditions of approval warranted to ensure such compliance occurs in fact. Therefore those applications should be approved subject to such conditions.

## B. HEARING AND RECORD HIGHLIGHTS

1. The hearings officer held a duly noticed public hearing on May 11, 2009 to receive and consider public testimony in this matter. The record includes a witness list, materials in the casefile as of the close of the record, including materials submitted after the hearing, and an audio record of the hearing. At the beginning of the hearing, the hearings officer made the declaration required by ORS 197.763. The hearings officer disclaimed any *ex parte* contacts, bias or conflicts of interest. The following is a summary by the hearings officer of selected relevant testimony offered at the hearing.

2. City planner Cheryl Caine summarized the Staff Report and responded to testimony from the parties.

a. She noted that the City approved a 1,090-foot segment of the trail south of Fanno Creek and north of the Tigard Library in 2005. Final Order SLR 2005-00016/MMD 22005-00015. The approved trail segment terminated at the south bank of Fanno Creek. With this, 2009, application the City proposes to extend the trail over Fanno Creek and connect it with an existing section of trail located on the west side of Hall Boulevard.

b. She noted that Condition of approval 5 of the 2005 decision required that the applicant conduct a wildlife assessment to address the impact of the project within the area north of Fanno Creek and design the section of the trail north of the creek to “[r]espond to and take into account the results of the wildlife assessment.” She argued that the proposed trail alignment strikes a balance between safe and convenient trail access and the preservation of wildlife habitat.

c. She noted that there are wetlands on both sides of Hall Boulevard. Therefore Sensitive Lands Review is required for this section of the trail. No work is proposed within the wetlands, but the trail will be located within the vegetative corridor associated with Fanno Creek and the wetlands. Clean Water Services (“CWS”) issued a letter approving the proposed work in the vegetative corridor. The trail meets the no net rise standard for the floodway. She recommended the hearings officer approve the application subject to the conditions of approval in the Staff Report.

3. City project planner Duane Roberts, consulting wetland scientist Caroline Rim and City engineer Vannie Nguyen testified in support of the application.

a. Mr. Roberts summarized the design of the proposed trail segment.

i. He testified that this section of the trail is designed to achieve two competing goals; safety of the trail users and protection of turtles and other wildlife. The field on the north side of Fanno Creek provides important breeding habitat for western pond turtles. The proposed trail will impact turtle habitat. But the applicant designed the project to minimize such impacts to the maximum extent possible.

ii. The trail must cross Fanno Creek to connect the two existing trail sections and provide a signalized crossing over Hall Boulevard. The existing Hall Boulevard bridge across Fanno Creek does not meet ADA requirements for pedestrian accessibility.

(A) Hall Boulevard currently carries more than 14,000 vehicle trips per day, making it difficult for pedestrians to cross the street at unsignalized intersections. Hall Boulevard is subject to the jurisdiction of the Oregon Department of Transportation ("ODOT"). ODOT approved a signalized pedestrian crossing on Hall Boulevard at the proposed location north of Fanno Creek. The approval is site specific. ODOT will not allow a signalized pedestrian crossing south of Fanno Creek or elsewhere on Hall Boulevard.

(B) There is an existing signalized crossing at the intersection of Wall Street and Hall Boulevard south of the site, at the southwest corner of the Library site. However trail users would be forced to undertake out of direction travel to use this crossing to access the remainder of the trail. Under existing conditions the majority of pedestrians run or walk across Hall Boulevard at unsignalized locations.

iii. He testified that the majority of the boardwalk will be elevated 30-inches above the ground. The railing will be 42-inches above the boardwalk. The different elevations listed in the text of the application are typographical errors.

iv. He testified that the CWS mitigation project on the site is only required to mitigate impacts to offsite wetlands. Although CWS performed mitigation activities throughout the site, the upland mitigation areas are not part of the required mitigation project. The trail development will have no impact on the mitigated wetlands on the site.

v. He noted that compliance with Metro's Fanno Creek Trail guidelines is not an approval criterion. Metro's preferred alignment extends through wetland areas north of Fanno Creek and east of Hall Boulevard. CWS approved the proposed alignment. The City's original alignment was located closer to the creek, in the southwest corner of the site as suggested by the Wildlife Assessment. However CWS required that the City move the trail to the northeast in order to reduce its impact on the vegetative corridors.

vi. He argued that the alternative trail alignment proposed by Mr. Frewing is not a reasonable alternative alignment. The alternative route will provide an equally direct route for pedestrians traveling through the area on the trail. However it will not accommodate other trail users.

(A) The alternative alignment will force westbound and northbound bike riders to make a difficult, unprotected, left turn across Hall Boulevard in order to rejoin the trail north of Fanno Creek. There is no center left turn lane on Hall Boulevard at that location.

(B) The alternative alignment proposed by Mr. Frewing does not provide a direct connection between the trail and the Library. Therefore those trail users are likely to cross Hall Boulevard at the unsignalized intersection of Hall Boulevard and O'Mara Street rather than undertaking additional out of direction travel needed to access the signalized crossing at Wall Street. The Library is a primary destination for many trail users.

vii. He testified that he may have been mistaken about the posted speed limit on Hall Boulevard. However there is no substantial evidence of traffic traveling at 50 mph as alleged by the appellants.

viii. He argued that the trail was designed to protect turtles. The application addresses all of the applicable approval criteria in the Code.

b. Ms. Rim testified that the City conducted a habitat review of the site three years ago, which was recently updated. The Oregon Department of Fish and Wildlife ("ODFW") and CWS undertook habitat mitigation activities on the site to enhance its value as turtle habitat. The updated analysis did not note any other significant changes on the site.

c. Ms. Nguyen testified that she designed the trail and other engineers and experts reviewed the project. The stream bank is stable and capable of supporting the proposed bridge footings. The City does not have design standards for trails. The City relies on a case-by-case design process.

i. She argued that the combined, two-way, bike path proposed by Mr. Frewing only serves bicyclists who are traveling on the trail. It will create a hazard for riders traveling northbound on Hall Boulevard. Those riders will be forced to turn left across Hall Boulevard at Wall Street to access the two-way path on the west side of Hall Boulevard, then cross Hall Boulevard again at an unprotected location in order to access the existing bike path on the east side and continue north on Hall Boulevard.

ii. She testified that the City considered Ms. Beilke's and ODFW's concerns about impacts to turtles and their habitat. The City proposed the elevated boardwalk to allow turtles to cross under the trail, reducing the trail's impact on turtle habitat and the potential for contact between humans and turtles. CWS reviewed the project and approved the proposed alignment. The trail is located in the corner of the site in order to minimize impacts to the habitat value of the site. The remainder of the site will remain protected and undisturbed.

4. John Frewing summarized his written testimony. Exhibit 1. He testified that, although he generally supports enhanced pedestrian amenities and connectivity, he is opposed to the specific trail alignment proposed in this application. The proposed trail alignment does not meet City standards and it will have cause impacts to turtles and turtle habitat that cannot be avoided or mitigated with conditions of approval.

a. He outlined an alternative trail alignment that avoids impacts to the turtle habitat north of Fanno Creek. His alternative trail alignment would utilize a new trail segment connecting the existing trail sections south of the Library with the existing trail section south of City Hall, on the west side of Hall Boulevard. The City cannot rely on the existence of the trail section on the Library site to justify approval of the proposed trail section north of Fanno Creek. The condition of approval of the 2005 decision approving the trail on the Library site required that the applicant complete a wildlife assessment of this site. The hearings officer's decision approving that trail segment site specifically stated that construction of the trail on the south side of Fanno Creek was "at the City's own risk."

b. He argued that the proposed trail constitutes a major modification of the Conditional Use Permit ("CUP") approval for the Library, CUP 2003-001. Therefore TDC 18.330.020.B(2) requires that the applicant submit a new CUP application. This application constitutes a major modification of the prior CUP approval based on the following:

i. CUP 2003-001 approved a public Library as a "cultural institution." Inclusion of a boardwalk and regional trail constitutes a change in the approved land use. TDC 18.330.020.B(2)(a).

ii. This application changes the design of the Hall Boulevard crossing and sidewalk, "A change in the type and/or location of access ways and parking areas where off-site traffic would be affected." TDC 18.330.020.B(2)(c).

iii. This application reduces the width of the trail from ten feet to eight feet, "An elimination of project [recreational] amenities by more than 10%..." TDC 18.330.020.B(2)(g).

iv. The City has not fulfilled conditions of approval 21 and 28 of CUP 2003-001, which require that the City fund the on-site portion of the Fanno Creek Trail and Hall Boulevard frontage improvements for the balance of the subject site frontage and a portion of the Fanno Creek bridge replacement costs prior to final occupancy of the library.

c. He argued that the record in this case is incomplete, because it does not include the prior land use and site development approvals for development on this site and the City Hall site across Hall Boulevard. Those decisions must be included in the record to determine whether approval of this application constitutes a major modification of those prior approvals.

i. In addition, the record does not include a copy of the information provided to the Division of State Lands (“DSL”) based on which DSL concluded that DSL permits were not required for the trail project.

d. He argued that the proposed trail will not comply with TDC 18.775.070.B(5), which prohibit pathways below the elevation of an average annual flood. He argued that the Code uses the terms “pathway” and “trail” interchangeably.

i. He argued that this criterion should be construed to require that the entire trail, including its foundation, support structure, decking and railings, must be above the annual flood level. The 2003 Metro Design Guidelines for the Fanno Creek Trail include all of those elements. In addition, the elevation requirement is listed in the Sensitive Lands section of the Code, which indicates this requirement is intended to protect sensitive lands. This criterion would be included elsewhere in the Code if it was intended to ensure that the trail is usable/accessible for transportation and recreation year-round.

ii. He further argued that even the walking surface of the trail is located below the elevation of an average annual flood. The applicant’s Average Annual Flood Certification Letter is based on the two-year flood. However the Certification is based on an estimate of an estimate, a statistical extrapolation of stream flow from a 100-year floodplain model, which itself is based on the Santa Barbara Urban Hydrograph, with questionable applicability to the site.

iii. He testified that, based on USGS stream flow data for the past eight years, the actual average annual flood elevation at the site is equal to or higher than 1996 flood, when Fanno Creek was flowing 18-inches above the curb level on the Hall Boulevard bridge, a flood elevation of roughly 143.87 feet msl.

iv. He noted that the applicant’s plans do not show the elevation of the proposed boardwalk structure, making it impossible to review the application for compliance with this criterion.

e. He argued that the boardwalk is a “nonresidential structure” subject to TDC 18.775.040.M This section requires that the lowest floor of the structure must be elevated to the level of the base flood elevation, the 100 year flood, or that the structure be flood proofed in compliance with TDC 18.775.040.M(1) and (2). Based on the City’s floodplain maps, the boardwalk is “several feet” below the base flood elevation on the site.

f. He argued that the trail cannot comply with CWS Design and Construction Standards, which require that "the path shall avoid the Vegetated Corridor where possible." It is possible to avoid the vegetated corridor along Fanno Creek by utilizing a combination of the City's "Option 2" and "Option 3," what he titled the "habitat protection alternative." This trail alignment uses the existing pedestrian bridge over Fanno Creek north of the Senior Center, south to O'Mara Street, then east to Hall Boulevard, as shown in the applicant's "Alignment Option 2," then south along the west side of Hall Boulevard to the signalized intersection at Wall Street, connecting to the existing trail near the Fanno Point Condominiums, as shown in the applicant's "Alignment Option 3." There are existing bicycle lanes on both sides of these streets. This alignment provides an equally direct trail alignment that avoids impacts to the vegetative corridor and the turtle habitat on the site.

i. This alignment is consistent with the range of alternatives shown in Metro's 2003 Fanno Creek Greenway Trail Action Plan (Attachment D of Exhibit 1) and Metro's guidelines for the trail (Attachment A of Exhibit 1). Although portions of this alignment are on street, it is consistent with Metro policy that calls for 75-percent of the trail length to be off-street. Over 90-percent of the overall trail is off-street. This alignment also provides access to several Tigard neighborhoods, which the City's alignment does not provide.

ii. This alignment is safer than the City's alignment, since pedestrians will cross at an existing signalized intersection. The pedestrian actuated signal proposed by the City north of Fanno Creek is located at the bottom of a dip in Hall Boulevard. Vehicles are accelerating as they travel downhill approaching this crossing. The posted speed limit on Hall Boulevard is 40 mph, not 35 mph as stated in the Staff Report.

(A) The majority of trail users have no incentive to cross Hall Boulevard at O'Mara Street. This crossing only provides a shorter route for trail users traveling to and from the Library. The habitat protection alignment provides an equally direct route for all other trail users. The City should not base its trail design on the assumption that citizens will ignore traffic laws. However the City can eliminate this hazard by installing a fence at the east end of O'Mara Street to direct pedestrians to the signalized crossing at Wall Street.

iii. The habitat protection alternative is equally scenic compared to the alignment proposed by the City. It also avoids the noise and exhaust generated by vehicles on Hall Boulevard and the railroad. It also avoids putting trail users in close proximity to the recently identified hazardous waste site north of the Library.

iv. This alignment is also cheaper for the City, since it avoids utilizing existing streets, sidewalks and bridges. New construction is limited to the installation of signage to identify the route of the trail.

v. The City cannot rely on the existing trail north of the Library to justify a stream crossing in this location. The City built that trail section at its own risk.

g. He argued that a traffic study is required for the proposed trail development:

i. TDC 18.810.030.AC(1)(c) requires a traffic study where “high traffic volumes on the adjacent roadway that may affect movement into or out of the site,” TDC 18.810.030.AC(1)(c)(1), or “the proposal requires a conditional use permit...” TDC 18.810.030.AC(1)(c)(5).

ii. TDC 18.810.030.AC(2) provides that a traffic study may be required “when the site is within 500 feet of an ODOT facility.” Hall Boulevard is an ODOT facility.

iii. The traffic study for the Library noted that the O’Mara/Hall intersection is operating at Level Of Service (“LOS”) F, a failing condition, during the PM peak hour. ODOT policy prohibits new development that makes a failing condition worse. The addition of a pedestrian actuated signal across Hall Boulevard will make the failing conditions at the O’Mara/Hall intersection worse.

h. He argued that the applicant should be required to submit an access report to ensure that all applicable state, county, city and AASHTO standards are met. TDC 18.705.030.H(1) requires an access report for all new development.

i. He noted that the existing bike lanes on Hall Boulevard at the Fanno Creek Bridge do not meet City standards. Therefore they should be eliminated and bicycle traffic rerouted to the “habitat protection alignment” of the trail. Elimination of the bike lanes would “free up” space on Hall Boulevard to provide a two-way bike lane on the west side of Hall Boulevard between O’Mara and Wall Streets, eliminating the need for cyclists to make an unprotected left turn across Hall Boulevard to access the trail. The City can also restripe O’Mara Street to provide two-way bike lanes on the south side of the street.

j. He argued that the applicant is required to construct frontage improvements along the section of Hall Boulevard abutting the site.

i. TDC 18.810.030.A(3) prohibits new development unless the adjacent streets are improved to City standards, including a required planter strip. The existing Hall Boulevard frontage does not comply with City standards. Frontage improvements were required as a condition of the Library approval, but the City has not constructed them.

k. He argued that this development “makes a commitment to further development” that will impact sensitive lands in the area. Those “committed developments” have not been evaluated for compliance with applicable approval criteria. In addition, construction of those committed developments may exceed the deadlines for phased developments set out in TDC 18.330.020.D.

l. The proposed boardwalk is located in a sensitive lands area designated “highest value habitat” on the City’s “Significant Habitat Areas Map.” TDC Table 18.775.3 classifies this area as “Strictly Limit.” Therefore CWS’s “avoid where possible” standard applies. The proposed trail is not an outright permitted use in this area, because TDC 18.775.020.B(3) lists outright permitted uses as “community recreation uses, excluding structures...” TDC 18.775.020.B(3) also excludes areas designated Vegetated Corridor, as defined in the CWS “Design and Construction Standards.” The proposed boardwalk is a “structure” as defined by the Code. Therefore it is not an outright permitted use in this area and is not allowed if it can be avoided. The Library approval only authorized stormwater and sanitary sewer lines in the 100-year flood plan.

m. He argued that the proposed trail alignment will impact and disturb an existing wetland mitigation site, in violation of state standards for such sites.

n. He noted that the application classifies the proposed development as a “community recreation” facility. However the Staff Report refers to the development as community recreation facility, a “public support facility” and “development...for roadway purposes.” The facility should be reviewed under the classification designated by the application. Staff should not be allowed to change the classification of the development to avoid applicable approval criteria.

o. He noted that the application requests CUP approval. P 12 of the application narrative. However the Staff Report does not identify or review compliance with the CUP criteria. In addition, the application narrative, in response to TDC 18.330.020.C(3)(a), only claims compliance with the CUP criteria. p 13. This section requires that the applicant demonstrate compliance with the entire Code, not just the CUP standards.

p. He noted that there are two trees on the site whose roots are severely undercut by erosion of the stream bank. Attachment L of Exhibit 1. Construction of the proposed bridge abutments will likely cause these trees to fail, reducing shade cover on the stream. In addition, construction of the bridge will prevent Fanno Creek from continuing to meander.

5. Professional biologist Sue Beilke testified on behalf of herself and Fans of Fanno Creek. She summarized her written testimony, Exhibit 2.

a. She argued that there is no evidence the development can comply with the anchoring standard of TDC 18.775.040. The Staff Report notes that the applicant did not address this standard. A condition of approval requiring the applicant to address this standard later in the process does not allow for public review and comment on this issue.

b. She noted that the banks of Fanno Creek are failing under existing conditions and cannot support a bridge. ODFW staff stated that this project contributes to deteriorating stream function, which impacts federally listed steelhead. ODFW staff recommend repair and restoration of the stream bank before the bridge or any other structure is constructed in this area. The City is required to consult with ODFW on this issue, since it relates to a federally listed species and its habitat.

c. She reiterated Mr. Frewing's testimony about the average annual flood elevation of Fanno Creek. Determination of the average annual flood elevation should be based on measured stream flow data rather than modeling of the two-year storm event. Based on the stream flow data the average annual flood elevation is roughly 142.37 feet msl, above the elevation of the proposed boardwalk. Therefore the application does not comply with TDC 18.775.070.B(5).

i. She noted that the "flashiness" of the stream is increasing over time as upstream development adds more impervious surface area and increases the rate and volume of stormwater runoff flowing into the creek. The stream flow data demonstrates that the average annual flood elevation has been increasing in recent years. Future increases are likely to impact the proposed bridge and trail. Stream bank erosion is currently impacting portions of the existing trail that were built too close the stream. Attachment C of Exhibit 2.

d. She argued that CWS's Design and Construction Standards prohibit the proposed development within the vegetative corridor because it is possible to avoid impacts to the vegetative corridor as demonstrated by the alternative alignments proposed by the applicant or the "habitat protection alignment" described by Mr. Frewing.

i. This site is very unique and important. The western pond turtle is declining throughout its range and is now considered rare within the Portland Region Urban Growth Boundary ("UGB"). This site is the only turtle nesting habitat within the Portland UGB and the only nesting site in public ownership. The turtles are highly sensitive to disturbance. The habitat on the site is designated for the highest level of protection. Therefore the applicant should "go the extra mile" to protect this site.

ii. ODFW opposes the proposed trail alignment due to its potential impacts to turtles and their nesting habitat. Construction of the trail will impact habitat and human activities on the trail, including noise, dogs etc. within the turtle habitat area will disturb the turtles and preclude use of the nesting habitat. In addition, people and their pets will travel off of the trail and enter the turtle habitat, causing additional disturbance to turtles and their habitat. The City should address ODFW's concerns to ensure compliance with statewide planning Goal 5, Metro Titles 3 and 13 and the City's comprehensive plan.

e. She argued that the application failed to adequately address the relevant comprehensive plan policies.

i. The application did not address Policy 4 of the Natural Resources section of the comprehensive plan, which requires that the City actively coordinate and consult with certain persons and agencies regarding the inventory, protection and restoration of natural features. The City failed to actively coordinate with ODFW over impacts to turtles, listed fish and other species, especially in light of ODFW's letter in opposition to the proposed trail alignment.

ii. Policy 6 of the Parks, Recreation, Trails and Open Space section of the comprehensive plan requires that the City acquire and manage some open spaces to solely provide protection of natural resources. Policy 17 of this section requires that the City maintain and manage its parks and open space resources in ways that preserve, protect, and restore the City's natural resources, including rare or state and federal listed species. The application failed to adequately address either of these policies by proposing a trail that will impact rare and listed species and their habitats.

iii. The application states that the project "minimizes the impact on natural areas." But it does not provide any evidence demonstrating what the potential impacts may be, how they were measured and how they have been reduced.

f. She noted that the conditions on the site have changed significantly since the habitat assessment was completed in 2006. For the past two years ODFW and Fans of Fanno Creek have been working with CWS and TriMet to protect and create turtle nesting habitat on this site as part of TriMet's mitigation project. The applicant should be required to perform a new habitat assessment of the site to take into account the recent mitigation project.

g. She argued that the wildlife assessment should address all wildlife that may use the site, including turtles, federally protected migratory birds that nest on the site, federally listed fish etc. and provide evidence demonstrating how the project has attempted to avoid or minimize these impacts.

h. She argued that a buffer of at least 150 meters is recommended to be maintained between nesting habitat and any trail in order to minimize disturbance from trail users. The proposed trail alignment does not maintain the recommended buffer width.

i. She noted that Metro moved an entire parking lot at Smith and Bybee Lakes to reduce disturbance to turtles and their nesting habitat. The City of Gresham relocated a segment of a regional trail to avoid turtle nesting habitat.

6. City planning director Dick Bewersdorff argued that this is a difficult project due to the location of the stream and turtle habitat and the existing trail. The City must evaluate the impact of the trail on the natural resources on the site. He argued that a trail is not listed as a land use requiring approval as defined by the Code. Trails are treated as streets, which are not subject to land use review unless sensitive lands or other development is involved. The trail is not part of the CUP approval for the Library.

7. At the end of the hearing, the hearings officer ordered the public record held open for three weeks to allow the applicant and City staff an opportunity to submit additional testimony and evidence regarding the issue raised at the hearing. The hearings officer held the record open for an additional two weeks to allow the public to respond to the new evidence. The hearings officer held the record open for a final two weeks to allow the City to respond to the information submitted by the public and to submit a final argument.

a. The City submitted additional evidence during the third open record period. Mr. Frewing requested an opportunity to respond to that new evidence as allowed by TDC 18.390.050.D(4). Therefore the hearings officer issued an Order Opening the Record, Exhibit 9, allowing the public an additional week to respond to the new evidence submitted by the City and a final week for the applicant to respond in writing to the comments submitted during the first week and to submit a final argument, without any new evidence. The record in this case closed at 5:00 p.m. July 13, 2009.

### C. DISCUSSION

1. City staff recommended that the hearings officer approve the application, based on the affirmative findings and subject to conditions of approval in the Staff Report. The applicant accepted those findings and conditions without objection.

2. The hearings officer finds that the Staff Report accurately identifies all of the applicable standards for the application and contains sufficient findings showing the application does or can comply with those standards subject to conditions of approval, based on substantial evidence in the record. The hearings officer adopts the affirmative findings in the Staff Report as his own except as otherwise provided herein.

3. The hearings officer finds that the applicant is not required to include copies of prior development approvals on and near this site, because those documents are not included in the list of application requirements for Type III review, which set out in TDC 18.390.050.B. The prior approvals and associated documents should be on file at the City and the hearings officer can take official notice of those approvals where necessary. Some of those documents may be missing, based on Mr. Frewing's un rebutted testimony. But there is no evidence that those documents are necessary for review of this application.

4. The applicant revised the design of the bridge supports during the review process. The applicant replaced the proposed poured concrete "spread footing" with 8-inch diameter steel piles driven into the ground to anchor the bridge. See p 5 and Attachment 13 of Exhibit 7.

a. The hearings officer finds that this change does not constitute a change in the application that requires additional notice or opportunity for public review. The revised supports will not alter the proposed use, a pedestrian/bicycle trail, or the alignment or footprint of the facility. The new supports may reduce the impact on the project, by reducing the amount of excavation required for installation of the bridge.

b. The applicant is not required to provide detailed engineering designs at this stage of review. The purpose of the preliminary plans is to determine whether it is feasible to comply with applicable criteria. The preliminary plans are conceptual, and analysis of all technical details is not required. See *Meyer v. City of Portland*, 67 Or App 274, n 6, 678 P2d 741, rev den 297 Or 82 (1984). ([C]onditions of approval may include conditions that specific technical solutions to identified development problems be submitted and reviewed and approved by the government's technical staff."'). To require complete, detailed engineering plans prior to preliminary approval of the application, or and to prohibit changes to those plans after preliminary approval, would require re-working the entire plan any time amendments or modifications of the plans are required. This would be highly inefficient and is not necessary to protect the public interest. City staff's review of the final plans provides adequate protection of the public interest. The law does not require an opportunity for public review and comment on the final engineering plans .

c. As the applicant noted, CWS will have an opportunity to review the final engineering design of the project, including any changes that may be required to comply with conditions of approval imposed by this decision, during its review of the Stormwater Connection Permit. CWS and other affected agencies have sufficient authority to require new or revised permit approvals to address the revised designs if required by their applicable regulations.

i. Condition of approval 12 of the CWS Service Provider Letter expressly requires that the applicant provide updated drawings, and if necessary, obtain a revised Service Provider Letter, "should final development plans differ significantly from those submitted for review by the District..."

5. The hearings officer finds that the opponents' concerns about the accuracy of the information submitted to DSL is not relevant to this review, because it does not relate to any of the applicable approval criteria. DSL has sufficient authority to ensure compliance with its regulations. The applicant can apply for a removal/fill permit if required by the applicable regulations based on the final design of the project. A condition of approval is warranted to that effect.

a. The applicant conceded that the plans submitted to DSL differed from the plans submitted with the application. The applicant modified the trail alignment to address CWS's concerns about impacts to the vegetative buffer. However the alignment changes did not impact wetlands, impact Fanno Creek or other areas within DSL's jurisdiction. Therefore additional DSL review is not required.

b. The applicant further testified that the original design of the project included minor work below the OHWL of the creek; installation of outfall pipes for the bridge abutment foundation drains. However the applicant revised the design of the bridge to eliminate need for foundation drains and the outfall pipes. The current design does not include any impacts below the OHWL of the stream. There is no substantial evidence to the contrary.

6. The hearings officer finds that this application does not constitute a major modification to the prior CUP for the Library on the site.

a. This application does not propose a change in land use. TDC 18.330.020.B(2)(a). The CUP approval for the Library expressly included the proposed trail. The decision approving the Library, Final Order CUP 2003-001, SLR 2003-001 and VAR 2003-009 and -020 (Tigard Library), discussed the trail in several sections of the decision. Condition of approval of 21 of the Final Order required that the applicant provide adequate financial assurances to ensure construction of that portion of the Fanno Creek Greenway Trail that crosses the property. The "property" in that decision included this site, tax lot 600, WCTM 2S102DA. This decision merely identifies a specific location for the trail on the library site. In addition, as Mr. Bewersdorff testified, the Code does not regulate trails as a "land use." They are treated as transportation facilities, similar to a road, which does not require City review and approval except where, as here, the alignment impacts sensitive lands. As discussed below, trails and roads constitute "development" as defined by TDC 18.120.030.A(57). However the Code does not provide for review of trails and roads as separate land uses.

b. No dwelling units were approved on the Library site and non are proposed in this application. Therefore this application will not increase the dwelling unit density. TDC 18.330.020.B(2)(b).

c. As discussed above, the Library CUP decision approved the segment of the Fanno Creek trail on the site, including a connection to the existing trail segment on the west side of Hall Boulevard. This application may change the location of the Hall Boulevard connection, but there is no substantial evidence that the change in location will affect offsite traffic. TDC 18.330.020.B(2)(c). The street crossing (crosswalk and signal) itself is subject to ODOT jurisdiction and is not relevant to this criterion.

d. This application does not include any buildings. Therefore TDC 18.330.020.B(2)(d) is inapplicable.

e. The proposed trail will not reduce the amount of open space on the site. TDC 18.330.020.B(2)(e). The proposed trail itself is "open space," an "open space facility" as defined by TDC 18.120.030.A(102). In addition, the trail was approved on this site as part of the prior CUP for the Library.

f. The proposed trail is not subject to setback requirements. Therefore TDC 18.330.020.B(2)(f) is inapplicable.

g. This application will not eliminate the amount of amenities included in the Library CUP approval. TDC 18.330.020.B(2)(g).

i. The "amenity" in this case is a segment of the Fanno Creek Regional Trail, connecting two existing trail segments. This application retains that amenity, although in a slightly different location and width.

ii. The applicant was required to construct sidewalks and other frontage improvements along the site's Hall Boulevard frontage as a condition of the Library approval. See conditions 16 and 28 of Final Order CUP 2003-001, SLR 2003-001 and VAR 2003-009 and -020 (Tigard Library). The City did not complete construction of the frontage improvements or include the improvements in the City's 2004-2009 Five-Year Capital Improvement Plan. That appears to be a violation of the conditions of approval of the prior CUP approval. However the violation is an enforcement issue. It is not relevant to this application. Approval of this application will not alter the requirement that the City construct the required frontage improvements on Hall Boulevard.

h. The trail will not alter the density on the site. Therefore TDC 18.330.020.B(2)(h) is inapplicable.

7. The hearings officer finds that a traffic study is not required for this project.

a. TDC 18.810.030.AC(1) requires a traffic study when the proposed development will generate a 10% or greater increase in existing traffic to high collision intersections identified by Washington County, TDC 18.810.030.AC(1)(a), or when traffic generated by the development exceeds a certain percentage of existing traffic, TDC 18.810.030.AC(1)(b). There is no substantial evidence that the proposed development will meet either of these criteria.

b. TDC 18.810.030.AC(1)(c) requires a traffic study "If any of the following issues become evident to the City engineer..." The hearings officer finds that TDC 18.810.030.AC(1)(c) grants the City engineer exclusive discretion to require a traffic study in these circumstances. The City engineer did not require a traffic study in this case. Therefore the hearings officer must conclude that the cited issues were not evident to the City engineer in this case. The hearings officer has no authority to overrule the City engineer and require that the applicant provide traffic study.

c. TDC 18.810.030.AC(2) provides that a traffic study "[m]ay be required..." when certain listed conditions occur. In this case the site is located within 500 feet of an ODOT facility, Hall Boulevard. TDC 18.810.030.AC(2)(a). However there is no substantial evidence that the proposed bicycle/pedestrian trail will generate a sufficient increase in vehicle traffic on this facility to warrant a traffic study. The City, in its discretion, chose not to require a traffic study. ODOT analyzed the impacts of the pedestrian signal on the operation of Hall Boulevard when it granted a permit for the pedestrian crossing and signal.

8. The hearings officer finds that an access report is not required for this project. TDC 18.705.030.H(1) requires an access report for "[a]ll new development proposals..." As discussed above, the proposed trail was approved on this site as part of the prior Library CUP. The City reviewed an access report for that CUP application and concluded that driveways and streets serving the site are safe and meet applicable standards. This application merely approves the specific location of the trail on the site. It does not alter the location or design of streets or driveways serving the site. Therefore it does not constitute "new development" subject to TDC 18.705.030.H(1). In addition, there is nothing for the access report to address because this project does not include any streets or driveways.

9. The hearings officer finds that the surface of the proposed boardwalk will be located above the elevation of the average annual flood, based on the expert testimony of the applicant's engineer. TDC 18.775.070.B(5).

a. The applicant's engineer calculated the stream flow volume for the two-year storm as 2,000 cubic feet per second ("cfs"). This flow volume is higher than the highest volume measured in Fanno Creek over the past eight years, based on the flow data submitted by Mr. Frewing. The highest measured flow over past eight years was 1670 cfs, measured on December 3, 2007 at the USGS measuring gauge at Durham Road, downstream from the site. See p 4 of Exhibit 1. As noted by the applicant's engineer, the two-year storm event is, by definition, higher than the average annual flood. See Attachment 4 of Exhibit 4.

b. The applicant's engineer input the calculated stream flow volume for the two-year storm into the regulatory floodplain model to determine the water elevation of Fanno Creek at the location of the boardwalk. The floodplain model estimated the water level during the two-year storm at 142.22 feet National Geodetic Vertical Datum ("NGVD"). The lowest portion of the boardwalk surface is at 143.18 feet NGVD. Therefore the entire boardwalk surface is above the elevation of the average annual flood, based on the applicant's engineer's calculations.

c. The opponents dispute the results of the regulatory floodplain model, based on their observations of floodwater elevations during 1996 flood and flow volumes measured in Fanno Creek during that flood. Fanno Creek registered a peak flow of 1,090 cfs at the Durham Road USGS station during the 1996 flood, when Fanno Creek was flowing at least 18-inches above the surface of Hall Boulevard. Attachment A of Exhibit 2. The water volume in Fanno Creek during the 1996 flood was lower than the average flow volume measured over the most recent four year period and roughly equal to the average flow volume over the past eight years. P 4 of Exhibit 1. Therefore, because the average annual flow volume over the past eight years is equal to or greater than the flow volume measured during the 1996 flood, the water level during the average annual flood will equal or exceed the water levels observed during the 1996 flood. The top of the proposed boardwalk is lower than the curb level of the Hall Boulevard bridge, which was inundated during the 1996 flood. Therefore the boardwalk will be below the elevation of the average annual flood, based on recent stream flow data.

d. The hearings officer finds that the regulatory floodplain model provides the best evidence of the flood elevations in Fanno Creek for a particular storm event.

i. As the applicant's engineer testified, the regulatory floodplain model is based on "[d]etailed studies meeting high technical standards, which are subjected to very intense review by FEMA... *Use of flows other than those contained within the current regulatory model would not be acceptable to FEMA due to the level of technical review already given them.*" P 2 of Attachment 4 of Exhibit 4. (Italics in original). The regulatory floodplain model was calibrated based on the high water marks observed during the flood events of February and November 1996. The regulatory floodplain model is accepted by FEMA, the federal agency charged with regulating development in floodplains.

ii. The eight years of stream flow data submitted by the opponents is substantial evidence. But it is not sufficient to dispute the results of the regulatory floodplain model. As discussed in Attachment 4 of Exhibit 4, the average annual flood may occur more than once in a year or may not occur at all. The eight years of stream flow data submitted by the opponents may represent a statistical anomaly with higher than usual stream flows or, as the opponents allege, it may indicate that upstream development is increasing the amount of runoff flowing into Fanno Creek, which is increasing the elevation of the average annual flood. There is no substantial evidence in the record to support either conclusion. The hearings officer finds that the regulatory floodplain model, which is based on observations of water levels over a long period of time, and is accepted by all relevant regulatory agencies as the best method for predicting flood elevations, provides the best evidence of the average flood elevations in Fanno Creek.

10. There is a dispute about the meaning of the term "pathway" as used in TDC 18.775.070.B(5). The applicant argues that the elevation requirement of this provision only applies to the surface of the pathway, the top of the boardwalk. The opponents argue that TDC 18.775.070.B(5) requires that the entire boardwalk structure, including the substructure and supports, be located above the elevation of the average annual flood.

11. The hearings officer finds that the term "pathway" is ambiguous. The TDC does not define the term, and its meaning is not plain on its face when considered in context. Therefore the hearings officer must construe the term "pathway."

a. When construing the City's ordinances the hearings officer is required to follow the rules of statutory construction set out in the Oregon Supreme Court's decision in *Portland General Electric v. Bureau of Labor and Industries*, 317 Or. 606, 859 P2d 1143 (1993) (*PGE v. BOLI*). The hearings officer must attempt to discern the intent of the City Council from the text and context of the ordinance and related ordinances. In analyzing the text of the ordinance for definition, words of common usage are given their plain, natural and ordinary meanings. *Id.* at 611. The hearings officer finds that the term "pathway" should be construed consistent with its common, dictionary, usage.

i. *Webster's New World College Dictionary*, Retrieved July 20th, 2009, from [www.yourdictionary.com/pathway](http://www.yourdictionary.com/pathway), defines "pathway" as a "path."

Webster's defines "path" as:

1. a track or way worn by footsteps; trail:
2. a walk or way for the use of people on foot, as in a park or garden.

ii. *Merriam-Webster Online Dictionary*. Retrieved July 20, 2009, from <http://www.merriam-webster.com/dictionary/path>, defines “pathway” as “path, course.”

*Merriam-Webster* defines “path” as:

- 1: a trodden way
- 2: a track specially constructed for a particular use

*Merriam-Webster* defines “course” as:

- 1: the act or action of moving in a path from point to point
- 2: the path over which something moves or extends

b. Based on these definitions, the hearings officer finds that the term pathway is limited to the walking surface, regardless of whether the pathway is located on the ground or on a bridge or other structure.

c. This is consistent with how the term is used in the Code.

i. The Code expressly allows raised walkways and pedestrian bridges as “passive use open space facilities” TDC 18.120.030.A(102)(b). The opponents’ interpretation, that the elevation standard of TDC 18.775.070.B(5) applies to the entire boardwalk structure, would likely preclude all pathways that cross any portion of the floodplain below the average annual flood elevation. With the exception of relatively narrow floodplain areas, it would be impossible to extend a bridge or boardwalk over such areas without using supports that extend below the elevation of the average annual flood. However the City’s adopted transportation plan clearly shows pathways crossing floodplain areas.

ii. The appellants argue that, because this criterion is included in the sensitive lands section of the Code, it must be intended to protect sensitive lands by prohibiting structures that could catch debris or increase flood levels. However this standard is not necessary to achieve those purposes. A surface pathway below the elevation of the average annual flood would have no effect on flood levels or debris flows. These problems only arise with elevated pathways located on fill or a boardwalk, bridge or other structure. Compliance with the “no-rise” standard of TDC 18.775.070.B(1) is sufficient to ensure that any structure supporting a pathway will not impact flood heights.

d. Therefore the hearings officer finds that the elevation requirement of TDC 18.775.070.B(5) only applies to the surface of the boardwalk, where the “pathway” is located. As discussed above, the surface of the boardwalk can be located above the average annual flood. Therefore the application can comply with TDC 18.775.070.B(5).

e. As Mr. Frewing noted, there is conflicting evidence about the height of various boardwalk components in the application materials. See pp 3 and 4 of Exhibit 1. This makes it difficult to determine the actual height of the propose boardwalk. Therefore in order to ensure compliance with TDC 18.775.070.B(5), the applicant should be required to demonstrate that the lowest portion of the boardwalk surface is higher than 142.22 feet NGVD based on the final design of the boardwalk. A condition of approval is warranted to that effect.

12. The hearings officer finds that the proposed boardwalk and bridge are not subject to the flood proofing requirements of TDC 18.775.040.M. The boardwalk and bridge are “structures” as defined by the Code.<sup>2</sup> However these “structures” do not have a “lowest floor” or “basement” that can be elevated or flood-proofed. Therefore this requirement is inapplicable.

a. Mr. Frewing argued that compliance with this standard is necessary to ensure that the structures will not wash downstream and create a hazard. p 8 of Exhibit 11. The hearings officer finds that compliance with the anchoring requirements of TDC 18.775.040.I is sufficient to address this concern.

13. The hearings officer finds that it is feasible to comply with the anchoring requirements of TDC 18.775.040.I. A certified bridge engineer designed the bridge, and support structures. See e.g., pp 18 and 19 of Exhibit 4 and Attachment 13 of Exhibit 7. The applicant is required to demonstrate actual compliance with this standard based on the final design of the structures. See condition 1. As discussed above, the applicant is not required to provide detailed engineering designs at this, preliminary, stage of review.

14. The hearings officer finds that the CWS Design and Construction Standards are not relevant to this application.

a. Mr. Frewing argued that the Intergovernmental Agreement (“IGA”) between the City of Tigard and CWS, Attachment S of Exhibit 5, requires that the City apply CWS’s Design and Construction Standards as part of its development review process. However the IGA, by its terms, appears to relate exclusively to the operation and maintenance of sanitary and storm sewer systems. Nothing in the sections of the IGA included in the record addresses vegetative corridors or assigns the City responsibility for

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<sup>2</sup> TDC 18.1200.030.A(136) provides “ ‘Structure’ or ‘building’ - See ‘Building.’” TDC 18.120.030.A(30) provides

“Building” - That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

applying the Design and Construction Standards.<sup>3</sup> There is no substantial evidence in the record to the contrary.

b. Nothing in the Code requires that the City apply CWS's Design and Construction Standards as a development approval criteria.

i. TDC 18.775010.C states that one of the purposes of the Sensitive Lands Chapter is to implement those standards. But the purpose statement is not an approval criterion. The purpose statements are implemented through compliance with the applicable approval criteria.

ii. TDC 18.775.020.A requires that all proposed "development" as defined in the CWS "Design and Construction Standards, must obtain a Stormwater Connection Permit from CWS pursuant to its Design and Construction Standards. TDC 18.775.030.A requires that the City "[r]eview all sensitive lands permit applications to determine that all necessary permits shall be obtained from those federal, state, or local governmental agencies from which prior approval is also required." However the City has no authority to determine compliance with the Design and Construction Standards or to issue the service provider letter and/or Stormwater Connection Permit. That is within the CWS's exclusive authority.

c. CWS issued a service provider letter for the proposed trail. Therefore the application complies with TDC 18.775.030.A.

i. The opponents argue that the proposed trail design is inconsistent with the conditions of the CWS service provider letter. The plans do not show permanent fencing between the development and the outer limits of the vegetated corridors as required by condition 26 of the CWS Service Provider Letter. The applicant testified that such a fence would cause the project to exceed the no-rise limitations of TDC 18.775.070.B(1). Therefore the applicant plans to negotiate with CWS to allow the use of thorny vegetation rather than metal fencing as a barrier between the trail and the vegetated corridor. P 5 of Exhibit 12.

(A) It is unclear whether this condition requires a fence behind the sidewalk on Hall Boulevard. Nothing in the Code requires such a fence. CWS's regulations, as implemented through condition 26 of the Service Provider Letter, may require such a fence. But that is up to CWS to determine.

ii. The hearings officer finds that this issue is not relevant to the applicable approval criteria for this application. Condition 26 of the CWS Service

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<sup>3</sup> Mr. Frewing's letter refers to Section IV of Appendix A of the IGA. See p 6 of Exhibit 5. However Appendix A was not included with the attachments to Exhibit 5. Attachment S of Exhibit 5 is limited to the "Council Agenda Item Summary," the odd numbered pages of the amended IGA, labeled "Attachment 1" and the odd numbered pages of "Appendix D." The hearings officer attempted to take official notice of the remainder of the document, but he was unable to locate a copy on the Internet.

Provider Letter requires that the applicant show the fence on the final plans. Failure to include the fence on the preliminary plans submitted with this application is not a violation of the Service Provider Letter.

iii. The applicant can negotiate with CWS during the ongoing design process to modify the condition. If the negotiations fail and CWS requires a fence, the applicant may need to alter the design of the project to ensure compliance with the no-rise requirement. Such changes may require additional review by the City. However the applicant can address that issue when and if it arises.

d. The parties made a number of arguments related to whether it is “possible” to design the path to avoid the vegetative corridor as required by Section 3.02.4.b(2)(d)(1) of CWS’s Design and Construction Standards. The hearings officer finds that those issues are not relevant to this application, because they do not relate to any applicable approval criteria. CWS determined that this criterion is met when it issued a Service Provider Letter for the project. The hearings officer has no authority to review that decision in this proceeding. The phrase “avoid where possible” does not appear in the TDC.

15. The hearings officer finds that Goal 5, the Tualatin Basin “Limit” Decision and the City’s “Significant Habitat Areas Map” are not applicable approval criteria for this application.

a. TDC 18.775.090.B provides that the Goal 5 requirements are implemented by compliance with the standard setback distance or vegetated corridor area. 18.775.090.B(5)(c) exempts pedestrian or bike paths, not exceeding 10 feet in width and meeting the CWS “Design and Construction Standards” from compliance with the standard setback distance or vegetated corridor area requirements.

b. The Tualatin Basin “Limit” Decision only relates to the Significant Habitat Areas Map Verification Procedures in 18.775.140. A map amendment/verification is not proposed in this case.

c. TDC 18.775.100.B allows adjustments to the standards in the underlying zoning district when development is proposed within or adjacent to the vegetated corridor area or within or adjacent to areas designated as “Strictly Limit” or “Moderately Limit” on the City of Tigard “Significant Habitat Areas Map.” TDC 18.775.100.C allows similar adjustments to protect areas identified on the “Significant Habitat Areas Map.” However these are elective standards that provide incentives to protect the identified areas. Compliance with these standards was not requested or required in this case.

16. The hearings officer finds that the applicant’s wildlife assessment is sufficient to fulfill the conditions of approval of Final Order SLR 2005-00016/MMD 22005-00015(Fanno Creek Trail).

a. Condition #5 of that decision provided:

A wildlife assessment will be conducted to address the impact of the project within the area north of Fanno Creek prior to construction of the trail section north of the pedestrian bridge. The trail design north of the creek will respond to and take into account the results of the wildlife assessment. The assessment and design will be subject to a public hearing by the Hearing Officer.

The applicant did that. A professional biologist conducted the assessment, using accepted criteria and standards. The assessment identified potential impacts of the project on wildlife and wildlife habitat on the site. See the Wildlife Assessment for the Fanno Creek Trail Extension, PHS Project No.: 3693, dated November 17, 2006, by Pacific Habitat Services (the "Assessment"). The applicant modified the alignment and design of the trail in response to the results of the Assessment, incorporating the suggestions in the Assessment to the extent possible. The applicant replaced the proposed at-grade asphalt trail with an elevated boardwalk and modified the alignment to minimize encroachments into habitat areas. Therefore the applicant fulfilled this condition of approval. The applicant testified that it attempted to shift the trail alignment further into the southwest corner of the site as recommended by the assessment. However CWS required that the City alter the alignment to minimize the footprint of the project within the vegetated corridor. Pp 14-15 of Exhibit 7.

b. Although the opponents would like the applicant to conduct a broader and more detailed assessment, quantifying the extent of potential impacts and the proposed mitigation measures, the hearings officer has no authority to impose such a requirement. Neither the Code nor the conditions of the prior approval establish any minimum standards for the conduct of a wildlife assessment. The standards of other agencies are not relevant, because the City has not adopted them.

i. The Assessment primarily focused on the impact of the project on turtles, because "The Western Pond Turtle is the only SOC [Species of Concern] or SC [state-listed Critical Species] of wildlife documented within the proposed site..." p 2 of the Assessment. Turtles were also the primary wildlife concern in the prior decision approving the Library, and presumably the reason for Condition #5 of Order SLR 2005-00016/MMD 22005-00015(Fanno Creek Trail).<sup>4</sup> Therefore it was appropriate to focus the Assessment on that species. However the Assessment also listed "[o]ther species which may potentially use the site." See Table 1 of the Assessment. The Assessment also noted that the recommended modifications to the design of the trail would reduce the impact of the trail on other wildlife likely to use the site. p 3-4 of the Assessment.

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<sup>4</sup> Condition #5 was included in the Staff Report for File No. SLR 2005-00016/MMD 22005-00015(Fanno Creek Trail). The basis for the condition was not discussed at the hearing or in the Final Order.

ii. The Assessment was not required to address the fish and wildlife in Fanno Creek or the stability of the stream bank because the proposed facility will not impact the stream or the stream bank. The bridge will be supported by abutments that are setback ten feet or more from the banks of the stream. No in-water work is proposed. The opponents argue that the bridge will impact protected fish in Fanno Creek. However there is no substantial evidence to that effect. ODFW and relevant federal agencies with jurisdiction over protected fish species have sufficient authority to require additional review and mitigation if they conclude that such impacts are likely to occur.

iii. The Assessment notes that the author met with Ms. Beilke on the site and identified her as an ODFW biologist. The Assessment did not include Ms. Beilke's comments and concerns. But Ms. Beilke's concerns are clearly set out in the record in this case.

iv. The Assessment did not address recent improvements to the habitat conditions on site. However Ms. Rim testified at the hearing that those changes did not affect the conclusions in the Assessment. The site provides habitat for turtles and the trail will impact turtles and their habitat to some extent.

v. The Assessment could not consider police use of ATVs to patrol trails in the City. As the applicant noted, the City acquired the ATVs in the same month that the applicant submitted the application. See p 10 of Exhibit 12. In addition, the applicant testified that ATVs are not needed on this section of trail, which is easily visible from Hall Boulevard. On-trail patrols will be limited bicycle officers. *Id.* There is no substantial evidence to the contrary.

vi. The Assessment did not evaluate the impact of the lighted pedestrian crossing on Hall Boulevard. However the hearings officer finds that this lighting will not have a significant impact on turtles. The lights are located on Hall Boulevard, not on the site. No lights are proposed on the site. The pedestrian crossing lights are less bright than normal streetlights. The lights are off most of the time. They only turn on when a pedestrian pushes the crossing request button. See p 10 of Exhibit 12. Headlights from vehicles on Hall Boulevard are likely to have a greater impact than the pedestrian crossing. There is no substantial evidence to the contrary.

vii. The Assessment did not evaluate the potential for the cable barrier to stretch and loosen over time, reducing the effectiveness of this barrier. However any of the barriers discussed in the Assessment may become damaged over time. The City testified that the cables are designed with adequate support to prevent stretching and loosening and the City Parks Maintenance Division will inspect and maintain the cables to ensure that they continue to serve their intended purpose. P 10 of Exhibit 12. A condition of approval is warranted to that effect.

viii. The Assessment was not required to address the ponds on the site. The trail project will not impact the ponds or the water source that supplies and maintains them. See p 15 of Exhibit 7.

ix. The Assessment recommends that the City avoid construction work in the grassy field on the site between May and July, when female turtles are searching for nesting sites. The Assessment further recommends that the applicant consult with ODFW regarding construction scheduling on the site in order to avoid impacts to incubating eggs. P 4 of the Assessment. Conditions of approval are warranted to that effect.

x. The project will not impact any wetland mitigation areas on the site. The upland mitigation areas are not required to mitigate offsite impacts of the TriMet rail project. Therefore protection of these areas is not required to ensure compliance with TriMet's mitigation requirement. The City is required to replace any proposed or planted vegetation within the corridor or construction staging area damaged during construction. Condition 23 of the CWS Service Provider Letter.

c. There is no dispute that the proposed trail will impact turtles, and other wildlife, on the site. The Assessment identifies a number of impacts from the project. See p 3 of the Assessment. The Assessment recommends a number of mitigation measures to reduce those impacts, but it is not possible to eliminate all of the impacts. However the Code does not prohibit impacts to turtles or other wildlife. Protection of wildlife is just one of the many issues the City must consider. As the applicant noted "The City has broad responsibility for both resource protection and bike/pedestrian safety. No one policy can be considered separately from others. In the case of the present project, the City attempts to strike an appropriate balance between the two in meeting its dual responsibility." P 22 of Exhibit 7. The apparent purpose of the Assessment requirement was to provide the City with information about the wildlife on the site and the potential impacts of the project on that wildlife to allow the City to make an informed decision about the alignment of this segment of the trail. After considering the results of the Assessment, and information obtained through consultations with other agencies and members of the public, The City chose the proposed trail alignment and design. CWS concluded that the trail design complies with its Design and Construction standards. The hearings officer has no authority to second-guess the City's alignment choice in this proceeding. If the application complies with the relevant approval criteria it must be approved.

17. There is no dispute that the banks of Fanno Creek are subject to severe erosion impacts. Based on Ms. Beilke's testimony, erosion of the stream banks impacts protected steelhead and other fish and wildlife species in the creek. See pp 1-2 of Exhibit 2 and pp 1-2 of Exhibit 6. However this is an existing condition that will continue to exist regardless of whether this project is constructed. The applicant is not required to remedy all existing or perceived problems in the area, only those that the project creates or exacerbates. There is no substantial evidence in the record that the proposed bridge and

walkway will increase the risk of erosion or destabilize the banks of Fanno Creek. The bridge will be elevated above the stream and the supports will be setback from the stream bank. There is no substantial evidence to the contrary. Ongoing erosion in the future could eventually undercut the bridge and cause it to fail. However the City can continue to monitor the stream and bridge and close bridge or take other action if warranted based on future conditions. In addition, the City is planning to undertake a project to stabilize the banks of Fanno Creek in this area. P 4 of Exhibit 12. Completion of that project may alleviate the erosion issue.

18. There is no dispute that the trees identified in the arborist's report are being undercut by erosion of the stream bank. This is also an existing condition that the applicant is not required to remedy. The arborist's report included with the application demonstrates that the project will have no impact on the future survival of these trees. As noted in the Arborist's report, the trees are suitable for retention during construction. However, because they are hazard trees, the City can remove them at any time in the future if it concludes that the trees pose an unacceptable risk of failure and impact to people or property.

19. The hearings officer finds that the application complies with relevant comprehensive plan policies, based on the affirmative findings to that effect in the Staff Report and the application. The hearings officer adopts those findings as his own, except to the extent inconsistent with the following findings.

a. The City actively coordinated and consulted with relevant parties as required by Policy 4 of Comprehensive Plan Chapter 5, Natural Resources. The applicant held a neighborhood meeting about the application and discussed the project with the opponents on several occasions. The applicant also consulted with CWS, ODFW, DSL and other relevant agencies. Policy 4 only requires consultation. It does not require that the City agree with or adopt those agencies recommendations, merely that it consult with them. The applicant did so in this case. That is sufficient to comply with this policy.

b. Policy 6 of the Parks, Recreation, Trails and Open Space section of the comprehensive plan provides: "The City shall acquire and manage some open spaces to solely provide protection of natural resources and other open spaces to additionally provide nature-oriented outdoor recreation and trail-related activities." This requirement only applies to "some" open spaces. There is no evidence that this particular property was acquired or intended to be managed solely for resource protection.

c. Policy 17 of Comprehensive Plan Chapter 8, Parks, Recreation, Trails and Open Space, provides: "The City shall maintain and manage its parks and open space resources in ways that preserve, protect, and restore Tigard's natural resources, including rare, or state and federally listed species, and provide "Nature in the City" opportunities." This section requires that the City preserve and protect natural resources, but it does not altogether prohibit impacts to such resources. The City designed the trail project to minimize impacts on sensitive species while fulfilling other competing policies, such as

“[d]evelop[ing], and maintain[ing] a diverse system of parks, trails, open space, and recreational facilities that are safe, functional, and accessible to all of its population,” (Policy 1 of the Parks, Recreation, Trails and Open Space section of the comprehensive plan), and “[l]ocat[ing] bicycle/pedestrian corridors in a manner which provides for pedestrian and bicycle users, safe and convenient movement in all parts of the city, by developing the pathway system shown on the adopted pedestrian/bikeway plan.” (Policy 1 of Section 5 of the comprehensive plan). As the applicant stated, the City cannot consider a single policy in isolation. It must give equal weight to all, striking a balance between competing goals and policies. p 22 of Exhibit 7.

20. The hearings officer finds that this application is subject to the frontage improvement requirements of TDC 18.810.030.A(3). That section provides:

No development shall occur unless the streets adjacent to the development meet the standards of this chapter, provided, however, that a development may be approved if the adjacent street does not meet the standards but half-street improvements meeting the standards of this title are constructed adjacent to the development.

The applicant argues that trails are not listed in the Code as land use requiring approval. That may be true. However the proposed trail constitutes “development” as defined by TDC 18.120.030.A(57).<sup>5</sup> Construction of the trail will result in a material change in the use or appearance of the site; adding a public use trail, elevated boardwalk and bridge, on what is currently a vacant parcel of land. The section of Hall Boulevard abutting the site is not improved to current City standards. Therefore the applicant is required to construct frontage improvements along the site’s Hall Boulevard frontage.

21. However TDC 18.810.020.A provides that the cost of right of way dedication and frontage improvements must be roughly proportional to the impact of the development.<sup>6</sup> The city bears the burden of proof under this standard. The trail will likely attract additional pedestrian, bicycle and vehicle traffic to the area, increasing the need for sidewalks and other frontage improvements on Hall Boulevard. However there is no substantial evidence in the record that the trail will generate a sufficient amount of traffic to justify the cost of frontage improvements on Hall Boulevard. The trail will accommodate the majority of pedestrian and bicycle trips, providing a direct and convenient connection to the existing buildings on the site and to the existing trail segments to the east and west. The trail may generate some additional vehicular traffic, as

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<sup>5</sup> TDC 18.120.030.A(57) defines “Development” as:

1) A building or mining operation; 2) a material change in the use or appearance of a structure or land; or 3) division of land into two or more parcels, including partitions and subdivisions as provided in Oregon Revised Statutes 92.

<sup>6</sup> TDC 18.810.020 reflects the holding of the US Supreme Court’s opinion in *Dolan v. City of Tigard*, 114 S.Ct. 2309, 129 L.Ed.2d 304 (1994).

people drive to the site in order to access the trail. However there is no evidence that the trail will generate a significant increase in vehicular traffic sufficient to justify the cost of frontage improvements. Therefore the hearings officer finds that the City failed to bear its burden of proof that the cost of frontage improvements on Hall Boulevard would be roughly proportional to the impacts of the proposed trail.

a. Mr. Frewing argues that the Code requires a connection between the trail and the existing sidewalk on the Hall Boulevard bridge over Fanno Creek. P 3-4 of Exhibit 11. However he fails to cite to any Code section imposing such a requirement.

22. Mr. Frewing argues that the applicant should limit grading on the site to a maximum 5:1 slope in order to minimize the impact of the project. P 5 of Exhibit 5. The applicant testified that the finished slopes from the back of the sidewalk shoulder to existing ground will be graded to 5:1 slope. However a temporary reduced slope area will be provided to allow for construction vehicle access during the construction process as determined by the contractor. P 8 of Exhibit 7. The applicant further testified that it will "consider" using 3:1 slopes. P 13 of Exhibit 12. The hearings officer encourages the applicant to do so in order to minimize the impacts on the site. But the hearings officer has no authority to impose such a requirement, because it does not relate to any of the applicable approval criteria.

#### **D. CONCLUSION**

Based on the findings adopted and incorporated herein, the hearings officer concludes that the proposed sensitive lands review and minor modifications applications comply with the applicable criteria and standards of the Community Development Code, provided development that occurs after this decision complies with the recommended conditions of approval with changes warranted by the discussion herein and with applicable local, state, and federal laws.

#### **E. DECISION**

In recognition of the findings and conclusions contained herein, and incorporating the Staff Report and public testimony and exhibits received in this matter, the hearings officer hereby approves SLR 2009-00002, SLR2009-00003, MMD2009-00007 and MMD2009-00013(Fanno Creek Trail), subject to the following conditions of approval:

#### **CONDITIONS OF APPROVAL**

1. The applicant shall provide information from a registered engineer to certify that the design and construction of the improvements will be resistant to flood damage and anchored to prevent flotation, collapse, and lateral movement.
2. The applicant shall obtain a removal/fill permit from DSL prior to undertaking any work in areas of the site subject to DSL's jurisdictions.

3. The applicant shall demonstrate that the lowest portion of the boardwalk surface is higher than 142.22 feet NGVD based on the final design of the boardwalk.
4. The City shall periodically inspect and maintain the fences, cables, and other barriers on the site to ensure that they continue to serve their intended function of limiting access between the trail and the adjacent vegetative corridor and turtle habitat areas.
5. Unless otherwise provided by CWS, no work will be undertaken within the grassy field on the site between May 1 and August 1, when female turtles are searching for nesting sites. The applicant shall consult with ODFW regarding construction scheduling in the field at other times in order to avoid impacts to incubating eggs.

DATED this 22<sup>nd</sup> day of July 2009.

A handwritten signature in black ink, appearing to read "Joe Turner". The signature is written in a cursive style with a horizontal line underneath it.

Joe Turner, Esq., AICP  
City of Tigard Land Use Hearings Officer

STAFF REPORT TO THE  
HEARINGS OFFICER  
FOR THE CITY OF TIGARD, OREGON



120 DAYS = 8/5/2009

SECTION I. APPLICATION SUMMARY

FILE NAME: FANNO CREEK TRAIL BRIDGE/HALL BLVD. CROSSWALK  
CASE NOS.: Sensitive Lands Review (SLR) SLR2009-00002  
Sensitive Lands Review (SLR) SLR2009-00003  
Minor Modification (MMD) MMD2009-00007  
Minor Modification (MMD) MMD2009-00013

PROPOSAL: The applicant is requesting approval to construct portions of the Fanno Creek trail. Construction involves installation of a sidewalk and signalized crosswalk on Hall Boulevard north of the Fanno Creek Bridge. An elevated boardwalk is proposed through the floodplain and vegetated corridor of nearby wetlands and Fanno Creek on the eastern side of Hall Boulevard, and a pedestrian bridge (Woodruff Bridge) over Fanno Creek is also proposed east of Hall Boulevard to connect the new boardwalk with the existing trail north of the Tigard library.

APPLICANT/  
OWNER: City of Tigard  
Attn: Duane Roberts  
13125 SW Hall Blvd.  
Tigard, OR 97223

COMPREHENSIVE  
PLAN/ZONE

DESIGNATIONS: CBD: Central Business District. The CBD zoning district is designed to provide a concentrated central business district, centered on the City's historic downtown, including a mix of civic, retail and office uses. Single-family attached housing, at a maximum density of 12 units/net acre, equivalent of the R-12 zoning district, and multi-family housing at a minimum density of 32 units/acre, equivalent to the R-40 zoning district, are permitted outright. A wide range of uses, including but not limited to adult entertainment, utilities, facilities with drive-up windows, medical centers, major event entertainment and gasoline stations, are permitted conditionally. (The CBD zone is located west of Hall Boulevard).

I-L: Light Industrial District. The I-L zoning district provides appropriate locations for general industrial uses including industrial service, manufacturing and production, research and development, warehousing and freight movement, and wholesale sales activities with few, if any, nuisance characteristics such as noise, glare, odor, and vibration. (The I-L zone is located east of Hall Boulevard and north of Fanno Creek).

R-12: Medium-Density Residential District. The R-12 zoning district is designed to accommodate a full range of housing types at a minimum lot size of 3,050 square feet. A wide range of civic and institutional uses are also permitted conditionally. (The R-12 zone is located east of Hall Boulevard and south of Fanno Creek).

LOCATION: 13125 & 13500 SW Hall Blvd., WCTM 2S102DA, Tax Lots 401 & 600.

APPLICABLE  
REVIEW

CRITERIA: Community Development Code Chapters 18.330, 18.360, 18.390, 18.510, 18.520, 18.530, 18.745, 18.775 and 18.810.

## SECTION II. DECISION

Staff recommends that the Hearings Officer find that the proposed Sensitive Lands Review and Minor Modification requests will not adversely affect the health, safety and welfare of the City and meet the Approval Standards for a Sensitive Lands Permit and Minor Modification. Therefore, Staff recommends APPROVAL, subject to the following recommended Condition of Approval.

### CONDITION OF APPROVAL

#### THE FOLLOWING CONDITIONS SHALL BE SATISFIED PRIOR TO THE ISSUANCE OF SITE/BUILDING PERMITS:

Submit to the Planning Department (Cheryl Caines, 639-4171, ext. 2437) for review and approval:

1. The applicant shall provide information from a registered engineer to certify that the design and construction of the improvements will be resistant to flood damage and anchored to prevent flotation, collapse, and lateral movement.

## SECTION III. BACKGROUND INFORMATION

### Proposal Description:

The applicant is requesting to construct a segment of the Fanno Creek trail to connect two existing sections between City Hall and the Tigard Library. The proposal includes construction of a crosswalk across Hall Boulevard, north of the Fanno Creek Bridge, a sidewalk along the east side of Hall Boulevard (140 Feet), an elevated boardwalk from the sidewalk to the creek (132 feet), and a new pedestrian/bike bridge across the creek (62 feet). This bridge, to be known as Woodruff Bridge, will align with an existing trail on the south side of the creek.

Most of the work is proposed within the 100-year floodplain and floodway. The plans have been designed to avoid construction within the wetlands but do impact the vegetated corridors of the wetlands and Fanno Creek. Mitigation for the project's permanent impacts is proposed off-site at SW Fern Street and 139<sup>th</sup> Avenue. On-site mitigation possibilities are limited due to current Clean Water Services (CWS) restoration activities already in progress, the future widening of Hall Boulevard, an access easement extending through the property, and potential impacts to turtle habitat.

### Site/Vicinity Information

The site is made up of two parcels (2S102DA-00600 and 2S102DA-00401). The main project site (tax lot 600) is located on the north side of Fanno Creek just north of the existing Tigard Library. Some of the proposed work will also occur on the west side of Hall Boulevard on the City Hall site (tax lot 401). This work is limited to relocation of a sidewalk ramp for the proposed crosswalk and installation of a pad for the crosswalk signal pole.

Tax lot 600 has dual zoning, Light Industrial (I-L) and Medium High Density Residential (R-12). The City Hall site is zoned Central Business District (CBD). Both sites are encumbered by sensitive lands, which include wetlands, floodplain, and drainageways (Fanno Creek). Parcels in the area are zoned I-L, CBD, and R-12.

### Site History

Staff conducted a search of City records for the subject property. The Tigard Library was approved for tax lot 600 in 2003 (CUP2003-00001). Various other approvals have been granted to construct a gazebo in the open space adjacent to the library, modify the library parking lot and construct portions of the Fanno Creek Trail. A Minor Modification and Sensitive Lands Review was approved in 2005 (SLR2005-00016/MMD2005-00015) to construct a segment of the trail around the Tigard Library, including the section proposed in this application. Condition # 5 of that approval required a wildlife assessment to be completed prior to construction of the trail section north of Fanno Creek. The trail design north of the creek must respond to and take into account the results of the wildlife assessment. The assessment will be subject to a public hearing by the Hearings Officer. This application seeks to satisfy that condition.

On the City Hall site land use applications related to on-site work include construction, expansion and remodel of the existing buildings and the construction of the Tigard Skate Park. These include a Conditional Use Permit to allow a Department of Motor Vehicles office within an industrial zone (CU 18-76), construction of an office/warehouse building to be used by an electrical contractor (SDR24-77), redevelopment of the site for the City Hall complex (SDR91-0017) and various minor modifications. Case file SDR2006-00005 approved the development of the Tigard Skate Park. No other land use cases were found to be on file with the City besides some temporary sign permits.

#### SECTION IV. DECISION MAKING PROCEDURES, PERMITS AND USE

Use Classification: Section 18.130.020

Lists the Use Categories.

The applicant is proposing to construct a missing segment of the Fanno Creek Trail. This facility is defined as Community Recreation within the use classification section of the Tigard Development Code. Community Recreation is permitted within the CBD zone and is a conditional use within the R-12 and I-L zones.

Summary Land Use Permits: Chapter 18.310

Defines the decision-making type to which the land-use application is assigned.

The proposal requires a Sensitive Lands Review within the 100-year floodplain, which is a Type III-HO (Hearings Officer) decision.

#### SECTION V. ANALYSIS OF ALTERNATIVE TRAIL ALIGNMENTS

The applicant evaluated four alternative trail alignments during the 2005 design process. An explanation of this evaluation is found on pages 3 - 5 of the applicant's narrative. Alternative alignments were considered to look at ways to minimize impacts to natural resources while providing a bike-pedestrian friendly path. The proposed location/design was chosen as it provides a balance between the two, as well as being handicap accessible. The applicant's evaluation is summarized below:

Hall Boulevard is an Oregon Department of Transportation (ODOT) facility. ODOT has refused to allow a signalized or un-signalized crossing between the Fanno Creek Bridge and the signalized crossing at Wall Street to the south. This existing crossing is too far out of direction for trail users to consider it to cross Hall Boulevard. The majority of pedestrians cross just south of the bridge during gaps in traffic, creating a dangerous situation for both pedestrians and drivers. Some of the alternative alignments would involve bicycle traffic turning left across Hall Boulevard. Other alternatives would require modifying the existing Fanno Creek Bridge to accommodate a cantilevered walkway, which was rejected by ODOT. For these reasons the applicant chose the proposed alignment north of the Fanno Creek Bridge.

The design of the trail was also modified to lessen impacts to the wildlife habitat. The proposed trail has been shortened and shifted closer to Hall Boulevard than the 2005 design. In addition, the original 10-foot asphalt trail has been replaced by an 8-foot, raised boardwalk on pre-cast foundations that eliminate the need to dig holes or pour concrete. The boardwalk provides 30 inches of clearance for wildlife to pass freely under the trail. Cable fencing and shrubs are also proposed on the trail to discourage users from leaving the trail.

#### SECTION VI. APPLICABLE REVIEW CRITERIA AND FINDINGS

A summary of the applicable criteria in the Chapter order in which they are addressed are as follows:

- A. 18.775 Sensitive Lands Review Criteria
- B. Other Applicable Development Code Standards
  - 18.330 (Conditional Use)
  - 18.360 (Site Development Review)
  - 18.510 (Residential Zoning Districts)
  - 18.520 (Commercial Zoning Districts)
  - 18.530 (Industrial Zoning Districts)
  - 18.810 (Street and Utility Improvement Standards)
- C. Impact Study (18.390)

## SECTION VII. APPLICABLE REVIEW CRITERIA AND FINDINGS

### A. SPECIFIC SENSITIVE LANDS REVIEW APPROVAL CRITERIA

#### Sensitive Lands (Section 18.775):

Section 18.775.020.F states that the Director shall have the authority to issue a sensitive lands permit in the following areas by means of a Type II procedure, as governed in Section 18.390.040, using approval criteria contained in Section 18.775.070 C-E:

- ♦ Drainageways;
- ♦ Slopes that are 25% or greater or unstable ground; and
- ♦ Wetland areas which are not regulated by other local, state, or federal agencies and are designated as significant wetlands on the Comprehensive Plan Floodplain and Wetland Map.

Section 18.775.020.G states that the Hearings Officer shall have the authority to issue a sensitive lands permit in the 100-year floodplain by means of a Type IIIA procedure, as governed by Section 18.390.050, using approval criteria contained in Section 18.775.070.

General Provisions for Floodplain Areas 18.775.040.

#### Special flood hazard:

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study of the City of Tigard," effective February 18, 2005, with accompanying Flood Insurance Rate Maps effective February 18, 2005, is hereby adopted by reference and declared to be a part of this chapter. This Flood Insurance Study is on file at the Tigard Civic Center.

The applicant and staff have reviewed these maps and agree that this site is within one of the identified special flood hazard areas. The application is being reviewed under this premise.

#### Base flood elevation data:

When base flood elevation data has not been provided in accordance with Section 18.775.040.B above, the Director shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 18.775.040.M and 18.775.040.N below).

The base flood elevation for the subject sites are shown to be 144 and 145 feet according to the Flood Insurance Rate Maps of February 18<sup>th</sup>, 2005.

#### Test of reasonableness:

Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that the potential for flood damage to the proposed construction will be minimized. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these sensitive land areas may result in higher insurance rates.

Base flood elevation data is available and has been established at 144 and 145 feet by the FEMA Flood Insurance Maps. Therefore, this standard does not apply.

#### Resistant to flood damage:

All new construction and substantial improvements, including manufactured homes, shall be constructed with materials and utility equipment resistant to flood damage.

The applicant has not provided sufficient information to determine if this criterion is met. Information should be submitted from the applicant's engineer regarding the design's resistance to flood damage. A condition has been imposed to ensure this standard is met.

#### Minimize flood damage:

All new construction and substantial improvements, including manufactured homes, shall be constructed using methods and practices that minimize flood damage.

A flood study prepared by the applicant's engineer has been provided. The study shows that the proposed improvements will not result in an increase in flood levels.

**Equipment protection:**

Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

**Water Supply Systems:**

All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.

**Anchoring:**

All new construction, all manufactured homes and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

The bridge will be anchored to abutments installed on each side of Fanno Creek. The boardwalk will be constructed on piers attached to low impact foundations. Information about the movement, collapse, flotation was not provided by the applicant. A condition of approval will ensure this standard is satisfactorily addressed.

**Sanitary sewerage systems:**

New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharge from the systems into floodwater.

**On-site water disposal systems:**

On-site water disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

No service facilities/equipment, water, sewer, or water disposal systems are proposed with this project. These standards do not apply.

**Residential Construction:**

1. New construction and substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor, including the basement, elevated at least one foot above base flood elevation; 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria: a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided; b. The bottom of all openings shall be no higher than one foot above grade; and c. Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of flood waters. 3. Manufactured homes shall be securely anchored to an adequately anchored permanent foundation system. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

Residential construction is not proposed with this development. This standard does not apply.

**Nonresidential Construction:**

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation, or together with attendant utility and sanitary facilities, shall: 1. Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water; 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; 3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in Section 18.775.030.E.2; and 4. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 18.775.040.L.2. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

This standard does not apply as this development is for roadway purposes. No habitable structures are proposed. This standard does not apply.

FINDING: Based on the analysis above, the General Provisions for Floodplain Areas can be met as conditioned below.

CONDITION: The applicant shall provide information from a registered engineer to certify that the design and construction of the improvements will be resistant to flood damage and anchored to prevent flotation, collapse, and lateral movement.

#### 18.775.050 General Provisions for Wetlands

##### Code compliance requirements.

Wetland regulations apply to those areas classified as significant on the City of Tigard "Wetland and Streams Corridors Map", and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, per "Table 3.1 Vegetated Corridor Widths" and "Appendix C" Natural Resource Assessments of the CWS "Design and Construction Standards". Wetland locations may include but are not limited to those areas identified as wetlands in "Wetland Inventory and Assessment for the City of Tigard, Oregon," Fishman Environmental Services, 1994.

The location of the proposed improvements is identified as having two locally significant wetlands (E-13 and E-14 - 1994 City of Tigard Wetland Inventory). The extents of the vegetated corridors, as determined by CWS, are shown in the applicant's plans. Work is not proposed within the wetlands, but will occur within the vegetated corridors. The proposal is therefore, subject to a Type II sensitive lands review for wetlands.

##### Delineation of wetland boundaries.

Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineation will be done by qualified professionals at the applicant's expense.

The extent of the vegetated corridors as determined by CWS are shown in the applicant's plans. According to the applicant's narrative, Fishman Environmental Services prepared a wetland delineation to meet CWS requirements.

18.775.070.B states that the Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:

Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;

The proposal includes alterations within the floodway and 100-year floodplain of Fanno Creek. The applicant hired an engineering consultant to perform a floodway and floodplain study to measure the impacts of the proposed improvements on area flood levels. Changes were made to the project before settling on the current design. According to the applicant's engineer "the proposed boardwalk, crosswalk and pedestrian bridge will not impose any meaningful hydraulic impacts to the Fanno Creek floodplain elevation." Therefore, the proposal meets the zero-foot rise requirement.

Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;

The development site lies within three zones. One is commercial, the second is industrial, and the third is residential. Land form alterations within the 100-year floodplain are permitted within the commercial and industrial zones. Community Recreation and Public Support Facilities are permitted within residential zones as an exception. The trail and sidewalk therefore, are permitted within the R-12 zoning. This standard is met.

Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;

The modeling results provided by the applicant's engineer show that the proposal will not result in any increase in the flood elevation.

The land form alteration or development plan includes a pedestrian/bicycle pathway in accordance with the adopted pedestrian/bicycle pathway plan, unless the construction of said pathway is deemed by the Hearings Officer as untimely;

The development proposal is only to construct a segment of the Fanno Creek Trail. The design is in accordance with the City's pedestrian/bicycle plan.

The plans for the pedestrian/bicycle pathway indicate that no pathway will be below the elevation of an average annual flood;

The proposed pathway is located above the average annual flood elevation as shown in a letter prepared by the applicant's water resources consultant (Pacific Water Resources, Inc.).

The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS permits and approvals shall be obtained; and

Fanno Creek will not be impacted by the construction of the bridge. The bridge will completely span Fanno Creek and with construction below the top of bank. The trail and sidewalk are located outside the wetlands on both the library and City Hall site but are within the vegetated corridor. Because no wetland or streams are impacted by the proposal, permits are not required by U.S. Army Corps of Engineers or Department of State Lands. A service provider letter is required by CWS for the work within the vegetated corridors. The letter has been obtained and is included in the application packet.

Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the comprehensive plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle pathway plan.

The proposal is to construct a missing segment of the Fanno Creek Trail between City Hall and the Tigard Library. No dedication is necessary as the trail will be entirely on City-owned property.

Within wetlands:

The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:

The proposed land form alteration or development is neither on wetland in an area designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map nor is within the vegetative corridor established per "Table 3.1 Vegetative Corridor Widths" and Appendix C: Natural Resources Assessments" of the CWS "Design and Construction Standards", for such a wetland;

The subject site contains areas designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map and a vegetative corridor of 50 feet from the edge of the wetland. The vegetative corridor for this wetland is a CWS water quality buffer and is not subject to the safe harbor provisions of Goal 5. No work is proposed within the significant wetland. Some grading and trail construction is proposed within the vegetative corridor and has already been approved by CWS (see service provider letter).

The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;

The applicant has indicated that the disturbance to the vegetated corridor will be the minimum required for the development. The portion of the trail within the vegetated corridors will be the minimum allowed (8 feet). A boardwalk design has been chosen and will be constructed with 42 inch piers. These piers eliminate the need to dig holes or pour concrete, therefore minimizing the disturbance. Because the applicant has revised the trail alignment/design, the amount of permanent impact area has been reduced from the original design.

Any encroachment or change in on-site or off-site drainage which would adversely impact wetland characteristics have been mitigated;

The impacts to the vegetative corridor will be for the proposed boardwalk, bridge abutments, and crosswalk signal pad. These improvements have been approved by CWS. There is no encroachment into the nearby wetlands. The proposed sidewalk along the east side of Hall Boulevard will change drainage by directing stormwater that now flows over land from street to the sidewalk, north to the end of the sidewalk. Water will then flow over land into the wetland. The site contours will remain relatively unchanged. The change will not have an adverse affect on the wetland.

Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in accordance with Chapter 18.745, Landscaping and screening.

The applicant's plans show erosion control measures to be used during construction. Disturbed vegetation will be replaced. Both proper erosion control and re-vegetation are conditions of the CWS Service Provider Letter.

All other sensitive lands requirements of this chapter have been met;

Fanno Creek runs through the project sites. No work is proposed within the creek but is proposed within the floodway and 100-year floodplain. The criteria for work within the flood areas have been met as shown within this staff report.

The necessary U.S. Corp of Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained.

Fanno Creek will not be impacted by the construction of the bridge. The bridge will completely span Fanno Creek and with construction below the top of bank. The trail and sidewalk are located outside the wetlands on both the library and City Hall site but are within the vegetated corridor. Because no wetland or streams are impacted by the proposal, U.S. Army Corps of Engineers or the Division of State Lands does not require permits. A service provider letter is required by CWS for the work within the vegetated corridors. The letter has been obtained and is included in the application packet.

The provisions of Chapter 18.790, Tree Removal shall be met;

There are two trees on the library site that may be affected by construction of the trail/bridge. Neither tree will be removed. The applicant has provided a tree protection plan for both trees. This criterion does not apply.

Physical Limitations and Natural Hazards, Floodplains and Wetlands, Natural Areas, and Parks Recreation and Open Space policies of the Comprehensive Plan have been satisfied.

The applicant addresses the relevant Comprehensive Plan policies within the narrative. These include Water Resources Quality (Goal 6), Hazards (Goal 7), and Parks, Recreation, Trails and Open Space (Goal 8). The design meets regional, state and federal water quality standards by meeting CWS permit requirements. A flood study shows that the improvements will not result in an increase in flood elevation. The construction of this gap in the trail connects two larger open space areas near the Tigard Library and City Hall and furthers the policy of creating an interconnected regional system of trails. The applicant has proposed a design that tries to balance the policies of providing greenway trails and minimizing the impact on natural areas. This criterion has been met.

**FINDING:** Based on the analysis above, the applicant meets the criteria for sensitive lands permit in wetlands.

18.775.090 Special Provisions for Development within Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and South Fork of Ash Creek

In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 666-023-0030) pertaining to wetlands, all wetlands classified as significant on the City of Tigard "Wetlands and Streams Corridors Map" are protected. No land form alterations or developments are allowed within or partially within a significant wetland, except as allowed/approved pursuant to Section 18.775.130.

The proposal does not include any work within a significant wetland.

In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of the bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.

The standard width for "good condition" vegetated corridors along Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50 feet, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard "Wetlands and Streams Corridors Map") is located within the 50 foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.

The CWS Service Provider Letter designates the pre-development vegetated corridor as 50 feet and in degraded condition. CWS has begun a restoration project on the site (including the area where the bridge and trail are proposed) that will upgrade the condition to good. The required vegetated corridor width is 50 feet as approved by CWS and is delineated on the project plans. There are no wetlands within the 50 foot setback; therefore, the vegetated corridor is measured from the upland edge of the wetland.

The minimum width for "marginal or degraded condition" vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50% of the standard width, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130.

As noted above, the vegetated corridor will be in good condition once the CWS restoration project is complete. The required 50-foot width requirement is met.

The determination of corridor condition shall be based on the Natural Resource Assessment guidelines contained in the CWS "Design and Construction Standards".

CWS has classified the vegetated corridor as degraded based on the site conditions at the time of the site assessment. A long term restoration project has begun on-site and over time the plantings will improve the vegetated corridor to good condition. Amber Wierck, with CWS, has indicated that this change does not create any issues with the current Service Provider Letter.

The standard setback distance or vegetated corridor area applies to all development proposed on property located within or partially within the vegetated corridors, except as allowed below:

- a. Roads, pedestrian or bike paths crossing the vegetated corridor from one side to the other in order to provide access to the sensitive area or across the sensitive area, as approved by the City per Section 18.775.070 and by CWS "Design and Construction Standards";
- b. Utility/service provider infrastructure construction (i.e. storm, sanitary sewer, water, phone, gas, cable, etc.), if approved by the City and CWS;
- c. A pedestrian or bike path, not exceeding 10 feet in width and meeting the CWS "Design and Construction Standards";
- d. Grading for the purpose of enhancing the vegetated corridor, as approved by the City and CWS;
- e. Measures to remove or abate hazards, nuisances, or fire and life safety violations, as approved by the regulating jurisdiction;
- f. Enhancement of the vegetated corridor for water quality or quantity benefits, fish, or wildlife habitat, as approved by the City and CWS;
- g. Measures to repair, maintain, alter, remove, add to, or replace existing structures, roadways, driveways, utilities, accessory uses, or other developments provided they are

consistent with City and CWS regulations, and do not encroach further into the vegetated corridor or sensitive area than allowed by the CWS "Design and Construction Standards.

A portion of the proposed pedestrian/bike trail and sidewalk alteration (City Hall site) is located within the wetland vegetated corridor. The proposed trail is 8 feet wide. The existing sidewalk on the western side of Hall Boulevard is being modified to relocate the handicap ramp and install a new crosswalk signal. This modification will be approximately 31 square feet of permanent impact to the vegetated corridor on the City Hall site. All work meets the CWS Design and Construction Standards as shown in the approved CWS Service Provider Letter. Only a and c above apply to this trail project.

Land form alterations or developments located within or partially within the Goal 5 safeharbor setback or vegetated corridor areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek that meet the jurisdictional requirements and permit criteria of the CWS, U.S. Army Corps of Engineers, Division of State Lands, and/or other federal, state, or regional agencies, are not subject to the provisions of Section 18.775.090.B, except where the:

- a. Land form alterations or developments are located within or partially within a good condition vegetated corridor, as defined in Sections 18.775.090.B.1 and 18.775.090.B.2;
- b. Land form alterations or developments are located within or partially within the minimum width area established for marginal or a degraded condition vegetated corridor, as defined in Section 18.775.090.B.3.

This proposal is subject to the provisions of 18.775.090.B since a portion of the improvements are located partially within vegetated corridor areas established for Fanno Creek. As shown, this proposal meets those provisions.

FINDING: Based on the above analysis, the applicant adheres to the special provisions for development along Fanno Creek. No work is proposed within significant wetlands or along the Tualatin River, Ball Creek, or the south fork of Ash Creek.

## B. OTHER APPLICABLE DEVELOPMENT CODE STANDARDS

### CONDITIONAL USE (18.330)

Section 18.330.020 of the Tigard Development Code Conditional Use Review Section, states; "if the requested modification meets any of the major modification criteria, that the request shall be reviewed as a new Conditional Use application."

Section 18.330.020.B.2 states that the Director shall determine that a major modification(s) has resulted if one (1) or more of the changes listed below have been proposed:

A change in land use;

The proposal is to construct a sidewalk, boardwalk and bridge to complete a gap within the Fanno Creek trail. Currently tax lot 600 is developed with the Tigard Library and trails within the Fanno Creek Greenway. No new uses are proposed at this time. This criterion is met.

A 10% increase in dwelling unit density;

The site is not developed with a residential use; therefore, this criterion is not applicable.

A change in the type and/or location of access ways and parking areas where off-site traffic would be affected;

There is no change in the type and/or location of access ways and parking areas where off-site traffic would be affected. This standard is met.

An increase in the floor area proposed for non-residential use by more than 10% where previously specified;

The request is to construct a section of the Fanno Creek trail. No increase in floor area of the existing structures is proposed. This criterion is satisfied.

A reduction of more than 10% of the area reserved for common open space and/or usable open space;

Placement of a trail within open space does not reduce the amount of open space. This criterion is satisfied.

A reduction of specified setback requirements by more than 20%;

The applicant has not requested changes to the building location or proposed setbacks. Trails, sidewalks, and bridges are not subject to setback requirements. This standard is not applicable.

An elimination of project amenities by more than 10% where previously specified provided such as: (a) Recreational facilities; (b) Screening; or (c) Landscaping provisions;

The proposed trail segment will increase the recreational opportunity on-site. Screening will not be affected by the proposal. The percentage of landscaping on-site is reduced by the construction of the boardwalk, but the library site has over five acres of open space. Open space is included in the landscaping percentage. The construction of 1,056 square feet of boardwalk will eliminate less than a .5% of the open space on-site. This standard is met.

A 10% increase in the approved density;

The proposed modification request does not involve residential development; therefore, no increase to density is involved in the request.

FINDING: This request is determined to be a minor modification to an existing site as demonstrated in the above analysis and meets all applicable requirements of Title 18 as indicated within this report. The requirements for a minor modification have been met.

#### SITE DEVELOPMENT REVIEW (18.360)

Section 18.360.050.B contains the following criteria for approval of a request for Minor Modification:

Section 18.360.050.B states that the Director shall determine that a major modification will result if one or more of the following changes are proposed.: There will be:

An increase in dwelling unit density, or lot coverage for residential development;

There are no dwelling units on the property. Therefore, this criterion does not apply.

A change in the ratio or number of different types of dwellings;

There are no dwelling units on the property. Therefore, this criterion does not apply.

A change that requires additional on-site parking in accordance with Chapter 18.765.

The proposed improvement on this site (sidewalk widening and signal installation) is classified as a Public Support Facility. These uses require no parking. This criterion is satisfied.

A change in the type of commercial or industrial structures as defined by the Uniform Building Code;

There are no proposed changes in the type of structures. Therefore, this criterion does not apply.

An increase in the height of the building(s) by more than 20%;

There is no proposed change in building height. Therefore, this criterion does not apply.

A change in the type and location of access ways and parking areas where off-site traffic would be affected;

The proposal does not change the type or location of access ways or parking areas where off-site traffic would be affected. Therefore, this criterion is met.

An increase in vehicular traffic to and from the site and the increase can be expected to exceed 100 vehicles per day;

The proposal does not increase vehicular traffic to and from the site. Therefore, this criterion does not apply.

An increase in the floor area proposed for a nonresidential use by more than 10% excluding expansions under 5,000 square feet;

No increase in floor area is proposed. Therefore, this criterion does not apply.

A reduction in the area reserved for common space and/or usable open space which reduces the open space area below the minimum required by this code or reduces the open space area by more than 10%;

The construction of the pad and signal pole, affecting 31 square feet of land, will not appreciably reduce the acreage of the site amenities. The City Hall tax lot has approximately 4 acres of open space. This criterion has been satisfied.

A reduction of project amenities below the minimum established by this code or by more than 10% where specified in the site plan:

- a. Recreational facilities;
- b. Screening; and/or
- c. Landscaping provisions.

The proposal does not reduce the site's recreational facilities or screening. Open space is part of the landscaping on the City Hall site. The landscaping will be reduced by 31 square feet. This decrease does not reduce the percentage to less than that required by code (15%), and does not reduce the percentage of existing landscaping by more than 10%. Therefore, this criterion has been satisfied.

A modification to the conditions imposed at the time of site development review approval, which are not the subject of B 1 through 10 above of this subsection.

The original site plan was approved under SDR 29-84. The conditions for this and subsequent approvals have been reviewed. This proposal does not conflict with nor modify any of these previous applied conditions.

FINDING: This request is determined to be a minor modification to an existing site as demonstrated in the above analysis and meets all applicable requirements of Title 18 as indicated within this report. The requirements for a minor modification have been met.

#### RESIDENTIAL ZONING DISTRICTS (18.510)

##### 18.510.030 Uses

Table 18.510.1 lists Community Recreation as a Conditional Use within the R-12 zoning district.

The library site has dual zoning (R-12 and I-L). Trails are classified as a Community Recreation use, which are listed as a conditional use within Table 18.510.1. The applicant has requested a minor modification to a previously approved Conditional Use Permit to allow the trail. The requirements of the Residential Zoning District have been met.

#### COMMERCIAL ZONING DISTRICTS (18.520)

##### 18.520.030 Uses

Table 18.520.1 lists Community Recreation as a Permitted Use within the CBD zoning district.

The City Hall site is zoned Central Business District (CBD). A small portion of the proposed work is on-site, but the majority of the work will be within the adjacent right-of-way. Sidewalk modifications and the proposed crosswalk signal are classified Public Support Facilities. These uses are permitted outright within the CBD. The applicant has applied for a minor modification to the previously approved Site Development Review to permit the proposed work. The requirements of the Commercial Zoning District have been met.

#### INDUSTRIAL ZONING DISTRICTS (18.530)

##### 18.530.030 Uses

Table 18.530.1 lists Community Recreation as a Conditional Use within the I-L zoning district.

As noted above, the library site has dual zoning, including Light Industrial (I-L). Community Recreation is permitted as a Conditional Use within the zone according to Table 18.530.1. Footnote 10 states that the use is limited to outdoor recreation on land classified as floodplain on City flood maps, when the recreational use does not otherwise preclude future cut and fill as needed in order to develop adjoining industrially zoned upland. According to FEMA flood maps adopted by the City, the industrial portion of the trail right-of-way is located entirely within the floodplain and does not adjoin any industrially zoned upland.

#### STREET UTILITY IMPROVEMENT STANDARDS (18.810)

##### 18.810.070 Sidewalks

Section 18.810.070.C requires a planter strip separation of at least five feet between the curb and the sidewalk in the design of streets, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant portions of the street; it would conflict with the utilities, there are significant natural features (large trees, water features, significant habitat areas, etc) that would be destroyed if the sidewalk were located as required, or where there are existing structures in close proximity to the street (15 feet or less). Additional consideration for exempting the planter strip requirement may be given on a case by case basis if a property abuts more than one street frontage.

The proposed sidewalk along the east side of Hall Boulevard is designed without a planter strip and is not proposed at ultimate location so as to limit the impact on the adjoining natural area. This is allowed as an exception to the standard.

##### Bikeways and Pedestrian Pathways

##### 18.810.110.C. requires:

1. Minimum width for bikeways within the roadway is five feet per bicycle travel lane.
2. Minimum width multi-use paths separated from the road is ten (10) feet. The width may be reduced to eight (8) feet if there are environmental or other constraints.
3. The minimum width for pedestrian only off-street paths is five (5) feet.
4. Design standards for bike and pedestrian-ways shall be determined by the City Engineer.

The proposed multi-use path is 8 feet wide. This narrower width was chosen to limit the impact on the sensitive lands. The proposal has been reviewed by the Engineering Division and no objections to the design were indicated.

##### C. IMPACT STUDY (18.390):

Section 18.390.040.B.2.e states that the applicant shall provide an impact study to quantify the effect of development on public facilities and services. For each public facility system and type of impact, the study shall propose improvements necessary to meet City standards, and to minimize the impact of the development on the public at large, public facilities systems, and affected private property users.

The proposed trail and sidewalk improvements will not increase traffic to and from the site. A signalized crosswalk is proposed where the trail crosses Hall Boulevard. It is expected that the proposed trail, sidewalk, and crosswalk will reduce the number of pedestrians crossing Hall at unsigned locations and provide a safer alternative to the stretches of Hall Boulevard without sidewalks. The proposed trail segment will result in improved recreational opportunities by closing a gap within the current Fanno Creek trail system and connect the open spaces of Fanno Creek Park and the library site. Water and sanitary sewer systems will not be impacted by the development. Minimal impervious area will be added by the improvements. Storm water will continue to be directed over land, through the vegetated corridors, and into the wetland or Fanno Creek. Noise levels from the trail are expected to be minimal. Any noise created by trail users is likely to have less of an impact than current traffic noise from Hall Boulevard.

## SECTION VI. OTHER STAFF COMMENTS

The City of Tigard Engineering Department commented that the proposed work is within the Fanno Creek floodplain regulated by TDC 18.775.070.B, the submittal is an adequate showing of compliance with these standards. 18.755.070.B.3 requires that the trail not be below the elevation of an average annual flood. The applicant's engineer has submitted no-rise certifications that the pathway is above the average annual flood elevation. These reports have been reviewed and found to comply with the TDC requirements. The applicant has obtained the required ODOT permit to connect the pathway to the Hall Boulevard sidewalk.

City of Tigard Arborist requested that the drawings have the tree protection fence shown to scale and specifications per the Arborist Report. It was also noted the Tigard Municipal Code requires tree protection for trees on City property.

RESPONSE: No trees will be removed for the proposed improvements. Protection required by the Municipal Code is not a land use regulation. Regardless the applicant has provided an arborist report outlining measures to be taken to protect existing trees during construction. The applicant should work with the City Arborist to ensure the Municipal Code protection requirements are met.

Tigard Police have reviewed the proposal and have no objections.

The Tigard Parks Department noted that the suggestion for a 6-foot fence is a little overboard. If fencing is installed, a 3 to 4 - foot fence would be preferred for security purposes.

The Tigard Public Works Department has reviewed the proposal and has no objection.

## SECTION VII. AGENCY COMMENTS (Copies of the complete letters are found in the file).

Clean Water Services issued a Service Provider Letter (4714) with conditions dated April 1, 2009.

Oregon Division of State Lands has commented that no removal-fill permit is required because it appears that the proposed bridge, elevated pathway, and crosswalk improvements avoid impacts to wetlands and waters.

Oregon Department of Fish and Wildlife does not support the placement of the trail within floodplains and vegetated corridor due to adverse impacts such as fragmented habitats, disturbance of sensitive species such as the Western pond turtle and affects on water flow. The bridge is being placed in an area with severely eroding banks which could cause future maintenance problems. The placement could also preclude future restoration projects. It is recommended that the City use the Senior Center/O'Mara Street/existing Hall Boulevard crossing as the trail connection to avoid any negative impacts to the North Library wetlands and mitigation site.

RESPONSE: The applicant's proposal meets or can meet the current requirements of the Tigard Development Code and other regulatory agencies. The design and location of the pathway has been modified prior to the review process to minimize impacts to natural areas, therefore these comments and suggestions were passed on to the applicant for their review and consideration.

Metro provided comments about the proposed trail. Of the four alternative alignments, the proposed alignment best suits the Metro requirements for regional trails. This application has four of the five components of the Metropolitan Greenspaces Master Plan framework used to prioritize regional trail capital improvements. Because of the trails location within a natural area that supports rare Western pond turtle, the writer emphasized that the greatest care should be taken and outlined possible adverse impacts of the trail on nesting populations of turtle. Metro praises the boardwalk and bridge design but also states that the applicant should be encouraged to protect rare and sensitive species. Suggestions provided include:

- ♦ Installing any necessary silt fencing for construction prior to mid-May, to avoid the risk of trapping nesting turtles in the construction site.
- ♦ Keeping construction materials and equipment away from suspected turtle nesting areas.

RESPONSE The applicant's proposal meets or can meet the current requirements of the Tigard Development Code and other regulatory agencies. The design and location of the pathway has been modified prior to the review process to minimize impacts to natural areas, therefore these comments and suggestions were passed on to the applicant for their review and consideration.

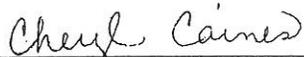
The Oregon Department of Environmental Quality commented that care should be taken to control erosion and sediment migration during construction activities.

RESPONSE: Erosion control measures are shown on the applicant's plans and are a condition of approval of Clean Water Services.

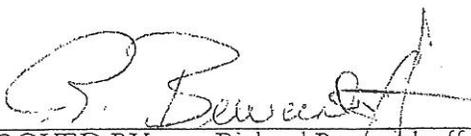
Verizon wrote that the proposed plans indicate working where there are several underground cables that run south of the east side of Hall Boulevard. Coordination to adjust any manholes will require early contact with this office and final grade information. Locates will be required.

Qwest states that the project location falls out of the Qwest service area.

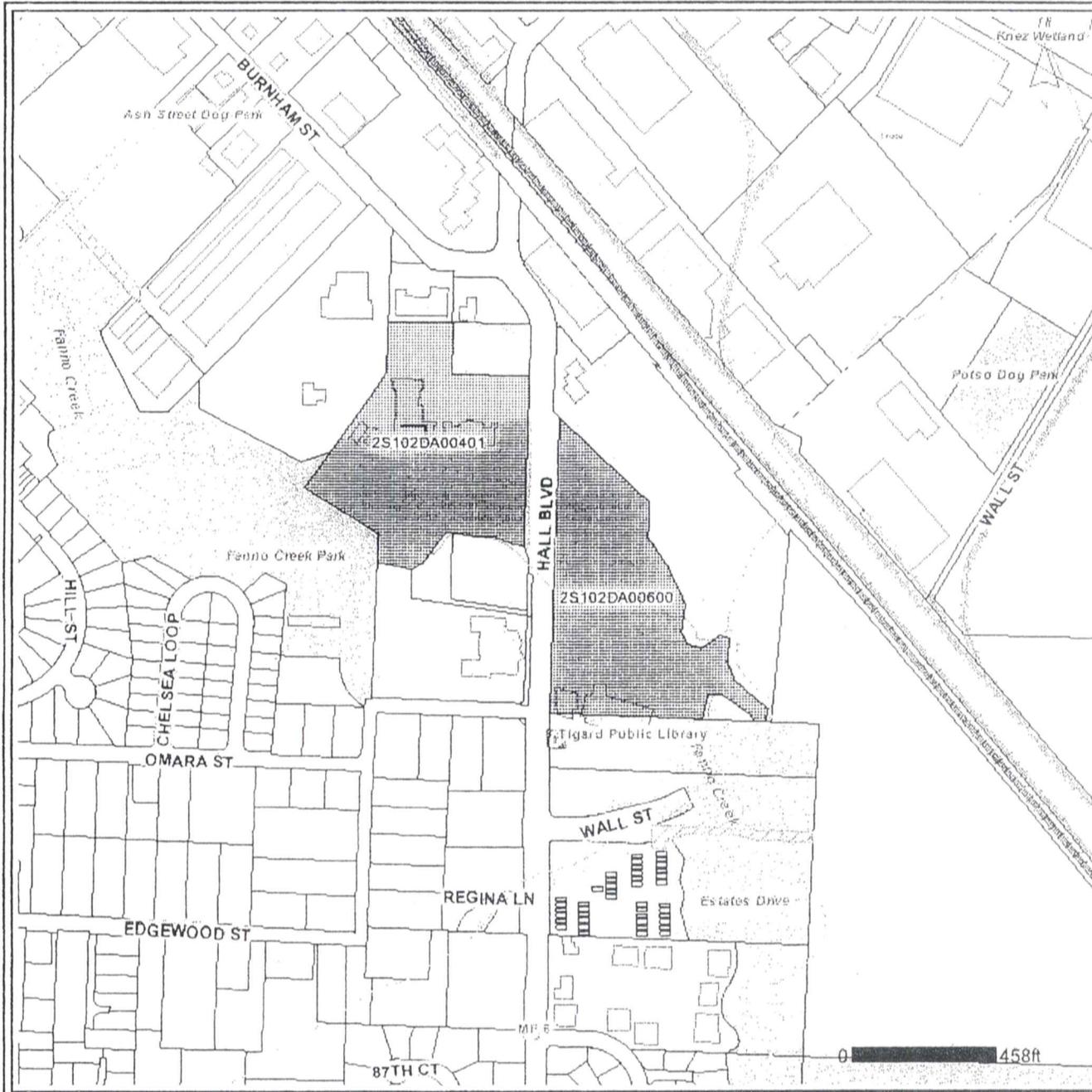
Tualatin Valley Fire and Rescue, Clean Water Services, Oregon Department of Transportation, U.S. Army Corps. of Engineers, Portland General Electric, NW Natural Gas, Comcast Cable Corporation, and Tri-Met Transit were given an opportunity to review this proposal but offered no comments or objections.

  
PREPARED BY: Cheryl Caines  
Associate Planner

\_\_\_\_\_  
April 29, 2009  
DATE

  
APPROVED BY: Richard Bewersdorff  
Planning Manager

\_\_\_\_\_  
April 29, 2009  
DATE

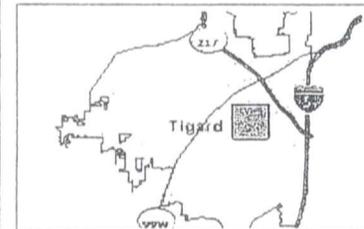


VICINITY MAP

SLR2009-00002  
 SLR2009-00003  
 MMD2009-00007  
 MMD2009-00013

FANNO CREEK TRAIL &  
 BRIDGE/HALL BLVD.  
 CROSSWALK

 Subject Site



Information on this map is for general location only and should be verified with the Development Services Division.

Scale 1:5,500 - 1 in = 458 ft

Map printed at 08-Apr-09 11:06 AM

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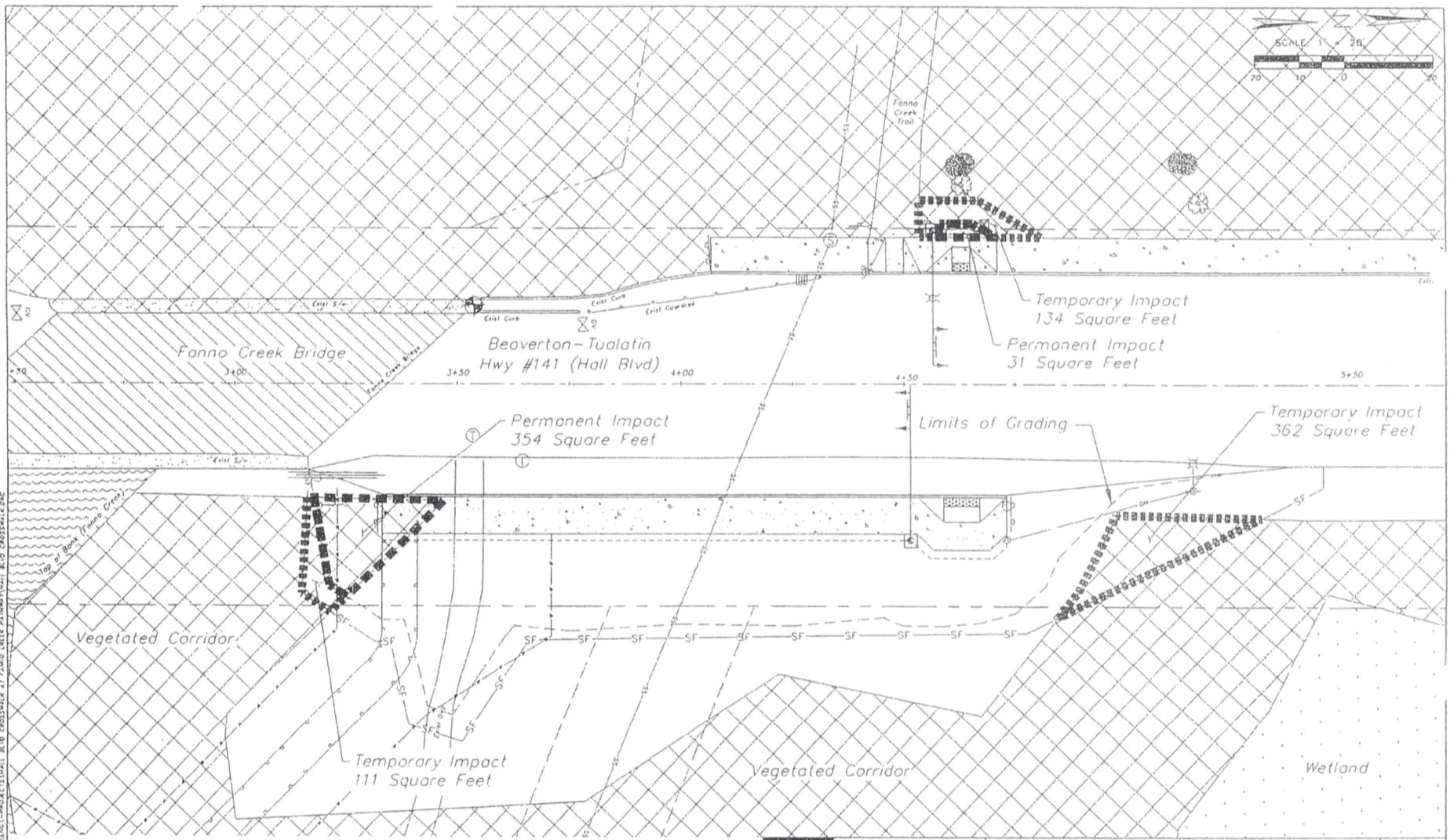
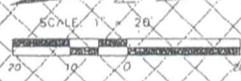
TIGARD MAPS

City of Tigard  
 13125 SW Hall Blvd  
 Tigard, OR 97223  
 503 639-4171  
 www.ligard-or.gov



0 458ft





ARCHITECT: COOK+FOX ARCHITECTS, 2008 #1 21718 Pl. from Hwy. CWS VEGETATED CORRIDOR IMPACTS Impact 118  
 CIVIL ENGINEER: TERRY L. BIRD, 2008 #1 21718 Pl. from Hwy. CWS VEGETATED CORRIDOR IMPACTS Impact 118

**Totals**  
 Permanent Impacts: 385 Sq Ft  
 Temporary Impacts: 607 Sq Ft

CAPITAL CONSTRUCTION AND  
 TRANSPORTATION DIVISION  
 13125 S.W. HALL BLVD.  
 TIGARD, OREGON 97223  
 VOICE: 503-639-4171  
 FAX: 503-624-0752  
 WWW.TIGARD-OR.GOV

**Beaverton-Tualatin Hwy  
 (Hall Blvd) Crosswalk**  
 CWS Vegetated Corridor Impacts

FIGURE  
 CWS-VCI  
 FILE NO  
 0632



11.06.2009 17:23



11.06.2009 17:23



11.06.2009 17:27



11.06.2009 17:24





March 8, 2010

Cheryl Caines, Associate Planner  
 City of Tigard Planning Division  
 13125 SW Hall Boulevard  
 Tigard, OR 97223

**Re: Wall Street Extension (Fields) (CPA) 2009-00004**

Dear Cheryl,

Tualatin Valley Fire & Rescue endorses this proposal predicated on the following criteria and conditions of approval:

- 1) **DEAD END ROADS:** Dead end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround. (IFC 503.2.5)
- 2) **ADDITIONAL ACCESS ROADS – COMMERCIAL:** Where buildings exceed 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access. Buildings or facilities having a gross area of more than 62,000 square feet shall be provided with at least two separate means of fire apparatus access. Buildings up to 124,000 square feet provided with fire sprinklers may have a single access. (IFC D104)
- 3) **ADDITIONAL ACCESS ROADS – ONE-OR TWO-FAMILY RESIDENTIAL:** Where there are more than 30 one- or two-family dwelling units, not less than two separate approved means of access shall be provided. Where there are more than 30 dwelling units and all are protected by approved residential sprinkler systems, a single access will be allowed. (IFC D107)
- 4) **ADDITIONAL ACCESS ROADS – MULTIPLE-FAMILY RESIDENTIAL:** Where there are more than 100 multiple-family dwelling units, not less than two separate approved means of access shall be provided. Projects up to 200 dwelling units that are protected by approved residential sprinkler systems may have a single access. Projects having more than 200 dwelling units shall have two separate approved means of access regardless of whether they are equipped with fire sprinkler systems. (IFC D106)
- 5) **REMOTENESS:** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. (IFC D104.3)
- 6) **BRIDGES:** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with *AASHTO Standard Specification for Highway Bridges*. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official. (IFC 503.2.6)

*North Division Office*

14480 SW Jenkins Road, Beaverton, OR 97005

Phone: 503-356-4700

Fax: 503-644-2214

www.tvfr.com



**While we understand the applicants' intent with this proposal, we would be remiss if we did not include the above-noted Fire Code requirements. The fire district will not endorse the issuance of any site development permits unless fire code requirements for secondary access roadways are met.**

We trust this letter will be helpful with the final design of this proposal insofar as fire apparatus access is concerned. If there is anything about this letter you do not understand, disagree with, or wish to discuss further, please call me.

Sincerely,

*John K. Dalby*

John K. Dalby, Deputy Fire Marshal II  
Tualatin Valley Fire & Rescue, North Division  
14480 SW Jenkins Road  
Beaverton, OR 97005-1152  
(503) 356-4723



# Oregon

Theodore R. Kulongoski, Governor

Department of Fish and Wildlife  
 Sauvie Island Wildlife Area  
 North Willamette Wildlife District  
 18330 NW Sauvie Island Road  
 Portland, OR 97231  
 503-621-3488  
 FAX 503-621-3025

RECEIVED PLANNING

MAR 19 2010



CITY OF TIGARD

Date: March 12, 2010

To: Cheryl Caines  
 City of Tigard Planning Division  
 13125 SW Hall Blvd  
 Tigard, OR 97223

RE: **Request for Comments CPA 2009-00004/SLR 2009-00004 and 00005/VAR 2010-00002/TRE 2010-000002**

Dear Ms. Caines:

This correspondence is in response to the request for comments received by the Oregon Department of Fish and Wildlife (ODFW) from the City of Tigard Planning Division on March 1<sup>st</sup>, 2010. The applicant would like to remove Goal 5 protection from the area surrounding Fanno Creek and is undergoing a Sensitive Lands Review in order to work within the 100-year floodplain. Overall, ODFW is very concerned about the fish and wildlife species and habitat resource values present in this area that would be negatively impacted if protections were removed and work was allowed to occur. ODFW agrees with the City of Tigard's initial assessment in (include date) that the area in question is a significant natural resource. ODFW does not believe that the applicant has demonstrated that the proposed plan amendment is consistent with Goal 5 and its administrative rule. For these reasons, ODFW does not support removal of Goal 5 protection from this area.

ODFW reviewed the submitted documents and several matters of concern were illuminated. They are bulleted below and addressed in more detail within the following paragraphs.

- The Alternatives Analysis (Section K), Part 4 and 5 is incomplete. Part 4 does not address species and habitats of special conservation concern (e.g., State Sensitive Species, wetland habitat, etc.) that are present within the project site. Nor does it address the long-term impacts to fish and wildlife from the chosen alternative. Therefore, Part 5, Ecological Impacts of Alternatives, is not accurate and does not adequately describe ecological impacts from the chosen alternative.
- The Economic, Social, Environment, and Energy (ESEE) Analysis that was completed as part of the process to request a removal of Goal 5 protection from the area is also incomplete. The analysis does not address impacts to a wide variety of wildlife including, but not limited to, state classified and federally listed species and long-term impacts to species and habitat. Therefore, the ESEE Analysis is not accurate and does not adequately describe impacts to the environment.
- The applicant did not demonstrate that the amendment to remove Goal 5 protection is consistent with Goal 5 pursuant to and including OAR 660-023.

- The proposal does not include other existing alternatives that would meet transportation safety and property access objectives and likely remove the need for a Comprehensive Plan Amendment, as well as remove impact to the area.

ODFW recommends analyzing the impacts to natural resources after the following information has been considered and included in the analysis for the public's record of information. ODFW has documented this reach of Fanno Creek as critical for a number of wildlife and fish species, including those of special conservation concern. At present, ODFW has documented a breeding population of the western (Northern Pacific) pond turtle in this reach of Fanno reach. The western pond turtle is a federal Species of Concern in Washington County, a State Sensitive-Critical species, and a Strategy Species within the Willamette Valley Ecoregion as per the Oregon Conservation Strategy (OCS) (ODFW 2006). This breeding population, in fact, is the last known location for a breeding population of western pond turtles, not only in the Fanno Creek basin, but within the entire Metro Urban Growth Boundary. Additionally, ODFW has documented a breeding population of northern red-legged frogs, Federal Species of Concern, State Sensitive-Vulnerable species and OCS Strategy species, in this reach of Fanno Creek. ODFW recommends the City of Tigard continue to recognize this reach of Fanno Creek as Significant Wildlife Habitat under the safe harbor provision stated in OAR 660-023-0110 (4)a. This section states that local governments may apply safe harbor criteria where the habitat has been documented to perform a life support function for a wildlife species listed by the state of Oregon as sensitive. Additionally, the Department of State Lands has designated Fanno Creek as Essential Salmonid Habitat (ESH). ODFW has documented this reach of Fanno Creek as rearing habitat for Coho salmon and spawning habitat for steelhead (Lower Willamette River ESU, winter run), a state-classified vulnerable sensitive species, federally listed threatened species, and OCS Strategy species. ODFW expects that there are several other species of special conservation concern that use habitats within the area of interest for at least part of their life cycle including, but not limited to, the little willow flycatcher, slender-billed nuthatch, and California myotis (bat). It is important to note that OAR 635-044-0130 protects state classified sensitive species.

The impacts to the significant wetland, riparian, and wildlife habitat found within the area would be substantial, in the long-term, as well as the short-term. Short-term impacts from actual bridge construction are not the only impacts, nor the largest. Long term impacts to fish and wildlife from increased, noise, traffic, associated pollution, the physical bridge, and future development include:

- A reduction in migratory bird use and nesting waterfowl from noise, increased use, and physical presence of the bridge covering the East Pond.
- Increase in non-native plant and animal species due to more soil disturbance and increased accidental introduction.
- Increased encroachment and development threat to deciduous/conifer forest and the largest oak-camas prairie habitat (an OCS Strategy Habitat) left within Portland's Urban Growth Boundary.
- A reduction in stream health and function and impact to fish habitat from increased run-off, less tree cover, and increased garbage.

ODFW works hard to maintain and increase populations of native and identified sensitive species. As such, the removal of Goal 5 protection from this reach is undesirable given its significance and does not support ODFW's future desired conditions for the occurring species or potentially occurring species.

ODFW recommends that Goal 5 protection not be removed from the designated significant resources at Fanno Creek. The request for a Plan Amendment to remove Goal 5 protection from this area is not consistent with ODFW's management guidelines, the Oregon Conservation Strategy Actions, the City of Tigard's Comprehensive Plan Goal 5.1, or Metro's Fish and Wildlife Habitat Protection Plan. The Metro Council has designated this area as a Class 1 riparian (highest value) and a High Habitat Conservation Area.

ODFW recommends conserving this area as a fish and wildlife movement corridor and linkage to adjacent suitable habitats. Habitat fragmentation is a limiting factor (i.e., threat) to habitats and associated species within the Willamette Valley Ecoregion and the OCS provides guidance through Actions 4.2 and 4.3. Fanno Creek is a clear corridor among an otherwise highly urbanized area.

ODFW recommends analyzing other alternatives to meet transportation safety objectives for Hall Boulevard and property access to the area on the east side of Fanno Creek that do not impact significant aquatic and terrestrial habitats, State Sensitive Species, and/or OCS Strategy Habitats and Species. ODFW commented on the DSL permit application (#31719RF) for work related to this project. In the comments, dated April 9, 2004, it is stated that an alternative that widens Hall Boulevard to handle transportation issues was discussed during a pre-application meeting. ODFW supports considering alternatives including the widening of Hall Boulevard that do not impact this reach.

ODFW supports exploring other uses for this property with the landowner. Given the complex history of the property, reduced access options, high-value natural resources present, and high social benefits gained from this particular area, ODFW encourages the City of Tigard to work with the landowner and the Metro Council to consider a conservation easement or outright purchase of the property to benefit the Fanno Creek Linkages Project and safeguard this area for future generations and wildlife.

In summary, ODFW highly supports revision of the ESEE analysis of this designated significant natural resource and important and rare habitat and to make the information available to the public. Since the removal of a Goal 5 protection for this area is not consistent with ODFW management guidelines or the Oregon Conservation Strategy and the applicant has not demonstrated that the proposed amendment is consistent with Goal 5 and its administrative rule, ODFW does not support removing Goal 5 protection. However, ODFW does support looking for alternatives that do not impact the significant wetland, riparian, and wildlife habitat in and around Fanno Creek to satisfy transportation safety and access issues including the possible acquisition of the property or conservation easement.

Please address any questions you may have regarding these comments to Elizabeth Ruther at 503.621-3488 x228.

Sincerely,



Elizabeth J. Ruther  
District Habitat Biologist  
North Willamette Watershed District

Cc: Patty Snow, ODFW  
Tom Murtagh, ODFW  
Susan Barnes, ODFW



# Oregon

John A. Kitzhaber, M.D., Governor

## Department of Land Conservation & Development

800 NE Oregon St. # 18  
Portland, OR 97232  
(503) 731-4065  
FAX (503) 731-4068

April 6, 2010

Cheryl Caines  
Tigard Planning Department.  
13125 SW Hall Blvd.  
Tigard, OR 97223

**Subject:** Post Acknowledgement Plan Amendment (PAPA) to amend Goal 5 program for wetland protection. Local file number DCA 2010-0001 (DLCD file # 002-10)

Dear Ms. Caines,

The Department of Land Conservation and Development appreciates the opportunity to review and comment on the proposed amendment to the city's Goal 5 program for protecting locally significant wetlands. Based on a review of the material submitted in the notice for this action and a conversation we had in March I have the following comments:

This proposal is to allow a road to be built through a site along Fanno Creek that has been recognized as locally significant due to the riparian, wildlife habitat and wetland characteristics of the site. Statewide land use Goal 5, Oregon Administrative Rule 660-23-0090, 660-23-0100, 660-23-0110, and Metro's Title 13 all have bearing on the proposed amendment to the city's program to protect this area for the natural resource functions it provides. State and federal rules for permitting fill of a jurisdictional wetland also apply, but these permits are administered by Oregon Department of State Lands and the US Army Corps of Engineers, so are not the subject of this letter. My intent is to explain the interface between ORS 660-23 and Metro's Title 13 so that the procedural requirements for amending your local Goal 5 protection program are clearer.

As a regional government Metro has the ability to identify land use planning issues of regional significance and to adopt regional rules to comply with state land use laws for addressing such issues. Water quality, riparian protection and wildlife habitat protection have been identified as issues of regional concern by Metro. In 2007 Metro's Title 13 was acknowledged by the Land Conservation and Development Commission for compliance with Goal 5 for riparian areas and Wildlife habitat. In other words, if a jurisdiction meets the inventory and protection criteria set by Metro, and implements their local program in compliance with Title 13, they are also in compliance with the Goal 5 and the OAR 660-23 for riparian areas (660-23-0090) and wildlife habitat (660-23-00110). In an email I received, on March 11, 2010 Tim O'Brien, Metro Planner, explained that the city's process for evaluating the proposed changes to it's Title 13 program met Metro's requirements and that Metro did not plan to comment.

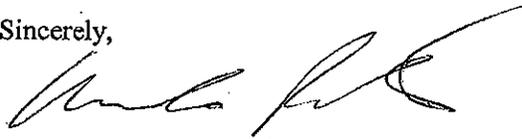


Cheryl Caines  
Tigard Planning Department  
April 6, 2010 – page two of two

Title 13 however was not intended to meet Goal 5 for wetlands, for this reason OAR 660-23-0100 applies directly to amendments to the city's program for protection of locally significant wetlands. To meet the requirements of OAR 660-23-0010 the applicant has correctly provided an analysis of the environmental, economic, social and energy consequences of a decision to allow, limit or not allow uses that conflict with the wetland resource. [Appendix R of the Meackenzie Group Report] Although the description of the Goal 5 ESEE process at the beginning of the analyses talks about significant fish and wildlife habitat, the information provided in the analysis speaks more generally of the wetland resource as a whole. It seems reasonable to conclude that this ESEE was submitted to address the Goal 5 considerations for proposed changes to the wetland protection measures for the site.

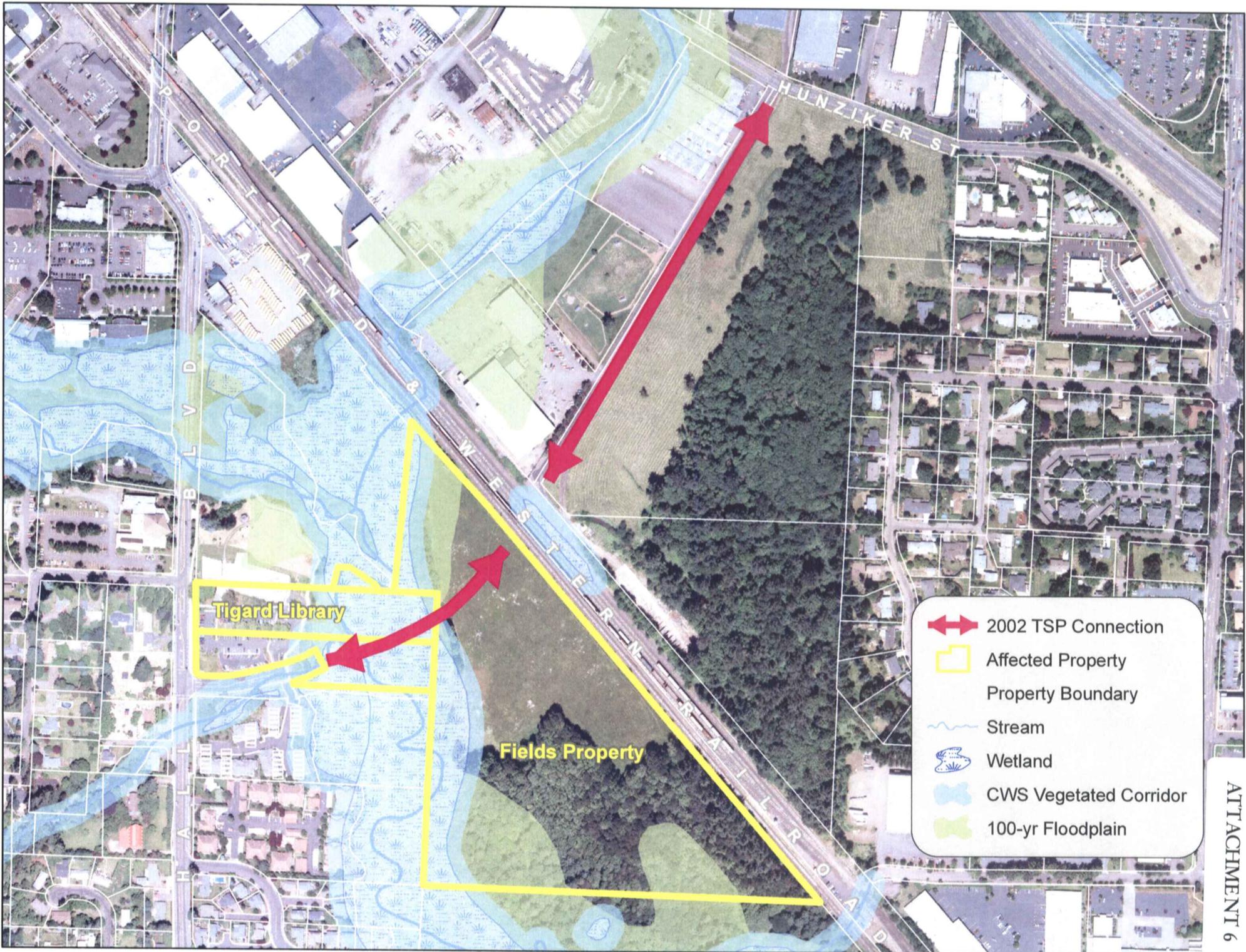
I recognize that this parsing of the subject area into riparian, wetland and wildlife habitat is a bit artificial because all of these attributes exist in one place. Unfortunately our construct of local, regional, and state efforts to protect these resources do not come together as seamlessly as nature. I hope this letter helps the city with navigating the overlapping review requirements. I am available to answer further questions that arise, as is our DLCD Metro Area Field Representative, Jennifer Donnelly. I can be reached by phone at 971-673-0961 or e-mail at [amanda.punton@state.or.us](mailto:amanda.punton@state.or.us).

Sincerely,



Amanda Punton  
Natural Resource Specialist

cc: DLCD staff - Rob Hallyburton, Jennifer Donnelly, File



-  2002 TSP Connection
-  Affected Property
-  Property Boundary
-  Stream
-  Wetland
-  CWS Vegetated Corridor
-  100-yr Floodplain

# VICINITY MAP

CPA2009-00004  
SLR2009-00004  
SLR2009-00005  
VAR2010-00002

## WALL STREET EXTENSION (FIELDS)

Subject Site



Information on this map is for general location only and should be verified with the Development Services Division.

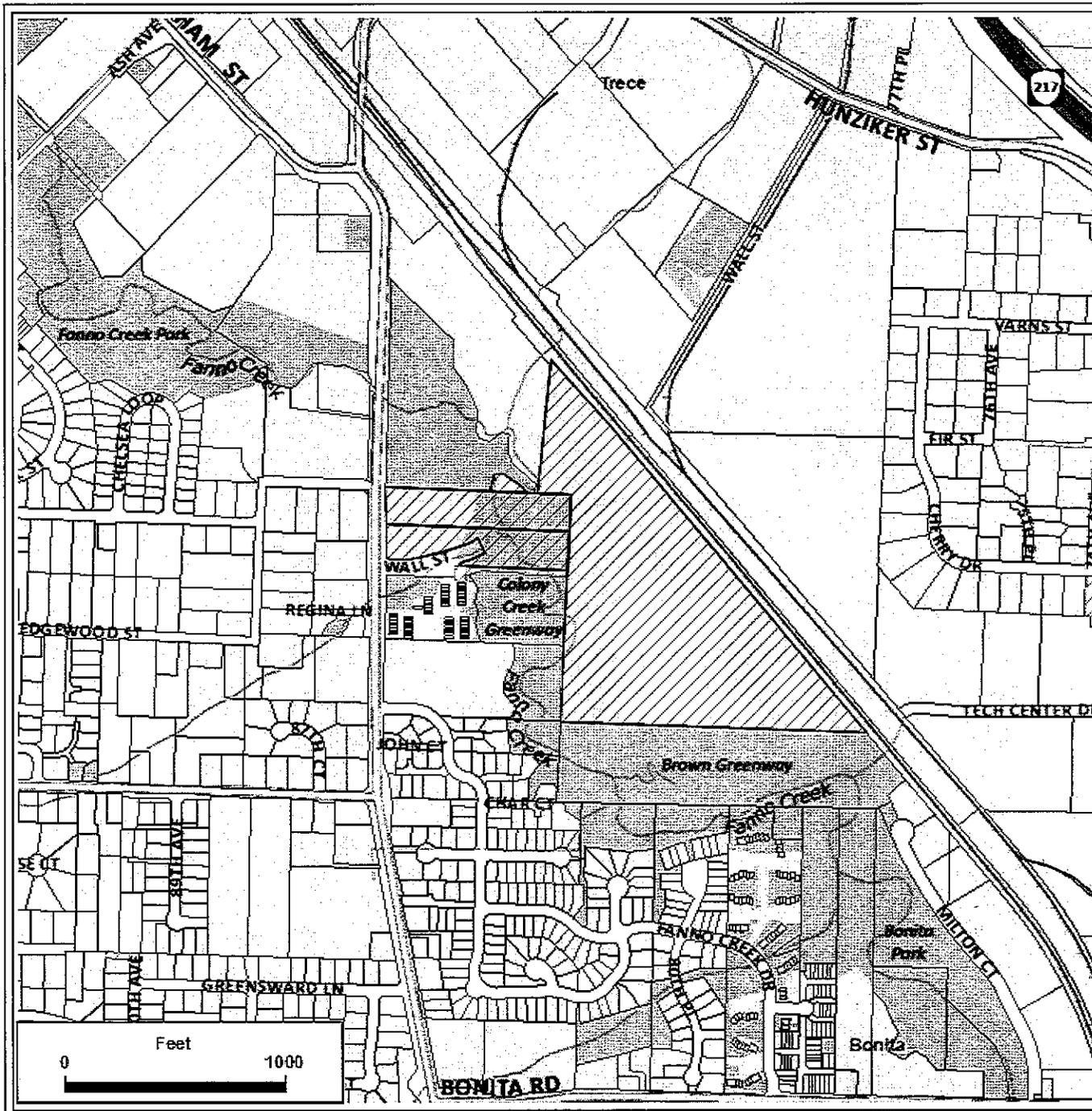
Scale 1:8,000 - 1 in = 667 ft

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Tigard, OR 97223  
503.639-4171  
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City of Tigard  
**M E M O R A N D U M**

TO: Tigard Planning Commission

FROM: Cheryl Caines, Associate Planner *CC*

RE: Fields Wall Street Extension

DATE: October 8, 2010

INTRODUCTION

A significant amount of evidence and information was submitted at and following the August 16, 2010 public hearing on the proposed Wall Street extension. Staff has prepared an addendum to the original Staff Report that addresses issues raised since the issuance of that report. Not all applicable criteria are re-addressed, only those needing additional findings or clarification. The findings within the original staff report are not being replaced, and Staff is still recommending that the Planning Commission recommend denial of all four applications associated with the proposal.

10-8-10 PLANNING COMMISSION PACKET

This packet contains the Addendum to the Staff Report and an article from the Oregonian submitted to the file by Commissioner Muldoon before the September 24<sup>th</sup> submittal deadline. There are no attachments to the addendum since it only refers to items already submitted into the record. All of these items have been forwarded to the Commissioners on compact discs.

ORGANIZATION OF THE STAFF REPORT ADDENDUM

Section III of the addendum outlines the report layout and other key information to be noted (pages 2 & 3). This section also provides a brief history of what happened during the public hearing, lists the submittal deadlines for information following the hearing, and a summarizes what was submitted to the record on each of those deadlines (pages 3-5).

Sections IV and V outline legal and code related issues that were raised throughout this process (pages 5 & 6). The legal issues relate to agreements between the City and the applicant regarding purchase of the library property, previous land use decisions, and the 2002 Transportation System Plan. There is an explanation of how these legal issues should be considered in the Planning Commission's recommendation.

Please also note that a new "pivot road" plan was submitted by the applicant during the new evidence phase. Staff views this as part of the alternative analysis only and not an approvable plan due to its impact on the library access. An explanation is found on page 6 of the report.

A staff analysis of the code related items follows in section VI (pages 7-19).

## APPLICATIONS

The application consists of four concurrent land use requests as follows:

1. A Comprehensive Plan amendment to remove Goal 5 protection from Fanno Creek's significant wetlands;
2. Sensitive lands review to do work in the Fanno Creek Wetland to construct the proposed Wall Street extension,
3. Sensitive lands review to do work in the Fanno Creek flood plain to construct the proposed Wall Street extension, and
4. An adjustment to the Tigard Development Code (TDC) street improvement standards to construct Wall Street to a narrower section than allowed by the TDC.

## CONCLUSION:

After considering the applicant's responses and new information submitted to the record, Staff has found that the applicable criteria have not been satisfied; including those related to work within the floodplain, removal of the Goal 5 protection for and work within the Tigard significant wetlands, adjustment to street standards, related Comprehensive Plan goals, Statewide Planning Goals, and Metro standards.

**ADDENDUM TO THE STAFF REPORT TO  
 THE PLANNING COMMISSION  
 FOR THE CITY OF TIGARD, OREGON**



120 DAYS = NA

**SECTION I. APPLICATION SUMMARY**

**FILE NAME:** FIELDS WALL STREET EXTENSION  
**FILE NOS.:** Comprehensive Plan Amendment (CPA) CPA2009-00004  
 Sensitive Lands Review (SLR) SLR2009-00004  
 Sensitive Lands Review (SLR) SLR2009-00005  
 Adjustment (VAR) VAR2010-00002

**PROPOSAL:** The applicant is requesting concurrent recommendations of approval by the Tigard Planning Commission of four separate actions: 1) an amendment to the Comprehensive Plan to remove Goal 5 protection from Tigard Significant Wetlands and the riparian corridor surrounding Fanno Creek in order to extend Wall Street across City of Tigard property and Fanno Creek to his property, 2) two Sensitive Lands Review permits for proposed work within the 100-year floodplain and wetlands, and 3) an adjustment to the street improvement standards in order to construct a narrower street section than required by code. Tree removal permits to remove trees within the sensitive lands were submitted under a separate application (TRE2010-00002).

**APPLICANT:** Fred Fields  
 1149 SW Davenport Avenue  
 Portland, OR 97201  
**APPLICANT'S REP.:** Group Mackenzie  
 Attn: Rhys Konrad  
 P.O.Box 4310  
 Portland, OR 97293

**APPLICANT'S REP.:** Miller Nash L.L.P.  
 Phil Grillo  
 3400 U.S. Bancorp Tower  
 111 SW Fifth Ave.  
 Portland, OR 97204  
**PROPERTY OWNER 1:** Same as applicant.

**PROPERTY OWNER 2:** \*City of Tigard  
 13125 SW Hall Blvd.  
 Tigard, OR 97223  
 \*Owner has not signed application  
**PROPERTY OWNER 3:** Aslak Eikram  
 by John O. Hayhurst  
 7805 SW Edgewater East  
 Wilsonville, OR 97070

**LOCATION:** No address, Washington County Tax Assessor's Map 2S102DA, Tax Lot 690.  
 No address, Washington County Tax Assessor's Map 2S102DD, Tax Lot 100.  
 13560 SW Hall Blvd., Washington County Tax Assessor's Map 2S102DD, Tax Lot 200.  
 No address, Washington County Tax Assessor's Map 2S10100, Tax Lot 1200.

**ZONE:**

R-12: Medium-Density Residential District. The R-12 zoning district is designed to accommodate a full range of housing types at a minimum lot size of 3,050 square feet. A wide range of civic and institutional uses are also permitted conditionally.

R-25: Medium High-Density Residential District. The R-25 zoning district is designed to accommodate existing housing of all types and new attached single-family and multi-family housing units at a minimum lot size of 1,480 square feet. A limited amount of neighborhood commercial uses is permitted outright and a wide range of civic and institutional uses are permitted conditionally.

**COMP PLAN:**

Medium Density Residential and Medium High Density Residential.

**APPLICABLE REVIEW CRITERIA:**

Community Development Code Chapters: 18.370-Variances and Adjustments, 18.380-Zoning Map and Text Amendments, 18.390-Decision-Making Procedures, 18.510-Residential Zoning Districts, 18.745-Landscaping and Screening, 18.775-Sensitive Lands Review, 18.790-Tree Removal, 18.810-Streets and Utility Improvement Standards; Tigard Comprehensive Plan Goals: 1-Citizen Involvement, 2-Land Use Planning, 5-Natural Resources and Historic Areas, 6-Environmental Quality, 7-Hazards, 8-Parks, Trails and Open Space, 11-Public Facilities, & 12-Transportation; Tigard Municipal Code Chapter 9 - Parks, Metro Functional Plan Titles 3 (Water Quality and Flood Management) & 13 (Nature in Neighborhoods), and Statewide Planning Goals 1-Citizen Involvement, 2-Land Use Planning, 5-Natural Resources, Scenic and Historic Areas and Open Spaces, 6-Air, Water and Land Resources Quality, 7-Areas Subject to Natural Hazards, 11-Public Facilities and Services, and 12-Transportation.

**SECTION II. STAFF RECOMMENDATION**

Staff recommends that the Planning Commission recommend **DENIAL** of the proposed Comprehensive Plan Amendment, Sensitive Lands Review, and Adjustment to the City Council.

**SECTION III. BACKGROUND INFORMATION**

**Purpose**

The purpose of this addendum is to address issues raised by the applicant and members of the public at the August 16, 2010 public hearing and submittals to the record following that same hearing.

**Layout**

The layout of this addendum strives to follow that of the original Staff Report (August 9, 2010) and includes the following information:

- A history following the original Staff Report has been included as part of the background information. This history includes topics of discussion at the August 16<sup>th</sup> hearing and an outline of the deadlines for submittals to the record.
- A description of the materials submitted to the record for each of the deadlines.
- An outline of issues addressed within this addendum. The issues are broken down into two categories: legal issues and code related issues. The code issues are either “new” (raised by submittals following the August 16<sup>th</sup> public hearing) or “previously addressed” (those concerns already addressed in the original Staff Report and at the August 16<sup>th</sup> public hearing).

- Staff's analysis of the materials and information submitted since the issuance of the original Staff Report.
- Summary/Conclusion.

**Other information to note:**

- Staff refers to numbered items within this addendum. These correspond to the numbering system used within the City's electronic version of the record and the CDs distributed to Planning Commissioners throughout this process.
- The findings within this addendum are in addition to those in the original Staff Report and are not a replacement for the original findings.
- Not every review criterion is re-addressed within this addendum. Additional findings were added to address new information submitted to the record and some of the applicant's 96 responses to the original Staff Report findings.
- The staff analysis section includes the relevant code criteria, Staff's original findings, the applicant's response, and additional findings for each criterion being re-addressed. For ease of reading, the applicant's response is in *italics* and additional staff findings are highlighted.
- The applicant states that certain criteria can be met as conditioned through an approval. Because Staff is recommending denial of this proposal, conditions of approval are not addressed for items such as construction details, Public Works Director approval for tree removal/planting on City property, revised Clean Water Services letter, etc.).

**History (following original Staff Report)**

**Public Hearing:**

A public hearing was held on August 16, 2010 with the Tigard Planning Commission to review the proposal and make recommendation to the Tigard City Council on the current Wall Street application. The staff report was presented by Staff and the applicant also gave a presentation on the application. Public testimony was taken, including written testimony. There was one proponent and nine opponents who testified.

The Planning Commission asked many questions of the applicant and staff following the presentations and applicant rebuttal. The discussions and questions revolved around the following issues:

- Railroad Crossing – the proposed plan is designed for an at-grade crossing and not an elevated RR crossing.
- Environmental, Social, Economic, Energy Analysis (ESEE) – what are the long term impacts? It is an insufficient analysis. Goal 5 is important to people.
- Milton Court as alternative – applicant states that analysis of an alternative is not required due to the alternatives analysis completed as part of Phase I, but Commissioner Vermilyea said it would be helpful as part of the package.
- Endangered Species Act – are there endangered or threatened species on-site and would an Environmental Impact Statement (EIS) be required?
- Changes since Phase I – there have been many changes since the assessments were done for Phase I, including the zoning. These changes do not seem to be addressed.
- It was strongly suggested that the applicant give alternatives to this alignment and access to the property, put in information or consider withdrawing the application and take an alternative approach. Are there other options than those pointed out by staff? Please get a copy of the draft TSP (TSP 2035) to meet the current desires of the community because the TSP has changed in relation to the extension of Wall Street. The applicant replied that a proposal must be based on some set of static information (take a snapshot somewhere in time). Mr. Grillo stated that numbers on the longer bridge span could be provided.
- A poll was taken of the Commissioners about what they'd like to see addressed by the applicant:
  - Application to reflect the changed circumstances rather than rehashing the submittal components for phase 1 which is considerably dated.
  - Talk to the railroad
  - Consider the changes in zoning
  - Flexibility – supply alternatives and options
  - Examine Milton Court more carefully
  - Report on possible adverse impacts to natural resources
  - Address the issues raised within the Staff Report.

- Seismic requirements for the bridge
- Respond to places within the staff report that they say insufficient information – provide the information or why that’s not necessary

The public hearing was not closed and the following schedule was agreed upon by all parties:

- Sept. 10<sup>th</sup> – Deadline for any new evidence submitted by any party.
- Sept. 17<sup>th</sup> – An opportunity for any parties to submit rebuttal evidence to that which was just submitted. Not new evidence, but rebuttal evidence.
- Sept. 24<sup>th</sup> – Any party may submit rebuttal arguments to the rebuttal evidence that was submitted the week prior.
- Oct. 8<sup>th</sup> – The staff report will be issued. It is hoped the staff report will not contain any new evidence and will only contain analysis and recommendations. If it contains new evidence, any party has the right to potentially rebut that. At this point, the City Attorney interjected “For the record, any arrangement we make, that scenario is going to play out.”
- Oct. 18<sup>th</sup> – The Planning Commission will convene for the continued public hearing and there will be no new evidence or argument and the Planning Commission will deliberate and be able to ask questions of staff and the applicant.

### Items Submitted to the Record:

#### August 16, 2010

At the August 16, 2010 public hearing the applicant submitted several items for the Planning Commission’s review. These included a memo from Group McKenzie addressing all 96 findings from the original Staff Report, a submittal which shows cuts on City property to balance proposed fill for the bridge construction, a letter responding to Oregon Department of Fish and Wildlife comments, and a letter to the City regarding legal issues. Electronic copies (compact disc) of all items submitted at the public hearing along with the draft meeting minutes were sent to the Planning Commission August 24, 2010.

#### September 10, 2010

Staff, the applicant, and members of the public all submitted information and new evidence into the record for the September 10<sup>th</sup> deadline. Electronic copies of this information were sent to the Planning Commissioners on September 13, 2010. Staff’s submittal included chapters 2 and 8 from the Tigard 2002 Transportation System Plan (TSP), arsenic contamination information for the Tigard library site, a 1993 Director’s Interpretation summary regarding fill within residential floodplain, and a zoning map and plans for the Fanno Creek Trail pedestrian bridge installed on City property north of the library.

The applicant submitted a Milton Court alternative analysis, a new plan showing a Pivot Road option for Wall Street (including proposed cuts on the applicant’s property), evidence to support that an Environmental Impact Study (EIS) is not necessary for this project and a memo from the applicant’s engineer regarding bridge seismic issues.

Over 60 comments were received from members of the public. Some had testified at the August 16, 2010 public hearing. The letters and e-mails touched on a wide range of topics. Many, but not all, of the letters had reoccurring themes that included: not removing the Goal 5 protection for the wetlands, disturbance to wildlife and their habitat/destruction of restored wetlands, increased traffic and trail safety, requested the property be purchased and preserved, loss of green space and quality of life, loss in property values, flooding issues, new housing is not needed, lack of public notice, and construction of a “bridge to nowhere”.

#### September 17, 2010

Staff submitted a signed copy of the 1993 Director’s Interpretation regarding fill within residential floodplain and a map showing the 1996 flood inundation for the Milton Court area. Five public comment letters were received. The writers addressed the applicant’s new Pivot Road plan saying it is a significant change and noted fallacies in the applicant’s analysis of Milton Court as an inferior alternative access to Wall Street. In addition, several commented on the City’s previous agreements with the applicant, Mr. Fields, by stating that no special favors are owed to the applicant and that the City also has an obligation to its citizens to act in a reasonable manner and not contrary to the public interest.

Electronic copies of these submittals were forwarded to the Planning Commission along with correspondence from the file (two letters). The first letter is addressed to the City from Dennis Griffin, Ph.D., at the Oregon Parks and Recreation Department stating that a cultural resource survey must be conducted on-site prior to proposed and future development due to archaeological sites being reported within adjacent lands. The second letter is addressed to the applicant's representative, Phil Grillo, from the City outlining the City's concerns about the new Pivot Road plan submitted on September 10, 2010.

September 24, 2010

The only item submitted to the record was a news article from *The Oregonian*, "Landowner, Tigard at Odds Over Wetland." This article was submitted to the record by Commissioner Muldoon. A copy of this article has been forwarded as part of this Planning Commission packet.

**SECTION IV. LEGAL ISSUES**

At the hearing and in written submittals, the applicant made direct references to the following items.

- 1) The Purchase and Sale Agreement ("PSA") entered into between the City and the applicant in 2001;
- 2) The City approval of Phase I of the construction of Wall Street;
- 3) The inclusion of a connection from Hall Boulevard to Hunziker Street in the City Transportation System Plan ("TSP"); and
- 4) The City approval of the Fanno Creek Trail foot bridge (SLR2009-00002).

The applicant has indicated that particular weight be given to each of these items in the determination of this application, and at the very least implied that as a result of the City's prior actions as related to the above items, the Planning Commission may in some way be obliged to decide various issues in favor of the applicant. Accordingly, staff has consulted with the City Attorney with regards to the nature of any precedential or other consideration that the Planning Commission must give these items. The response of the City attorney is summarized below.

- The PSA does not obligate or allow the Planning Commission to base its recommendation on anything other than an unbiased determination of whether the proposed development is consistent with all applicable comprehensive plan and Tigard Community Development Code (TDC) criteria.
- The City's TSP includes local street connectivity between Hall Blvd. and Hunziker St. as well as between Milton Ct. and Hall Blvd. (TSP Figure 8-12). Such inclusion does not affect the criteria applicable to the current request to amend the City's Goal 5 analysis. The applicant must comply with TDC 18.775.130 in its entirety.
- The City's approval of the construction of a portion of Wall Street to access the library property does not establish that the applicant is entitled develop the Wall Street extension in the currently proposed alignment.
- The City's approval of the Fanno Creek Trail foot bridge does not establish, as the applicant contends, that the development proposed within the floodplain constitutes public support facilities.

**SECTION V. CODE RELATED ISSUES**

From the hearing and subsequent submittals, a few new issues arose and new information was submitted by the applicant to address issues raised within the original staff report. This section will outline and address some of the issues not directly related to code requirements, policies, goals and standards. An analysis of the new information based on approval criteria will follow under Section VI of this report.

### **New Issues:**

Many of the new issues were raised by members of the public. These include questions on whether adequate notification was provided by the City and social impacts of removing the Goal 5 protection from the on-site resources. The introduction of a new plan (pivot road) was seen as an issue by Staff and the public, who noted inadequate opportunity for public review/comment.

### Staff's Response to the Pivot Road Alternative

On September 10, 2010, the applicant submitted a plan showing a revised alignment and design for the Wall Street extension. As noted in a letter (#40) to Phil Grillo from Ron Bunch, Community Development Director, Mr. Bunch has "significant concerns about the implications that the pivot road is an option for either the Planning Commission or City Council" to consider and that "if this is the case, then it likely constitutes a significant change" to the application. The letter was written as an opportunity for the applicant to withdraw the new materials. The applicant has requested a pre-application conference with Staff regarding the pivot road proposal following a conversation about this plan with Mr. Bunch on September 15, 2010; however, the applicant has not withdrawn the plan or indicated how they wish it to be considered within the existing application. **Staff will continue to process the current application and consider the pivot road plan as new evidence related to the alternatives analysis.** City Council will be the review body to make the determination on the "significant change" issue as outlined in TDC 18.390.080.D.4.

### **Previously Raised Issues:**

The following issues were raised within the original Staff Report. Staff has completed analysis of the additional/new information submitted regarding these issues.

#### **Variations and Adjustments**

- The applicant did not provide facts about what adverse impacts to the natural resources would be avoided by a narrower bridge deck.

#### **Sensitive Lands**

##### *Wetlands*

- An Economic, Social, Environmental, Energy Analysis (ESEE) is required to show that the Goal 5 protection should be removed from the Tigard Significant wetland to construct the extension of Wall Street. The applicant's analysis fails to show that the positive economic impact outweighs the adverse impacts to the resource.
- Alternatives to the 320-foot bridge span that may avoid or have less impact upon natural resources were explored showing that there may be alternatives to the proposed location and bridge design.

##### *Floodplain*

- Land form alterations (any man-made change to improved or unimproved real estate) are only allowed within 100-year floodplain in areas designated as commercial and industrial on the Comprehensive Plan land use map, except that alterations or development associated with community recreation uses, utilities, or public support facilities are allowed. The proposal is not associated with any of these three uses.
- The Tigard Community Development Code (TDC) requires no increase in the water surface elevation of the 100-year floodplain due to land form alteration or development. Compliance with this standard has not been demonstrated by the applicant.

#### **Street and Utility Improvements**

- A temporary turnaround has not been proposed but is necessary to meet city standards.
- It is unknown if the design of the bridge could accommodate utilities that will be above the floodplain or resistant to flood damage.

#### **Statewide Planning Goals**

- The applicable goals related to environmental quality, hazards, parks, recreation, trails and open space, and public facilities and services are not satisfied as noted in the original Staff Report. The applicant has not met the burden of proof for many of the development and municipal code standards that implement these goals.

## SECTION III. STAFF ANALYSIS

### Variations and Adjustments (18.370)

Adjustments for street improvement requirements (Chapter 18.810). By means of a Type II procedure, as governed by Section 18.390.040, the Director shall approve, approve with conditions, or deny a request for an adjustment to the street improvement requirements, based on findings that the following criterion is satisfied: Strict application of the standards will result in an unacceptably adverse impact on existing development, on the proposed development, or on natural features such as wetlands, bodies of water, significant habitat areas, steep slopes or existing mature trees. In approving an adjustment to the standards, the Director shall determine that the potential adverse impacts exceed the public benefits of strict application of the standards.

**FINDINGS:** The applicant has requested an adjustment to the street improvement requirements to construct a narrower street section by eliminating the planter strips on the bridge portion of Wall Street. The applicant must show how the wider street results in unacceptable adverse impacts on existing or proposed development or natural features and how these impacts exceed the public benefit of strict application of the standards. The following reasons are listed by the applicant for the requested adjustment: strict application would result in additional wetland and vegetated corridor impacts, inconsistency with the proposed location of Wall Street that has been reviewed within the submitted material and inconsistency with a previously approved (Joint Fill) permit. In addition, the applicant states that the adjustment does not impact the public benefit as the proposed street extension will still provide vehicular, pedestrian and bicycle access. The Joint Fill permit referenced by the applicant is now expired and is no longer valid.

The applicant has provided inadequate facts for Staff to evaluate this request. No evidence is proposed to support the applicant's assertion that unacceptably adverse impacts on the natural areas will result from a wider bridge deck. Nor has the applicant explained the nature and character of any such impacts and how the impacts are unacceptable.

*Applicant's Response:* Staff's statement summarizes information related to the requested adjustment of the bridge section of Wall Street. The applicant's response to this criterion can be found on pages 38-40 in our October 3, 2009, materials. To further demonstrate compliance with this criterion additional information is provided. The location of this extension has already been decided upon in two ways; the first is with the adoption of the TSP, and the second is through the alternatives analysis approved with Phase I. Further, five different bridge lengths have also been considered and the proposed 320-foot length identified as the preferred alternative. As listed on page 9 of Exhibit K on the October 3, 2009, submittal, the bridge section associated with the preferred alternative is reduced and eliminates the planter strip.

*The reduction of the bridge width to remove the planter strip eliminates unacceptable adverse impacts to wetlands, floodplain, significant habitat areas, and mature trees. On page 10 of 32 of the Phase I decision (Exhibit G), Tigard found that "In addition to selecting the most feasible and least impacting road alignment, impacts are further reduced by removing much of the planter strip along the south side of the road to maintain as great a distance as possible from the resource." Our request in Phase II is similar, provides a public benefit in the same way it did in Phase I, by eliminating the planter strip from the bridge section to maintain the greatest distance possible from the resource. This criterion is met.*

**ADDITIONAL FINDINGS:** As noted in the original Staff Report, the applicant has not provided information explaining the impacts of a wider bridge deck on the natural areas and how these impacts are unacceptable. The criteria to justify an adjustment to the street improvement standards have not been met.

### Decision Making Procedures (18.390)

#### **D. Notice of hearing.**

- 1. Required hearings.** Two hearings, one before the Commission and one before the Council, are required for all Type IV actions, except annexations where only a hearing by the City Council is required.
- 2. Notification requirements.** Notice of the public hearings for the request shall be given by the

Director in the following manner:

- a. At least 10 days prior to the scheduled hearing date, notice shall be sent to:
    - (1) The applicant;
    - (2) Any affected governmental agency;
    - (3) Any City-recognized neighborhood group whose boundaries include the site; and
    - (4) Any person who requests notice in writing and pays a fee established by Council resolution.
  - b. At least 10 business days prior to the scheduled public hearing date, notice shall be given in a newspaper of general circulation in the City.
  - c. The Director shall:
    - (1) For each mailing of notice, cause an affidavit of mailing to be filed and made a part of the record as provided by Subsection D.2.a; and
    - (2) For each published notice, cause an affidavit of publication to be filed and made part of the record as provided by Subsection D.2.b.
3. Content of notice. The notice given to persons entitled to mailed or published notice pursuant to this section shall include the following information:
- a. The number and title of the file containing the application and the address and telephone number of the Director's office where additional information can be obtained;
  - b. A description of the location of the proposal reasonably calculated to give notice as to the location of the affected geographic area;
  - c. A description of the substance of the proposal in sufficient detail for people to determine that a change is contemplated and the place where all relevant materials and information may be obtained or reviewed;
  - d. The time(s), place(s), and date(s) of the public hearing(s); a statement that public oral or written testimony is invited; and a statement that the hearing will be held under this title and rules of procedure adopted by the Council and available at City Hall or the rules of procedure set forth in Section 18.390.060.E;
  - e. Each mailed notice required by this section of the ordinance shall contain the following statement: "Notice to mortgagee, lienholder, vendor, or seller: The Tigard Development Code requires that if you receive this notice it shall be promptly forwarded to the purchaser."
4. Failure to receive notice. The failure of any person to receive notice as required under Subsections B and C of this section shall not invalidate the action, providing:
- a. Personal notice is deemed given where the notice is deposited with the United States Postal Service;
  - b. Published notice is deemed given on the date it is published.

Removal of Goal 5 protection from significant wetlands is a quasi-judicial Comprehensive Plan Review under a Type IV procedure. Two public hearings are held (one before the Planning Commission and the second before the City Council) at which an opportunity for public input is provided. The City has mailed notice of the Planning Commission hearing to property owners within 500 feet and persons who have requested to be on. A request for comments was mailed to affected agencies, including Department of Land Conservation and Development. The City published notice of the Planning Commission hearing in the Tigard-Tualatin Times (July 29, 2010). After the final Planning Commission public hearing, additional notice will be published prior to the City Council hearing. Although not required by code, a notice of the Planning Commission hearing was posted on the library site (at the end of Wall Street) one week prior to the hearing on August 9, 2010. The notification requirements have been met.

### Sensitive Lands Review (18.775)

#### **18.775.040 General Provisions for Floodplain Areas**

##### **Water Supply Systems:**

**All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.**

**FINDINGS:** The applicant states that the roadway extension does not include water supply systems. One way to supply water to the site for future development is on the bridge. It is unknown if the current bridge design will accommodate a future water supply system, or if the system can be designed to minimize or eliminate infiltration of floodwater if below the flood elevation level.

*Applicant's Response: This criterion does not apply at this time, because no water supply systems are proposed. Future development will address the extension of utilities.*

*It should be noted, however, that Sheet R2.3 shows the potential location of a waterline. As it relates to utilities for future development, these would be proposed to be affixed to side or bottom of the bridge structure in design, or dependent on the selection of bridge type and with concurrence of the City, penetrate the structure itself. In all these cases, the utility would be at an elevation above the base flood elevation over the length of the bridge. Outside of the structure, the pipes would be buried per typical construction, and at a typical bury depth of 3 feet, pipes may only be at or below the base flood elevation and within the floodplain limits for approximately 150 feet beyond the east end of the bridge. As determined by design, piping could be anchored to prevent displacement. Typical means would consist of concrete collars or metal anchors fixed more deeply into the soil. This criterion can therefore be met in the future, when anticipated utilities are added to the bridge. These drawings show that it is feasible to meet this criterion.*

**ADDITIONAL FINDINGS:** A provision for extending water service across with the bridge needs to be incorporated into the project design for the structure. The applicant states that the criterion does not apply. However, it does in that it must be incorporated into the design to ensure that the line is placed properly and is protected from flood damage. The location and method of integration needs to be more fully developed. This standard is not met.

### **18.775.070 Sensitive Lands Permits**

**Within the 100-year floodplain.** The Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:

**Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;**

**FINDINGS:** The applicant states that OBEC Consulting Engineers/West Consultants were retained by the City previously to analyze hydraulic impacts of bridge alternatives (applicant's Exhibit K). This analysis was done as part of a 2002 City proposal to cross Fanno Creek. The applicant states that the analysis concludes that a 320-foot bridge will span the floodway and would meet City/FEMA requirements related to no rise with a balance of earthwork volumes. Because this report did not directly address the requirements of 18.775.070, a memorandum was prepared by Matt Butts, a P.E. with Group MacKenzie. Mr. Butts speaks to the City's zero-foot rise requirement by stating that the net fill due to Phase 2 is approximately 1,069 CY, and that there are excavation areas within the project vicinity to satisfy the needed cut volumes to preserve floodplain storage. These areas of storage are not shown, and the applicant has not provided the necessary information to reach positive findings on zero-rise. This criterion is not satisfied.

*Applicant's Response: This criterion is addressed on pages 19-20 of the submittal dated October 3, 2009. We also offer the following clarification. First, the areas where flood storage can be added to mitigate for impacts related to the proposed construction are detailed in our October 3, 2009, submittal. After extensive discussions with staff, staff asked us to remove any proposed mitigation areas outside the applicant's easement. We did so on June 6, 2010. Staff now contends that we do not meet this criterion due to revisions to our application that they requested. We are therefore resubmitting this information again, in order to demonstrate compliance with this criterion. If the City refuses to cooperate and will not allow mitigation to occur on their site, it is feasible for such mitigation to occur on Fred Fields' adjacent property.*

**ADDITIONAL FINDINGS:** The applicant has not shown a zero-rise. Although FEMA allows a 1-foot rise in the floodway, the City requirement of zero-rise is stricter than what FEMA allows. Until the applicant demonstrates zero-rise in the floodway, this standard remains unmet.

As for the proposed cuts on City property, many are located within areas of arsenic contamination. This can be seen by comparing Figure 2 of the 2009 Revised Focused Feasibility Study (#34c -- Staff Submittal) with the applicant's floodplain impacts plan R2.6 (#23 -- Applicant's Feb 2010 submittal, exhibit L). The City is currently working with a consultant, GeoEngineers, to obtain a No Further Action (NFA) determination from Oregon Department of Environmental Quality (DEQ) by preparing a Comprehensive Management

Plan. This plan is not yet finalized, but is expected to show capping and no further disturbance of contaminated areas. The applicant's proposed cuts would be contrary to that plan. Any disturbance of soils in this area would require approval from DEQ. The applicant has not addressed this issue at this time.

Furthermore, the proposed excavation of the area north of the library (North Field) is also unacceptable due to its location immediately adjacent to the library building. As noted by Gus Duenas, Development Engineer, within a September 2010 memo (#34c – Staff Submittal), this location is not appropriate. The excavation area will fill with water during a major flood and likely pond during wet weather. This regular saturation of the ground near the foundation of the library may create stability issues for the building and require continual maintenance.

**Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;**

**FINDINGS:** The sites involved are zoned R-12 (Medium Density Residential) and R-25 (Medium High Density Residential). Proposed affected areas within the floodplain are zoned R-12, which is a residential zone. According to this standard, land form alterations or developments within the 100-year floodplain are allowed only in commercial and industrial zones. The only exception is for community recreation, utilities, or public support facilities. The applicant argues that the proposed fill and pilings for the road are public support facilities.

Standard 18.775.070.B.2 says that a definition of public support facilities can be found in TDC Chapter 18.120- Definitions, but one is not provided. The applicant points to how the term is used in standard 18.775.020.E.1.a (administrative sensitive lands review), which reads: "...the City Engineer shall review the installation of public support facilities such as underground utilities and construction of roadway improvements including sidewalks, curbs, streetlights, and driveway aprons by means of a Type I procedure..." The applicant states that inclusion of the phrase "construction of roadway improvements" strongly indicates that roadways are allowed in residential floodplains and that support structures for bridges are public support facilities. This interpretation would allow the proposed extension of Wall Street since the roadway is above the floodplain elevation and supported by pilings, structural fill, and wingwall/retaining walls.

The applicant then points to the term public facilities as used in the purpose statement of Chapter 18.810 of the Street and Utility Improvements chapter of the TDC. This statement reads "to provide construction standards for the implementation of public and private facilities and utilities such as streets, sewers, and drainage". The applicant states that streets are public facilities; therefore the support structures for Wall Street are public support facilities.

The applicant argues the definition of support as something physical, while Staff argues the term is used to show an ancillary role, which is better supported in the context of the code. Staff points to the fact that the items listed in 18.775.020.E.1 only include facilities found along streets, all of which play a supportive role in the street and transportation system. The City of Aurora, Oregon uses the term "public support facilities" within its Land Development Code (Title 16) and defines the term as "services which are necessary to support uses allowed outright in the underlying zone and involves only minor structures such as power lines and poles, phone booths, fire hydrants, as well as bus stops, benches and mailboxes which are necessary to support principal development". Again the examples used are all things found along a street.

In response to Staff's prior completeness review request of the applicant to show how the term "public support facilities" has been previously interpreted, the applicant points to a land use approval to construct a portion of the Fanno Creek Trail within the floodplain (SLR2009-00002). This decision permitted the installation of a sidewalk, elevated boardwalk, and bridge across Fanno Creek, within the 100-year floodplain. Most of the work occurred on property that was zoned (I-L – Light Industrial), but a portion of the bridge is located within land (library property) zoned R-12 (Medium Density Residential). The applicant draws parallels between the pedestrian bridge and the proposed Wall Street vehicular bridge, which is 180 meters downstream from the pedestrian bridge.

In a letter dated December 1, 2009 from the applicant's attorney, Phil Grillo, it is stated that both the staff report and the Hearing's Officer's findings for the trail application treat pathways as roads. Staff contends Mr. Grillo's use of terms like roadway, streets, trails, and pathways were taken out of context. These terms were used by Staff to show no land use review is typically required for these facilities unless within sensitive lands in response to testimony about a change of use requirement or to show that the proposed improvements were not commercial, industrial, or non-residential structures that require lowest floor flood-proofing.

In SLR2009-00002, the Hearing's Officer concluded that the surface of the boardwalk met the requirements of 18.775.070.B.5 that pedestrian/bicycle pathways be above the elevation of an average annual flood.

When addressing the standard regarding fill within residential floodplain, Staff found that the proposed improvements were allowed because the sidewalk is a public support facility and the trail is a community recreation facility. The sidewalk (public support facility) is located on land zoned Light Industrial. As noted above only a small portion of the bridge (community recreation) is located within residential floodplain. The applicant is trying to compare a 62-foot long, 8-foot wide pathway bridge that involved approximately 4 cubic yards of fill with the extension of a collector street bridge (320 feet) that involves approximately 2,010 cubic yards of fill. While bicycle/pedestrian pathways have some transportation attributes, they are also community recreation. The applicant has not proven the term public support facilities applies to the proposed fill and pilings required for the extension of Wall Street.

*Applicant's Response: Staff's position is that the proposed pilings and fill needed to support the proposed bridge do not constitute alterations or development associated with "public support facilities," as that term is used in TDC Section 18.775.070(B)(2). We disagree, and have explained why the pilings and fill are needed to support the bridge to qualify as "public support facilities" under this section of the code. Our detailed analysis on this issue is found at pages 20-23 of our January 15, 2010, materials, at Exhibit U, and in Mr. Grillo's letter of August 16, 2010.*

*Staff argues that the term "public support facilities" only applies to such things as power poles, phone booths, fire hydrants, bus stops, benches, and mailboxes. This interpretation is not supported by any text or context within the City's code.*

*As a practical matter, staff's interpretation makes little sense. Most of the structures staff says would qualify as "public support facilities" would need to be anchored in the floodplain by some sort of pilings, excavation, or fill. These items cannot simply be placed in the floodplain—they require fill, excavation, and/or pilings of some sort, just as was the case with the Fanno Creek Trail Bridge case, cited in our materials. It is irrelevant that the pilings and fill for that bridge required less fill of different types of footings than will be required for our bridge. What is relevant is that pilings and fill (i.e., alterations and development) associated with a bridge that will allow a planned transportation facility to be constructed above the floodplain, constitute "public support facilities" for purposes of the code. In other words, when dealing with planned transportation facilities in floodplains, the hearings officer in the Fanno Creek Bridge case made a clear distinction between the need to locate the surface of a planned transportation facility above the floodplain elevation, and the competing need for public support facilities to extend below the floodplain elevation in their ancillary role of keeping the street itself above the floodplain elevation. As the hearings officer correctly concluded in the Fanno Creek Bridge case, unless the provisions of TDC 18.775.070 are interpreted in this way, it would be "impossible" to construct planned transportation facilities through the floodplain, except in relatively narrow floodplain areas. For the above reasons, and the reasons detailed elsewhere in our materials, this criterion is met.*

**ADDITIONAL FINDINGS:** The applicant argues that the pilings and fill (alterations and development) are public support facilities. However, the code states that alterations or development associated with community support facilities, utilities, and public support facilities shall be allowed in areas designated residential. In this proposal, the pilings and fill are the alterations and development. If the pilings and fill are associated with a public support facility, then they are allowed. The pilings and fill are associated with the construction of a bridge for the extension of a road, which are not public support facilities. As noted in staff's previous findings, public support facilities are items found along a road such as sidewalks, curbs, streetlights, and driveway aprons.

In addition the applicant states that the Hearing's Officer in the Fanno Creek Bridge case made findings related to public support facilities. As previously noted by staff, the Hearing's Officer concluded that the surface of the boardwalk met the standards of 18.775.070.B.5 that requires pedestrian/bicycle pathways be

above the elevation of an average annual flood and not the supporting structure or fill. Also in the Fanno Creek Bridge case, the majority of the work took place on industrial zoned land, in which this code provision does not apply. A small portion of fill and pilings were constructed on residential land to construct a bridge for a trail, which is community recreation. These alterations are allowed in residential flood areas.

The applicant's proposal with or without the proposed cuts on City property still require development and land form alterations within flood areas in a residential zone and are not associated with community recreation, utilities, or public support facilities; therefore the proposal does not meet this criterion.

**Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;**

**FINDINGS:** The applicant's hydraulic analysis prepared by WEST Consultants, Inc. (applicant's Exhibit K) shows an increase in the water surface elevation of the 100-year flood. These increases are shaded in Table 1 – Results for the Base Flood Event (see footnote #2). This footnote reads that “the shaded area above corresponds to where the 100-year water surface elevations would be increased as a result of the proposed bridge plan.” In this case, the elevation for the proposed 320-foot span would increase the elevation between 0.1 and 0.4 feet. This standard is not met.

*Applicant's Response:* This criterion has been met with the response provided on pages 20-21 of the October 9, 2009, submittal. Additional information has been provided for clarification on the OBEC analysis provided with Phase I (Exhibit K). As part of the March 2005 Alternative Analysis prepared by the City, Phase 1 was adopted and Plan 3 (a 320-foot long bridge) was proposed as the alignment and bridge length for the Phase 2 extension. The June 11, 2003 attachment "Hydraulic Analysis of Various Bridge Plans" by WEST Consultants concluded the 320-foot long span could be utilized without a floodplain elevation rise on Fanno Creek upstream of the Hall Boulevard crossing. It did note this bridge impact would create a floodplain elevation rise local to the bridge of 0.1 to 0.4 feet, but this would not impact the Library improvement or other, existing improvements in the area.

*Given this data, we calculated the net fill volumes to be placed in the floodplain and established a plan (attached) to excavate a similar amount within the area identified to contain the rise in floodplain elevation. This work tracks the recommendation of the WEST Consultants report (page 7, note 10), which called for offsetting the increase in water surface elevation "by excavating high ground". This data reflects the ability to construct the proposed bridge without a rise in the flood elevation.*

**ADDITIONAL FINDINGS:** As noted in previous findings, the hydraulic analysis provided by the applicant (#15 - Exhibit K – applicant's original submittal) shows the 320-foot long bridge will raise the 100-year flood between 0.1 and 0.4 feet. The standard requires no increase in the water surface elevation. In addition, the resubmitted documents show cuts within the floodplain to comply with the zero-rise requirement that are immediately adjacent to the library building. This is not an appropriate location for an excavation area that would fill with water during a major flood. This standard is not met.

**Within wetlands:**

**The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:**

**The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;**

**FINDINGS:** The applicant states the Alternatives Analysis demonstrates that the proposed impacts are the minimum practicable for the project and that no other alternatives exist. There are other alternatives, including a longer bridge that spans the entire floodway and avoids the wetland. Another alternative is to gain access across Metro property to the south from Milton Court. These alternatives were not discussed in the Alternatives Analysis (Exhibit K), only within the applicant's narrative. The amount of disturbance to the wetlands for each alternative was not provided. A longer bridge would not impact the wetland and there are no mapped Tigard significant wetlands on the Metro site. The applicant has not shown how the proposed land form alteration will create the minimum disturbance to the wetland for the use.

*Applicant's Response: This criterion is addressed on page 23 of the submittal dated October 3, 2009. The "alternatives" issue is addressed in the August 16, 2010, letter from attorney Phil Grillo.*

**ADDITIONAL FINDINGS:** The applicant's representative, Phil Grillo, notes in his August 16<sup>th</sup> letter addressing legal issues (#28) that an alternative analysis is not required. However an analysis of the Milton Court alternative access was provided per the Planning Commissioner's request and a plan showing an alternative Wall Street extension design (pivot road) was submitted on September 10, 2010 (#35 a, b, & c). As noted within the original Staff Report, there are no mapped significant wetlands that would be affected by a Milton Court extension and the alternative plan may also create less impact on the Tigard significant wetlands found on the Wall Street site. This information shows there may be alternatives to enable the applicant to access the site without impacting or having less impact upon Tigard significant wetlands. This standard is not satisfied.

#### **Milton Court Alternative:**

On September 10, 2010 the applicant submitted documents to address the Planning Commission's request to explain their argument that Milton Court is not a reasonable alternative to the Wall Street access (#35 a & b). The letter to Commissioners from the applicant's representative, Phil Grillo, outlined several issues such as Milton Court does not abut the site, Milton Court floods, extension would impact significant natural resources, operational and safety problems on Bonita, violates city street standards, does not support the city's environmental justice policies, and exacerbation of existing street connectivity problems.

Staff acknowledges that both the Wall Street and Milton Court alternatives for access to the applicant's property present issues; however clarification is necessary for some of the applicant's analysis.

- Milton Court does not abut the site; however, neither does Wall Street or Hall Boulevard. The applicant has a 60-foot wide access easement across City property, but has not met the approval criteria to extend Wall Street to the applicant's property.
- A portion of Milton Court is mapped within a 100-year floodplain. However, the applicant did not provide information to show that the street would be affected by floods. Information from the City's Geographic Information System, Tigard Maps, was entered into the record showing the 1996 flood inundation in relation to Milton Court (#38). The '96 flood was not a 100-year event, but was a record peak flow. The map provided shows that Milton Court was not affected.
- There would be some impact to natural resources, but the proposed access by extending Wall Street also impacts natural resources. It is unknown if access from Milton Court would impact a significant wetland like the Wall Street alignment considering its distance from any mapped wetland. In addition, both street extensions would impact significant habitat area, although the Milton Court area has some lower value habitat area than the Wall Street extension location.
- Milton Court is a collector street that would provide access from the site to a public street, Bonita Road. The applicant's traffic engineer outlines issues with the connection, including a failing intersection. Nevertheless the analysis is unclear as to whether or not the intersection is already failing. The applicant's engineer also only explores one means of mitigation (a signal at Milton Court) and no other options. Connectivity is not increased by either Wall Street or Milton Court because there is still the issue of crossing the railroad to provide connectivity to the east. Neither the Milton Court nor Wall Street extension meets City standards for cul-de-sacs length.
- The applicant refers to environmental justice policies based on Figure 4-2 (Environmental Justice Populations) within the draft 2035 TSP. This document, which has not yet been approved by City Council, does not outline the City's environmental justice policies. Figure 4-2 identifies areas with Block Groups for significant non-English speaking, senior, and low-income populations. The development site is located within a large area with non-English speaking populations. This area also includes Milton Court. This information was considered in the evaluation of potential transportation projects and is not City policy regarding specific populations or development applications.

In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of the bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.

3. The minimum width for "marginal or degraded condition" vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50% of the standard width, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130.

FINDINGS: As noted above, the vegetated corridor is in marginal or degraded condition. The applicant states that the required 50-foot vegetated corridor has been shown on the plans in accordance with CWS standards utilizing a professional survey and wetland delineation. However, the applicant does not address if any reductions are proposed or by how much the width is reduced.

*Applicant's Response: This criterion is addressed on page 29 of the October 3, 2009, submittal. Per TDC 18.775.090(B)2 the standard width for vegetated corridors along Fanno Creek is 50 feet, unless wider in accordance with CWS "Design and Construction Standards." The site's vegetated corridors are marginal or degraded and are therefore 50% of the standard width (25 feet) per this criterion. However, CWS vegetated corridors are 50 feet. No reductions are proposed, and the full 50-foot width (as required by CWS) is proposed to be enhanced in accordance with the Service Provider Letter (Exhibit P). This criterion is therefore met.*

ADDITIONAL FINDINGS: The applicant has indicated that no reductions are proposed to the 50-foot CWS vegetated corridor requirement. This criterion is satisfied.

#### **ESEE Analysis (Environmental, Social, Economic and Energy)**

Any owner of property affected by the Goal 5 safeharbor (1) protection of significant wetlands and/or (2) vegetated areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek may apply for a quasi-judicial comprehensive plan amendment under Type IV procedure. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove Goal 5 protection from the property, but not to remove the requirements related to the CWS Stormwater Connection Permit, which must be addressed separately through an Alternatives Analysis, as described in Section 3.02.5 of the CWS "Design and Construction Standards." The applicant shall demonstrate that such an amendment is justified by preparing an Environmental, Social, Economic and Energy (ESEE) consequences analysis in accordance with OAR 660-23-040 or demonstrate that the sensitive area site no longer meets applicable significance thresholds defined by the Goal 5 administrative rule, relative to other comparable resources within the Tigard Planning Area.

1. The analysis shall consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and the comparison with other comparable sites within the Tigard Planning Area;

FINDINGS: The applicant has outlined positive and negative consequences for allowing and prohibiting the conflicting use, but did not discuss the impacts of limiting the use on the resource site. Also, the analysis does not look at comparable sites within the Tigard Planning Area.

*Applicant's Response: This criterion is met, as addressed on page 31 and Exhibit R of the October 3, 2009, submittal. This criterion does not require the analysis of a "Limit" conclusion in the applicant's ESEE analysis. A Limit conclusion has already been analyzed within the Phase I decision, which contemplated the full alignment of Wall Street. This is consistent with the analysis in Exhibit K, which demonstrates the proposed alignment has the least amount of environmental impacts. This analysis was the factual basis for approving the alignment and design of the project at the time Phase I was approved by the City. Because a limit decision has already been made for the entire project, which determined the alignment of the proposed extension of Wall Street, the ESEE analysis for Phase II then becomes a determination between Allow and Prohibit. Furthermore, as this is a public street identified on the TSP, this extension is unique to this specific location within the City of Tigard. There are no other locations within the City where Wall Street can be extended as planned. Therefore, there are no comparable sites for analysis.*

**ADDITIONAL FINDINGS:** The applicant states that a “limit” analysis of the proposal was not necessary since a limit conclusion has already been analyzed within the Phase I decision, which contemplated the full alignment of Wall Street and the analysis in Exhibit K (applicant’s materials). There have been alternatives, put forward by the applicant and staff, that indicate less environmental impact may be possible while still permitting access to the applicant’s property.

**2. The ESEE analysis must demonstrate to the satisfaction of the Tigard City Council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;**

**FINDINGS:** The applicant concludes that allowance of the impact would result in relatively minor impacts to the resource, while permitting the development of the applicant’s property. According to the applicant, prohibiting the impact limits the opportunities for vegetative corridor enhancement provided by the applicant and avoids legal questions related to takings by not permitting access to the site. In addition, the applicant notes that completion of the street extension will help accomplish the eventual connection of Hall Boulevard with Hunziker Street (shown in the TSP).

However, the proposal to complete this portion of the Wall Street extension is purely speculative as to the development of the applicant’s property. While physical access to the site increases the likelihood of the site to be developed, it does not guarantee it. Because Wall Street is a public street, once constructed, the community then takes on the cost to maintain, repair, and alter the facility, including any necessary environmental permitting costs. Vegetative corridor enhancement can occur with or without development and is not reliant upon this proposal to occur. Connection of Hall to Hunziker is currently shown on the TSP, but at this time there is no approved at-grade crossing of the railroad. Previous applications for a crossing were not approved. The applicant points out the mitigation for the temporary construction impacts, but does not discuss the long term impacts of constructing a road through the resource. The applicant’s wetland scientist, Shawn Eisner, states that the resource will still have the connection for wildlife to pass under the bridge, but what effects will the introduction of cars, people, pollutants, including garbage, have upon an area that is inaccessible to these things now? A comment letter from Elizabeth Ruther with Oregon Department of Fish and Wildlife (Attachment 4) also underscores the inadequacy of the applicant’s ESEE in relation to on-going, permanent effects on species and habitat.

*Applicant’s Response: This criterion is met, as addressed on page 31 of the October 3, 2009, submittal and Exhibit R. The ESEE conclusion of Allow weighs the consequences of the economic, social, environmental, and energy for the proposed extension of Wall Street with the conflict of the partial loss of 0.19 acres of wetland. As mentioned above, the proposed Phase II extension is no different than what was contemplated when the entire project was considered and Phase I was approved. This criterion is met through the ESEE analysis submitted for Phase II, along with the ESEE submitted with Phase I.*

*The proposed alignment of the bridge and additional section of Wall Street will cross an area that is currently undeveloped, but those areas are not currently inaccessible. Existing access to these areas by pedestrian traffic has resulted in the presence of garbage, both in the immediate vicinity of the east end of the bridge, as well as adjoining areas, especially in the forested areas south of the bridge. Also, given that Fanno Creek is an urban creek system it often carries with it its own source of water born debris. During high water this debris (including trash) is often rafted into the floodplain east of Fanno Creek.*

*Of course, it is not unreasonable to assume that pedestrian traffic would increase if access was easier than it is under current conditions. However, the same can be said for increased access as a result of completion of a pedestrian trail. The Fanno Creek Greenway Trail Action Plan (January 2003) shows the preferred alignment of the Fanno Creek Trail crossing onto lot 1200 at approximately the same location as the east end of the proposed bridge, continuing south along the west side of lot 1200. As along a pedestrian trail, signage and appropriately placed trash receptacles, and fencing where appropriate might be utilized to keep pedestrians out of adjoining habitats.*

*Dirt and pollutants associated with vehicular traffic would be addressed through utilization of appropriate stormwater collection and treatment facilities. Noise pollution would also be a concern, with total volume of traffic dependent upon the ultimate end use of lot 1200, which is again beyond the scope of this assessment. However, it can be said that wildlife utilizing habitats in the vicinity of the proposed bridge are accustomed to urban noise pollution. The east side of lot 1200 is bordered by four or five lanes of railroad traffic, while west of Fanno Creek habitats are bordered by the Tigard Library, a residential development, and beyond that, Hall Boulevard.*

*Plans to further protect habitats in the vicinity of the bridge would include providing fencing or other deterrents to limit wildlife use of the bridge or Wall Street. Also, lighting on the bridge will incorporate technologies to limit light pollution into adjoining habitats at night.*

**ADDITIONAL FINDINGS:** The applicant notes that the site is not currently inaccessible to people and that there is trash on the site. However, this resource is inaccessible to most people because the area is fenced off or reached by crossing private property. If a public street is built, then access is granted to the general public via the proposed bridge and sidewalks, bringing more people, cars and disturbance.

In addition, the applicant has not addressed the social impacts of the proposed access by extending Wall Street. Over 60 letters regarding this proposal were received from the public following the August 16<sup>th</sup> hearing. Many of these letters spoke to the lowered quality of life due to impacts to wildlife/loss of habitat/loss of greenspace, Fanno Creek Trail safety, and increased traffic. These letters identify some of the social impacts to those who live in the area, those who visit the library, and those who use/enjoy the Fanno Creek Trail and greenspace. The applicant has not shown that the positive economic impact of allowing the bridge outweighs the adverse environmental, social, and economic impacts.

**3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning area that can meet the specific needs of the proposed use;**

**FINDINGS:** The applicant outlines how there are no alternative access options to serve the site. The proposed extension is aligned with the access easement granted from the City to the applicant. This alignment minimizes impacts to wetlands and the 100-year floodplain. In addition, the applicant states that all other alternative access options have been exhausted. The applicant then concludes that there are no other sites in Tigard that can meet the specific needs of the proposed use. Yet the applicant does not discuss the option to provide a longer bridge span that will avoid the impact to the wetland and still provide access to the site for development. There is buildable land on which to construct the road and meet the need for access to the site.

*Applicant's Response: This criterion is met, as provided on page 31 and Exhibit R of the October 3, 2009, submittal. As detailed in Mr. Grillo's letter of August 16, 2010, there are no other sites that can meet the specific needs of the proposed use, because the Wall Street extension cannot be built elsewhere.*

**ADDITIONAL FINDINGS:** The applicant's ESEE (Exhibit R) indicates the intent of extending Wall Street is to gain access to Mr. Fields property and the conflicting use is impacts necessary to provide access to the applicant's property. As previously discussed, there are other options on buildable land to gain access to the applicant's property (longer bridge, possible alternative alignment, Milton Court); therefore this criterion is not satisfied.

**Minimum Rights-of-Way and Street Widths:** Section 18.810.030E and Figure 18.810.1 require a 5-lane arterial to have right-of-way varying from 100 feet to 104 feet, a 3-lane collector to have right-of-way varying from 70 to 74 feet, and a local street to have a 54-foot right-of-way. Other improvements required include sidewalks, bike lanes if designated as bike routes, underground utilities, street lighting, storm drainage, planter strips and street trees.

**FINDINGS:** Wall Street is a collector street as designated in the TSP and requires 72 feet of right-of-way. A significant portion of the street is on the Tigard Library property, on which the applicant has a 60-foot access easement. This easement is of inadequate width to accommodate the improvements (street, sidewalk, planter strips, utilities, etc.) required for a collector street.

Additional requirements for the street include sidewalks, bike lanes, storm drainage, street lights, planters, and street trees. The applicant has proposed a 72-foot right of way with sidewalks, bike lanes, street lighting, storm drainage, planter strips, and street trees. The one exception is the bridge portion of the street. The applicant has requested an adjustment to permit construction of a narrower bridge section (50 feet vs. 72 feet without the planter strips and street trees. The criteria for the adjustment have not been met, which is discussed in more detail under the Variances and Adjustments section of this report. Because the application does not meet the criteria for an adjustment, then the required improvements are

not proposed. In addition, the necessary right-of-way has not been dedicated; therefore, the applicant's proposal does not satisfy these standards.

*Applicant's Response: This criterion is met, as discussed on page 39 and the preliminary plans (Exhibit L) submitted October 3, 2009. Additional justification further supporting the proposed adjustment to the street width standards has been included with the response to item #2 above.*

*Staff indicates that because the applicant only has a 60-foot easement, that it cannot meet the 72-foot right-of-way requirement. We disagree for several reasons. First, the City already owns the underlying land, and is therefore already in control of all of the land within the future right-of-way. Nothing more needs to be provided to the City in order for it to control the needed area for the 72-foot right-of-way. Second, the specific location of the street was reviewed and approved as part of the Phase I alignment decision. This street location is shown on the City's TSP and is shown on the Fanno Creek Master Plan. No other uses are planned in this location. Third, pursuant to the Purchase and Sale Agreement, the City has a duty to cooperate with regard to this roadway extension. That duty includes cooperating with regard to compliance with its own right-of-way requirements.*

*This criterion will therefore be met, because the City already owns the needed right-of-way and has a duty to cooperate to provide it, in conjunction with this long-anticipated roadway extension.*

**ADDITIONAL FINDINGS:** The applicant is correct that the City owns most of the property on which the Wall Street extension is proposed; however the place for public streets is within public right-of-way. Currently there is only a 60-foot access easement for the benefit of the applicant, Mr. Fields. Adequate ROW must be dedicated to construct the proposed street extension.

**Future Street Plan and Extension of Streets:** Section 18.810.030.F states that a future street plan shall be filed which shows the pattern of existing and proposed future streets from the boundaries of the proposed land division. This section also states that where it is necessary to give access or permit a satisfactory future division of adjoining land, streets shall be extended to the boundary lines of the tract to be developed and a barricade shall be constructed at the end of the street. These street stubs to adjoining properties are not considered to be cul-de-sacs since they are intended to continue as through streets at such time as the adjoining property is developed. A barricade shall be constructed at the end of the street by the property owners which shall not be removed until authorized by the City Engineer, the cost of which shall be included in the street construction cost. Temporary hammerhead turnouts or temporary cul-de-sac bulbs shall be constructed for stub streets in excess of 150 feet in length.

**FINDINGS:** A future street plan is only required in conjunction with a subdivision or partition application; therefore a plan is not required with this submittal. Extension of Wall Street is proposed across City property to the applicant's property in anticipation of future development. A temporary hammerhead or cul-de-sac must be constructed as the terminus for the extended Wall Street. In addition signs must be posted west of the bridge to indicate a dead-end street, and a temporary easement shall be delineated and dedicated to the City to accommodate the temporary turnaround until such time as Wall Street is extended or the property is developed with interior roadways to provide that turnaround capability. The applicant has not proposed any such turnaround; therefore this standard is not met.

*Applicant's Response: This criterion is addressed on page 43 of the October 3, 2009, submittal. In discussions with City staff in 2009 prior to the original submittal, they indicated deference to TVFRD in terms of fire truck turnaround. Group Mackenzie staff spoke preliminarily with Jim Everitt of TVFRD and, pending a review of the plans and no requirement for a site development permit with the construction of the bridge, he indicated a turnaround may not be needed as no structures or improvements would be present at the end of the roadway.*

*With the current TVFRD review and comment, and City adoption of a condition for same, a turnaround can be accommodated outside the floodplain and wetland areas, beyond the proposed end limits at approximate Station 20+50. If not, appropriate signage can be added prior to the last side access to note the dead end condition.*

ADDITIONAL FINDINGS: A temporary turnaround area needs to be provided at the proposed terminus of Wall Street. Either a hammerhead or cul-de-sac design would be appropriate. A turnaround has not been proposed by the applicant; therefore this standard is not met.

### **Statewide Planning Goal 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources**

This goal outlines the protection of natural resources and conservation of scenic, historic and open spaces.

FINDINGS: This site includes both open space and natural resources. The regulations outlined in the Sensitive Lands chapter (18.775) of the TDC protect these areas, along with the goals and policies found in Goal 5 of the City's Comprehensive Plan. As discussed previously in this report, the applicant does not comply with the implementing codes or City goals. The applicant has not met the burden of proof to remove the protection from the Tigard Significant wetland. Insufficient information was provided for alternatives such as a longer bridge span or access from Milton Court to determine if the proposed 320-foot bridge has the least impact on natural resources. Long term affects of the bridge were also not discussed in relation to habitat and wildlife species found in the area.

*Applicant's Response: There is substantial evidence in the record demonstrating that Goal 5 has been met. The City's plan and land use regulations already comply with Goal 5. With regard to the proposed alignment, and its effect on the small (0.19-acre) wetland that the applicant seeks to remove from Goal 5 protections, City Council has already determined that:*

*"The application presents sufficient evidence justifying the requested comprehensive plan amendment and reconfiguration of the natural resource. The alternatives analysis identifies nine feasible road alignment options and a final proposed alignment recommended by project biologists to both minimize impacts and allow for mitigation opportunities." (See City Council Decision, Phase I Wall Street Extension, May 9, 2006, at 14.)*

*In addition, as the City pointed out with regard to Phase I, which also involved the removal of a small wetland area (0.11 acres) from the City's Goal 5 inventory, the City has already mitigated for the loss of both the 0.11- and 0.19-acre wetlands, so the City's Goal 5 wetland inventory is actually enhanced through these mitigation efforts. At the very least, there is no net loss of Goal 5 resources. Goal 5 is therefore met.*

ADDITIONAL FINDINGS: The approval of Goal 5 protection removal for Phase I and mitigation of the proposed impact to the .19 acre disturbance does not have bearing on whether or not Goal 5 protection should be removed for the wetland areas affected by this proposal. As noted in the original Staff Report, the applicant does not comply with the City code requirements and policies that implement Statewide Planning Goal 5; therefore Goal 5 is not met.

### **Statewide Planning Goal 8 – Recreation**

This goal ensures the recreational needs of the citizens of the state and visitors are satisfied and, outlines how to provide for the siting of necessary recreational facilities including destination resorts where appropriate.

FINDINGS: As noted by the applicant, this goal's main focus is large-scale resort opportunities, which is not applicable to this application. However, this proposal does impact a large tract of Tigard open space that is part of Fanno Creek Park and currently is relatively undisturbed. As noted under the review of Tigard Comprehensive Plan Goal 8.1, the applicant does not provide information on how the long term impacts proposed will be mitigated within this open space and natural area.

*Applicant's Response: Goal 8 is met because the Wall Street Extension is shown on the City's Fanno Creek Park Master Plan. It is also shown on the City's TSP and the alignment was approved as part of the Phase I decision. Goal 8 is therefore met because this street extension has long been anticipated in the City's land use regulations.*

**ADDITIONAL FINDINGS:** The Fanno Creek Park Master Plan is not a regulating document. In addition, Wall Street is not shown on the Master Plan (#34d, page 19). The proposed location of Wall Street was included as part of the Existing and Natural Conditions (#34d, page 3). There is no discussion of the location of Wall Street within the Fanno Creek Park Master Plan Summary. As pointed out by members of the public, this proposal will have direct impacts on the Fanno Creek Trail and surrounding open space, which the applicant has not addressed. Goal 8 is not met.

## **SECTION IV. STAFF CONCLUSION**

### **CONCLUSION:**

As previously noted, the applicant is requesting a Comprehensive Plan Review (CPA) to remove the Goal 5 protection from a Tigard Significant Wetland in the project area, a Sensitive Lands Review (SLR) for wetlands, a Sensitive Lands Review (SLR) for the 100-year floodplain, and an Adjustment (VAR) to the street requirements in order to construct a narrower street section and eliminate the planter strip on the bridge deck. After reviewing the additional information presented at the August 16<sup>th</sup> hearing and subsequently submitted to the record, Staff continues to recommend denial of all four applications associated with this request. The applicant has failed to provide the facts and findings necessary to meet the burden of proof required for the proposal.

The applicant's ESEE analysis does not show that the positive economic impacts for the proposed Wall Street extension outweigh the adverse impacts to the resource, in particular long term effects upon the natural resources, habitat, and wildlife. Many public comments were received after the hearing that raised several social impacts of the proposed street extension. These impacts were not addressed within the applicant's ESEE or rebuttal evidence.

As noted by the Planning Commission much of the applicant's information related to alternatives and effects on the resources is out of date. Additional information was provided on alternatives, including an analysis of the Milton Court access and a new pivot road plan. Although there are potential traffic issues with the Milton Court alternative, both the Milton Court and pivot road plan, along with the longer bridge mentioned by staff in the original report, seem to indicate there may be other options that lessen or avoid impact on natural resources. At this time, the applicant has not submitted substantial evidence supporting its contention that the proposed 320-foot bridge is the alternative that best protects natural resources.

The criteria for Sensitive Lands Review for the floodplain were not met by the new information. The zero-rise requirements within the 100-year floodplain are not met, even with the proposed cuts on City property. In addition, there are concerns about arsenic contamination and undermining of the library foundation in those proposed cut areas. Seismic information was submitted to address concerns raised during the public hearing. However information to show that wingwalls, fill, and pilings below the 100-year flood elevation are flood-proof and will be anchored to prevent movement or collapse was not provided. In addition land form alteration is not permitted in floodplain zoned residential, unless associated with public support facilities, utilities, and community recreation. The parcels involved are zoned R-12 and R-25. The applicant has asserted that the fill and pilings that will support Wall Street are public facilities, but the code does not support that claim.

Finally, as noted in the original Staff Report, the applicant has not shown the nature and extent of the impacts that are to be forgone if the adjustment to the street standards is permitted. The applicant asserts a narrower section would have fewer impacts on natural resources, but does not describe the adverse impacts. Without this information, it is impossible to understand the extent of the impacts of a full bridge width and why an adjustment for a 72-foot street section and elimination of planter strips on the bridge deck should be allowed.

Based on the findings within the original Staff Report and this addendum, the proposed Comprehensive Plan, Sensitive Lands Reviews, and Adjustment are inconsistent with applicable provisions of the Tigard Development Code (Chapters 18.390, 18.745, 18.775, 18.790, & 18.810), Comprehensive Plan (Goals 2-Land Use Development, 5-Natural Resources and Historic Areas, Goal 6-Environmental Quality, Goal 7-Hazards, Goal 8-Parks, Recreation, Trails, and Open Space, and 11-Public Facilities and Services), Tigard Municipal Code (Chapter 9.06-Trees on City Property), Statewide Planning Goals 2, 5, 6, and 7, and Metro Urban Growth Management Plan Title 3.

**SECTION V. STAFF RECOMMENDATION**

Staff recommends that the Planning Commission recommend denial of the proposed comprehensive plan amendment, sensitive lands reviews, and adjustment to City Council.

*Cheryl A. Caines*

PREPARED BY: Cheryl Caines  
Associate Planner

October 8, 2010  
DATE



TABLE OF CONTENTS

I. Project Summary.....2  
II. Project Overview .....3  
III. Sensitive Lands Review ..... 10  
IV. Comprehensive Plan Amendment.....33  
V. Other Applicable Code Sections.....38

Exhibits

A. Application Form  
B. Property Deed  
C. Pre-Application Notes  
D. Neighborhood Meeting Materials  
E. 10/30/02 Purchase and Sale Agreement  
F. 1/19/06 Grant of Easement  
G. Final Order (06-05)  
H. DSL Permit #31719-RF/Corps #200300137  
I. CWS Service Provider Letter #4203  
J. Memorandum of Understanding  
K. Alternatives Analysis/Hydraulic Analysis  
L. Wall Street – Phase 2 plans  
M. Preliminary Stormwater Calculations  
N. Stream Restoration and Mitigation Plan (Revised)  
O. Floodplain Impact Memorandum  
P. 08-003183 CWS Service Provider Letter  
Q. Pacific Habitat Services Enhancement Planting Letter  
R. ESEE Analysis

REQUEST FOR  
COMPREHENSIVE  
PLAN AMENDMENT/  
SENSITIVE LANDS  
REVIEW

To  
City of Tigard

For  
Fred Fields

**Initial  
Submittal**  
October 3, 2009  
**Completeness  
Response**  
January 15, 2010  
**Complete Submittal**  
February 2, 2010  
**Supplemental  
Submittal**  
June 14, 2010

**Project Number**  
2070334.06

## I. PROJECT SUMMARY

**Applicant:** Fred Fields  
1149 SW Davenport Avenue  
Portland, OR 97201  
P: 503-228-7084

**Applicants  
Representatives:** Group Mackenzie  
1515 SE Water Avenue, Suite 100  
Portland, OR 97214  
Contact: Rhys Konrad  
P: 503 224-9560  
F: 503-228-1285  
rk@grpmack.com

Miller Nash LLP  
3400 U.S. Bancorp Tower  
111 SW Fifth Avenue  
Portland, OR 97204-3699  
Contact: Phil Grillo  
P: 503-224-5858  
F: 503-224-0155  
phil.grillo@millernash.com

**Proposed Project:** Phase 2 Wall Street extension to serve the Fields property.

**Project Location:** 2S1010001200  
2S102DD000100  
2S102DD000200

**Zoning:** R-12/R-25

**Requests:** Comprehensive Plan Amendment to remove locally adopted significant designation from impacted wetlands necessary for the Wall Street extension.

Sensitive Lands Review for the impacts to locally significant wetlands and 100-year floodplain.

## II. PROJECT OVERVIEW

This application requests City Council approval for an extension of Wall Street to serve the applicant's property east of the Library. This extension will fill the gap that was created between the current terminus of Wall Street constructed by the City, and serve what is now a land-locked residentially designated parcel of approximately 24.73 acres. This extension will provide access to Mr. Fields' property as contemplated in the 2002 Purchase and Sale Agreement for the Tigard library property. The following package includes narrative, plans, drawings, and other documentation in support of this application. This section of the application summarizes the history related to the Wall Street extension, and provides details of the proposed application.

### PROJECT BACKGROUND

In December 2001, the City of Tigard and Mr. Fields (applicant) entered into an Option Agreement to purchase property owned by Mr. Fields for the purpose of constructing a new City library. Following the execution of this agreement, a purchase and sale agreement was entered into between the two parties in October 2002. Provisions related to an "extension road" were listed throughout these two documents. The "extension road" was generally defined as providing access from Hall Boulevard to other properties owned by Mr. Fields.<sup>1</sup> In January 2006, the City granted Mr. Fields a permanent non-exclusive easement for the purposes of construction, maintenance, repair, reconstruction and replacement, utilities and a roadway on, over, under and across the property subject to the Purchase and Sale Agreement<sup>2</sup>. The purpose of this easement was to facilitate the construction of the "extension road" previously included with the Purchase and Sale Agreement. The "extension road" is identified as Wall Street which is shown on the City's TSP as a future collector.

On June 8, 2006 the City Council granted approval for Phase 1 of Wall Street that included a 360-foot extension from Hall Boulevard to support the new library and the Fanno Pointe Condominiums (Ord 06-05)<sup>3</sup>. The approval included a comprehensive plan amendment to remove the locally significant designation from impacted wetlands (CPA 2004-00001), sensitive lands approval for impacts to wetlands and drainage ways and the proposed reconfiguration of Pinebrook Creek (SLR 2004-00003 and 2006-0001), and a tree removal permit (TRE 2006-00001 through 00009). Included with this approval by exhibit was a Joint Fill Permit (Exhibit H) from the Department of State Lands ("DSL") and U.S. Army Corps of Engineers ("Corps") (Permit Number 31719-RF) and CWS Service Provider Letter (Exhibit I) for wetland and sensitive area impacts. The approved permits were based on drawings prepared by the City's consultant, DeHaas and Associates Inc, which included the full extension of Wall Street as shown on the City's TSP (ie. Hall to Hunziker). The approved permits related to wetland and buffer impacts

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<sup>1</sup> See provision 6(d) of the 10/30/02 Purchase and Sale Agreement included as Exhibit E.

<sup>2</sup> See provision (1) "grant of easement" per the 1/19/06 Grant of Easement included as Exhibit F.

<sup>3</sup> See Exhibit G included as reference only.

included the full extension of Wall Street, even though the City's land use approval included only the first 360 feet (Phase 1).

Although not included with the City's Phase 1 approval, Phase 2 of the Wall Street extension included a bridge crossing over Fanno Creek and an at-grade crossing of the railroad tracks for the ultimate connection with Hunziker Street. An overwhelming reason for the City approving only Phase 1 of the extension was due to difficulties negotiating with the railroad for a crossing over the tracks north of the site. Regardless of difficulties with the railroad crossing, the Phase 2 extension was included on all exhibits and plans, and the permits and approvals from the Corps, DLS, and CWS were issued for both phases. In these permit documents two primary reasons were stated for the Wall Street extension as approved: the first is to comply with the City's TSP designation of Wall Street as a collector, and the second to provide access to the property east of Fanno Creek and west of the railroad (ie. applicant's property).

The 2002 Purchase and Sale Agreement contemplated the possibility that the railroad would refuse to allow a crossing. The Agreement states that if the railroad refuses to permit a crossing of the tracks, the City will cooperate with Mr. Fields to establish an alternate roadway access from Hall Boulevard to serve Mr. Fields' adjacent property<sup>4</sup>. In the spirit of cooperation, and in accordance with the Purchase and Sale Agreement, a Memorandum of Understanding between Mr. Fields, City of Tigard, and the Tigard/Tualatin School District was developed (see Exhibit J). One item of this memorandum was to identify an alternate access point to serve Mr. Fields property by creating a new roadway through the existing School District property. Mr. Fields acted in good faith with all parties to come to an agreement where this roadway extension could be established. Unfortunately, an agreement could not be made and as such this alternative is not viable. Therefore, this request seeks City of Tigard approval for access to Mr. Fields property as originally contemplated with the Purchase and Sale Agreement, and further described by the Grant of Easement by the City.

## ALTERNATIVES ANALYSIS

The City's Phase 1 application included a detailed Alternatives Analysis for the full extension of Wall Street (Exhibit K). This Analysis considered ten different alternative alignments for the full extension of Wall Street from Hall Boulevard to Hunziker Street. A phasing plan was assumed consisting of a first extension to serve the library, and a second phase with a bridge crossing Fanno Creek. The Alternatives Analysis was developed in part to obtain necessary approvals from natural resource regulatory agencies as well as ODOT as Hall Boulevard is under their jurisdiction. As briefly stated above, the necessary approvals related to wetland impacts associated with the full extension (ie. Phase 1 & 2) of Wall Street were obtained. The preferred alternative, Alternative 9, was selected as it avoided and minimized impacts to wetlands and 100-year floodplain to the greatest extent practicable.

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<sup>4</sup> See provision 6(e) of the Purchase and Sale Agreement included as Exhibit E.

The approved City application included plans and associated permits and approvals necessary to construct the full extension of Wall Street, to the applicant's property. These permit documents are included with Exhibit H as reference. A major reason for approving only Phase 1 of the extension was due to difficulties negotiating with the railroad for a crossing over the tracks. The City's phasing plan has created a gap between Mr. Fields' property and the Phase 1 terminus of Wall Street. Since learning of the issues related to the railroad crossing, the applicant has worked closely, and in good faith, with the City of Tigard and Tualatin/Tigard School District in accordance with an adopted non-binding Memorandum of Understanding (Exhibit J). Tasks associated included investigation into providing the School District with a new bus facility on the applicant's property north of the railroad, as well as a new facility for the City's public works department. In addition, the applicant has exhausted all efforts with abutting property owners to investigate the possibility of providing access to the subject site in an alternative alignment from the extension of Wall Street. As stated above, an agreement could not be reached between the two parties.

In addition to the ten alternatives analyzed in the City's Alternatives Analysis, this application includes discussion of two additional access points to serve Mr. Fields' property at the suggestion of the City of Tigard.

***Option 1 Access: Tigard-Tualatin School District Property Alignment***

Access to SW Hall Boulevard through the existing School District property was investigated based on the assumption that the school bus facilities would be removed and relocated to the applicant's property north of the railroad tracks. The location of the access would be subject to ODOT requirements, and would most likely need to align opposite the Tigard City Hall driveway. The access could not be located south of the Tigard City Hall driveway because of left-turn conflicts on SW Hall Boulevard. An access located north of the City Hall driveway was investigated, but would not meet ODOT spacing standards. Access was assumed to be either a private driveway or public street. Signal warrants and initial site distance requirements were also reviewed, and would require coordination with ODOT for approval.

The most feasible access would align with the City Hall driveway on the north side of SW Hall Boulevard and be directed through the bus yard, curving parallel to the shared property line with the railroad. The roadway length required to access the Fields property is approximately 1,248 feet, and for purposes of this review assumed a local street width of 34 feet inside a 50-foot right-of-way. Review of existing grades indicates the roadway would need to be placed on significant fill adjacent to the railroad right-of-way. As the street turns through the School District property, it would impact City identified significant wetlands (approximately 0.75 acres) and fill material will be necessary to address floodplain impacts (approximately 1.02 acres). The new roadway would bisect the existing School District property, resulting in two industrially designated parcels of 23,011 SF and 42,156 SF. We have assumed a culvert extension of the current railroad crossing of Red Rock

Creek would be necessary, and contractor field information indicates a culvert diameter of 84 inches. Mitigation of both wetland and floodplain impacts would require appropriate permits from DSL/Corps as well as CWS.

***Option 2 Access: Milton Court Extension***

Access to the subject site via an extension of SW Milton Court was also investigated. This access could either be a public street extension or a private access in an easement. Metro owns the property immediately abutting the subject site to the south, and has purchased this property to remain as open space. Abutting the Metro parcel between the existing right-of-way is City-owned property. As such, this access would require approval and coordination with Metro/City as it crosses the Metro parcel. Extension as a public street through the Metro and City parcels would be more expansive and require a turnaround on site, which may be avoided if a private extension is approved by the City of Tigard. A cul-de-sac is already provided at the end of SW Milton Court.

Access for SW Milton to the major street would be at SW Bonita Road. The intersection of SW Bonita Road with SW Milton Court is stop controlled on Milton Court. A left-turn lane is provided on SW Bonita Road at the intersection. Depending on the level of development on the site, traffic volumes could increase such that traffic signal warrants are met at this location. Additional mitigation could include striping on SW Milton Court to provide separate left- and right-turn lanes at the approach to SW Bonita Road.

A connection from the existing SW Milton Court cul-de-sac would serve the Fields site via an approximate 450-foot roadway extension. We have assumed a local street width of 34 feet inside a 50-foot right-of-way. The new roadway would require a creek crossing, and would impact significant habitat areas and require extensive tree removal on Metro's property and the subject site. Due to the zoning on properties fronting on Milton Court, development of the site via this access option may be more appropriate for industrial than residential uses. However, the length of this dead-end roadway under this scenario is significant, and would be difficult for any development type as the primary access. In any event, Mr. Fields does not have permission to construct a road across Metro or the City's property.

As is discussed above, these two additional access options are not feasible for primary access for several reasons including but not limited to impacts on a greater amount of sensitive lands, and crossing of properties which are either currently developed, have been purchased for open space, and/or are not under the control of the applicant. As a result, Alternative 9 continues to be the preferred and only feasible option to provide primary access to the applicant's property. As such this application requests approval to continue the extension of this alternative to provide access to the applicant's property. The details of this application remain consistent with the assumptions related to the Phase 2

extension as contemplated in the City’s Alternatives Analysis, and as designed by DeHaas and Associates for the City.

**PROPOSAL**

With no other alternative available to provide access to the applicant’s property, this application proposes a 662’ extension of Wall Street from its current terminus to serve the applicant’s property. The Phase 1 extension of Wall Street, by not fully extending through the City property to the boundary of the applicant’s property, created a gap. This application proposes to fill this gap so as to effectively provide public street access to Mr. Fields’ property as previously considered by the City of Tigard, and as documented through the various agreements between Mr. Fields and the City of Tigard.

**ROAD DESCRIPTION**

The design of the proposed road extension is unchanged from the previously proposed Phase 2 of the City-initiated Wall Street extension approval. The exception is that the proposed crossing of the railroad tracks and continuation of Wall Street up to Hunziker has been excluded. The proposed drawings indicate that a crossing of the railroad tracks is feasible, in accordance with the City’s TSP, however would still require approval by the railroad.

The City of Tigard TSP (Figure 8-3) identifies Wall Street as a proposed collector. TDC 18.810 and Table 18.810.1 define the requirements for a collector street. The following table illustrates these requirements and provides information related to the proposed extension of Wall Street.

Table 1: Proposed Street Elements								
Street ID	ROW Width	Paved Width	Number of Lanes	Min. Lane Width	Bike Lane Width	Sidewalk Width	Landscape Strip Width	Median Width
City Collector Standard	58'-96'	Varies	2-5 (Refer to TSP)	11'	6' (New Streets)	6' (Res. & Ind. Zones)	5'	12'
Proposed Street Section	72'	48'	3	11'	6'	6'	5'	12'
Proposed Bridge Section	72'	63'	2	12'	6'	6'	None	None

Figure 8-11 of the TSP identifies Wall Street as having 2/3 lanes. This figure notes that 2 lanes may be used for segments where environmental constraints limit a roadway and access is controlled to eliminate left turn movements. As

allowed under Figure 8-11, the proposed bridge section provides 2 lanes and eliminates the planter strip to minimize impacts to sensitive lands.

Typical street and bridge deck sections have been included with this application and can be found on Sheet R8.1 of Exhibit L. In addition to the proposed right-of-way, an 8' public utility easement is proposed. The design of the proposed bridged extension remains consistent as previously proposed with the preferred Alternative 9. The proposed bridge of 320' spans both the creek and floodway associated with Fanno Creek. The paved width will be reduced to 36' with curbs, bike lanes, sidewalks, and handrails for a total improved width of 50 feet. The bridge will be constructed in four 80 foot sections using precast prestressed concrete slabs supported by three rows of eight 16-inch diameter steel pipe piles at the junction of each of the sections. The piles will be located outside of Fanno Creek and delineated wetland areas.

The eastern end of the proposed extension terminates as a temporary dead-end. Conversation with TVF&R (John Wolf) confirmed that the proposed dead-end terminus of the proposed extension would typically be satisfactory as there will be no development on the applicant's property for TVF&R to serve. Future development applications will need to provide an approved turnaround per TVF&R requirements. Additionally, future development applications will address the need and provide secondary access.

A new bioswale will be constructed east of Fanno Creek to treat runoff from the proposed extension. The proposed bioswale is consistent with the previous plans, and includes capacity to treat impervious surfaces from the streets and sidewalks associated with the Phase 2 impacts as well as future extension to a proposed high point in the profile east of the existing railroad track crossings. A portion of the stormwater runoff from the new impervious surfaces to the west of the bridge span will be treated with the water quality facility constructed with Phase 1. The previous approval sized this facility appropriately for the ultimate build-out of both phases. Preliminary calculations are provided in Exhibit M per City and Clean Water Services standards.

## IMPACTS AND MITIGATION

The previously prepared Alternatives Analysis considered both wetland and 100-year floodplain impacts.<sup>5</sup> The preferred Alternative 9, as currently proposed, indicated a total of 0.27 AC wetland impact and 0.55 AC floodplain impacts. The Joint Fill permit approved a total of 0.30 acres of wetland fill for the full extension (ie. Phase 1 & 2). Approved wetland impacts for Phase 2 include 8,447 SF (0.19 acres) as are shown on Sheet 4a of 13 of the approved Joint Fill permit (Exhibit H). The proposed application includes the same amount of wetland impact. The impacts are primarily due to the construction of the western and eastern sections of road leading up to the bridge abutments and required fill slopes. The proposed application will have minor impacts to a man-made pond (East Pond) and wetlands located east of Fanno Creek in order

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<sup>5</sup> See page 10 of 21 in Exhibit K for a summary of the ten alternatives analyzed.

to construct the bridge wingwall on the west side of the bridge and the roadway and fill slopes for the remainder of the alignment. No impacts are proposed to Fanno Creek from the proposed extension. The proposed wetland impacts are shown on Sheet 2.4B of Exhibit L.

Approved mitigation for wetland impacts for both phases included a stream channel and wetland creation of 0.08 acres, wetland enhancement of 0.29 acres and wetland restoration of 0.20 acres. Attached to this application is the revised wetland mitigation plan prepared for the City by Zion Consulting, which demonstrates the mitigation measures that were constructed (Exhibit N). It should be noted that the mitigation approved and constructed with Phase 1 was actually of a size and level appropriate (as approved by DSL/Corp) for the full extension of Wall Street (ie Phase 2). As such, the proposed Phase 2 impacts have already been mitigated before even though the 0.19 acres of impact has not yet occurred.

Floodplain impacts associated with the proposed extension are limited to placement of roadway structural fill in the areas west and east of the proposed bridge and support piles. Mitigation will occur off-site in an area to be determined in accordance with applicable standards. Impacts are further limited to match previous design assumptions through the construction of wing and retaining walls on both sides of the bridge span. Total floodplain impacts indicated for the proposed extension, prior to mitigation, are 2010 CY (over a 0.56 AC footprint). An OBEC Consulting Engineers/West Consultants team was retained by the City previously to analyze hydraulic impacts associated with various bridge alternatives (Exhibit K). The study concluded that a 320' bridge would span the floodway, and would have minimal impacts on the floodway and would meet FEMA requirements related to no rise in the floodplain elevation. A memo summarizing the information in this report has been prepared for further information see Exhibit O.

## APPROVALS REQUIRED

The stream, pond and wetland impacted by the proposed road extension are mapped on the City of Tigard's Wetlands & Stream Corridors Map. A Comprehensive Plan Amendment is required to remove the locally significant designation from the impacted wetlands, which effectively removes Goal 5 under Section 18.775.120 of the City of Tigard Development Code. The Sensitive Lands Review is required for the proposed for the impacts to wetland and 100-year floodplain areas. In addition, per review of the Final Order by the Tigard City Council dated 5/9/2006, future extensions of SW Wall Street across Fanno Creek require a separate review and approval by the City.

The following package includes narrative, plans, drawings, and other documentation in support of this application to remove the significant wetland designation from affected wetland and stream areas, and sensitive lands approval to extend Wall Street into the applicant's property.

### III. SENSITIVE LANDS REVIEW

Chapter 18.755 of the City of Tigard Development Code identifies the approval criteria and requirements for development in floodplains, wetlands, and drainageways. The following addresses how the proposed road extension meets the applicable criteria.

#### **18.775.020 Applicability of Uses; Permitted, Prohibited, and Nonconforming**

*A. CWS Stormwater Connection Permit. All proposed “development”, must obtain a Stormwater Connection Permit from CWS pursuant to its “Design and Construction Standards”. As used in this chapter, the meaning of the word “development” shall be as defined in the CWS “Design and Construction Standards”: All human-induced changes to improved or unimproved real property including:*

- 1. Construction of structures requiring a building permit, if such structures are external to existing structures;*
- 2. Land division;*
- 3. Drilling;*
- 4. Site alterations resulting from surface mining or dredging;*
- 5. Grading;*
- 6. Construction of earthen berms;*
- 7. Paving;*
- 8. Excavation; or*
- 9. Clearing when it results in the removal of trees or vegetation which would require a permit from the local jurisdiction or an Oregon Department of Forestry tree removal permit.*
- 10. The following activities are not included in the definition of development:*
  - a. Farming activities when conducted in accordance with accepted farming practices as defined in ORS 30.930 and under a Senate Bill 1010 water quality management plan;*
  - b. Construction, reconstruction, or modification of a single family residence on an existing lot of record within a subdivision that was approved by the City or County after September 9, 1995 (from ORS 92.040(2)); and*
  - c. Any development activity for which land use approvals have been issued pursuant to a land use application submitted to the City or County on or before February 4, 2000, and deemed complete or before March 15, 2000.*

**Response:** The proposed extension of Wall Street includes several types of “development” as defined above including grading, paving, and excavation. As such a CWS Stormwater Connection Permit will be required prior to issuance of building permit for the construction of the proposed extension. This standard is met.

*B. Outright permitted uses with no permit required. Except as provided below and by Sections 18.775.020.D, 18.775.020.F, and 18.775.020.G, the following uses are outright permitted uses within the 100-year floodplain, drainageways, slopes that are 25% or greater, and unstable ground when the use does not involve paving. For the purposes of this chapter, the word “structure” shall exclude: children’s play equipment, picnic tables, sand boxes, grills, basketball hoops and similar recreational equipment.*

- 1. Accessory uses such as lawns, gardens, or play areas; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.*

2. *Farm uses conducted without locating a structure within the sensitive land area; except in (a) a Water Quality Sensitive Area or Vegetative Corridor, as defined in CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.*
3. *Community recreation uses, excluding structures; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.*
4. *Public and private conservation areas for water, soil, open space, forest, and wildlife resources.*
5. *Removal of poison oak, tansy ragwort, blackberry, English ivy, or other noxious vegetation.*
6. *Maintenance of floodway excluding re-channeling; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.*
7. *Fences; except in (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CSW “design and Construction Standards”, or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.*
8. *Accessory structures which are less than 120 square feet in size; except in (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetative Corridor, as defined in the CWS “Design and Construction Standards”, or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.*
9. *Land form alterations involving up to 10 cubic yards of material; except in (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetative Corridor, as defined in the CWS “Design and Construction Standards”, or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.*

**Response:** The proposed extension of Wall Street is not permitted outright subject to the above listed exceptions. As such this application requests Sensitive Lands approval for impacts to significant wetlands and 100-year floodplain associated with Fanno Creek.

*C. Exemptions. When performed under the direction of the City, and in compliance with the provisions of the City of Tigard Standards and Specifications for Riparian Area Management, on file in the Engineering Division, the following shall be exempt from the provisions of this section:*

1. *Responses to public emergencies, including emergency repairs to public facilities;*
2. *Stream and wetlands restoration and enhancement programs;*
3. *Non-native vegetation removal;*
4. *Planting of native plant species; and*
5. *Routine maintenance or replacement of existing public facilities projects.*

**Response:** Wetland mitigation for proposed impacts related to the extension of Wall Street include stream and wetlands restoration and enhancement that has been constructed for the proposed extension with Phase 1 (see Exhibit M). Enhancement and mitigation of encroachment to CWS vegetated corridors has been approved per the attached Service Provider Letter (Exhibit P). To meet condition 13 of the SPL, a landscape plan has been provided in accordance with draft landscape plan details provided by Pacific Habitat Services (Exhibit Q). As specified on sheet R2.5of Exhibit L the enhancements will include the removal of non-native vegetation in accordance with CWS Design and Construction Standards Appendix A as adopted by R&O 07-20. Although these improvements are proposed, they do not exempt the impacts to significant wetlands and 100-year floodplain. Therefore this application requests Sensitive Lands approval.

*D. Jurisdictional wetlands. Landform alterations or developments which are only within wetland areas that meet the jurisdictional requirements and permit criteria of the U.S. Army Corps of Engineers, Division of State Lands, CWS, and/or other federal, state, or regional agencies, and are not designated as significant wetlands on the City of Tigard “Wetland and Streams Corridors Map”, do not require a sensitive lands permit. The City shall require that all necessary permits from other agencies are obtained. All other applicable City requirements must be satisfied, including sensitive land permits for areas within the 100-year floodplain, slopes of 25% or greater or unstable ground, drainageways, and wetlands which are not under state or federal jurisdiction.*

**Response:** The proposed impacts related to the extension of Wall Street require updated permits from the DSL, the Corps and CWS. Additionally, the City of Tigard has designated wetlands necessary for impact as significant per the Wetland and Streams Corridors Map. As such a Sensitive Lands permit is not exempt per this standard.

*E. Administrative sensitive lands review.*

*1. Administrative sensitive lands permits in the 100-year floodplain, drainageway, slopes that are 25% or greater, and unstable ground shall be obtained from the appropriate community development division for the following:*

*a. The City Engineer shall review the installation of public support facilities such as underground utilities and construction of roadway improvements including sidewalks, curbs, streetlights, and driveway aprons by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;*

*b. The City Engineer shall review minimal ground disturbance(s) or landform alterations involving 10 to 50 cubic yards of material, except in the floodway area, for land that is within public easements and rights-of-way by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;*

*c. The Director shall review minimal ground disturbance(s) or landform alterations involving 10 to 50 cubic yards of material, except in the floodway area by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;*

*d. The Director shall review the repair, reconstruction, or improvement of an existing structure or utility, the cost of which is less than 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction provided no development occurs in the floodway by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;*

*e. The Building Official shall review building permits for accessory structures which are 120 to 528 square feet in size, except in the floodway area; and*

*f. The Director shall review applications for paving on private property, except in the floodway area by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter.*

**Response:** The project area includes a 662’ expansion of Wall Street over three residentially designated properties. Wall Street is identified as a collector per the City’s TSP, and Phase 1 has been constructed. As a requirement to construct the proposed extension, including a 320’ bridge as identified by the preferred Alternative 9, wetland impacts and 100-year floodplain impacts are necessary. Specific to 100-year floodplain impacts, a total of 2010 CY (over a 0.56 AC footprint) of roadway structural fill is required to support the new public roadway as proposed. The bridge support pilings include negligible impacts to the 100-year floodplain per the previous

OBEC/West Consultants report (Exhibit K). The actual paved surface and related improvements do not create 100-year floodplain impacts and are elevated above the floodplain elevation with more than the required 1' freeboard. The proposed structural fill is needed to elevate the proposed public roadway above the 100-year floodplain. As the roadway itself does not have floodplain impacts, and the structural fill supports the proposed public roadway, the proposed 100-year floodplain impacts are allowed as public support facilities as the term is used in 18.775.020e.1.a above. These thresholds are met.

*2. The responsible community development division shall approve, approve with conditions, or deny an application for a development permit, as described above, based on the standards set forth in Sections 18.775.050, 18.775.070, and 18.775.080.*

**Response:** Impacts to the 100-year floodplain proposed with the public support facility trigger an administrative review. However, the concurrent comprehensive plan amendment to remove the locally significant designation from project impacted wetlands upgrades this application to a Type IV. This provision is met.

*F. Sensitive lands permits issued by the Director.*

*1. The Director shall have the authority to issue a sensitive lands permit in the following areas by means of a Type II procedure, as governed in Section 18.390.040, using approval criteria contained in Section 18.775.070:*

- a. Drainageways;*
- b. Slopes that are 25% or greater or unstable ground; and*
- c. Wetland areas which are not regulated by other local, state, or federal agencies and are designated as significant wetlands on the City of Tigard "Wetland and Streams Corridors Map".*

*2. Sensitive lands permits shall be required for the areas in Section 18.775.020.F.1 above when any of the following circumstances apply:*

- a. Ground disturbance(s) or land form alterations involving more than 50 cubic yards of material;*
- b. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction;*
- c. Residential and non-residential structures intended for human habitation; and*
- d. Accessory structures which are greater than 528 square feet in size, outside floodway areas.*

**Response:** This application does not include impacts to the areas listed in this Section.

*G. Sensitive lands permits issued by the Hearings Officer.*

*1. The Hearings Officer shall have the authority to issue a sensitive lands permit in the 100-year floodplain by means of a Type IIIA procedure, as governed by Section 18.390.050, using approval criteria contained in Section 18.775.070.*

*2. Sensitive lands permits shall be required in the 100-year floodplain when any of the following circumstances apply:*

- a. Ground disturbance(s) or landform alterations in all floodway areas;*
- b. Ground disturbance(s) or landform alterations in floodway fringe locations involving more than 50 cubic yards of material;*
- c. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction provided no development occurs in the floodway;*

- d. Structures intended for human habitation; and
- e. Accessory structures which are greater than 528 square feet in size, outside of floodway areas.

**Response:** This application does not include impacts to the areas listed in this Section.

*H. Other uses. Except as explicitly authorized by other provisions of this chapter, all other uses are prohibited on sensitive land areas.*

**Response:** No other uses are proposed which would be prohibited under this section.

*I. Nonconforming uses. A use established prior to the adoption of this title, which would be prohibited by this Chapter or which would be subject to the limitations and controls imposed by this Chapter, shall be considered a nonconforming use. Nonconforming uses shall be subject to the provisions of Chapter 18.760. (Ord. 06-20)*

**Response:** Nonconforming uses do not exist, this section does not apply.

### **18.775.030 Administrative Provisions**

*A. Interagency Coordination. The appropriate approval authority shall review all sensitive lands permit applications to determine that all necessary permits shall be obtained from those federal, state, or local governmental agencies from which prior approval is also required.*

*1. As governed by CWS “Design and Construction Standards”, the necessary permits for all “development”, as defined in Section 18.775.020.A above, shall include a CWS Service Provider Letter, which specifies the conditions and requirements necessary, if any, for an applicant to comply with CWS water quality protection standards and for the Agency to issue a Stormwater Connection Permit.*

**Response:** The proposed extension of Wall Street includes “development” in the form of grading, paving and excavation as defined in Section 18.775.020.A. A previous CWS Service Provider Letter was issued for the full extension and submitted with the Phase 1 application (Exhibit I). The SPL included approval of the impacts proposed with this application. The applicant has obtained an updated CWS Service Provider Letter which specifies encroachment, enhancement, and mitigation areas related to the proposed extension of Wall Street (Exhibit P). The conditions of the SPL require various items to be completed prior to issuance of a Stormwater Connection Permit. To meet condition 13 of the SPL, a landscape plan has been provided in accordance with draft landscape plan details provided by Pacific Habitat Services (Exhibit Q). As specified on sheet R2.5 of Exhibit L the enhancements will include the removal of non-native vegetation in accordance with CWS Design and Construction Standards Appendix A as adopted by R&O 07-20. By complying with the conditions as specified in the updated SPL, this application ensures compliance with water quality protection standards and a Stormwater Connection Permit will be issued with building permit. This provision is satisfied.

*B. Alteration or relocation of water course.*

*1. The Director shall notify communities adjacent to the affected area and the State Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;*

*2. The Director shall require that maintenance is provided within the altered or relocated portion of a watercourse so that the flood-carrying capacity is not diminished.*

**Response:** This application does not include any alteration or relocation of Fanno Creek. These provisions do not apply.

*C. Apply Standards. The appropriate approval authority shall apply the standards set forth in Sections 18.775.040, and 18.775.070 when reviewing an application for a sensitive lands permit.*

**Response:** The proposed extension of Wall Street falls under a Type I process as it involves impacts related to a public support facility. However, the concurrent comprehensive plan amendment to remove the City's significant wetland designation upgrades this request to a Type III-PC process. Therefore, the City Planning Commission will forward a recommendation to the City Council who will be the ultimate approval authority subject to the standards listed in this section. This application addresses applicable standards related to the proposed request. This provision is satisfied.

*D. Elevation and flood-proofing certification. The appropriate approval authority shall require that the elevations and flood-proofing certification required in Section 18.775.030.E below be provided prior to permit issuance and verification upon occupancy and final approval.*

**Response:** The attached memo, previous reports, and the 2005 Flood Insurance Study indicate the floodplain elevation in the project area in compliance with 18.775.030.E. This provision is satisfied.

*E. Maintenance of records.*

*1. Where base flood elevation data is provided through the Flood Insurance Study, the Building Official shall obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;*

*2. For all new or substantially improved flood-proofed structures, the Building Official shall:*

*a. Verify and record the actual elevation (in relation to mean sea level); and*

*b. Maintain the flood-proofing certifications required in this chapter.*

*3. The Director shall maintain for public inspection all other records pertaining to the provisions in this chapter.*

**Response:** The base flood elevation for the project area has been determined through the Flood Insurance Study effective February 18, 2005. No structures are proposed with this application other than the new roadway for the extension of Wall Street. These provisions do not apply.

**18.775.040 General Provisions for Floodplain Areas**

*A. Permit review. The appropriate approval authority shall review all permit applications to determine whether proposed building sites will minimize the potential for flood damage.*

**Response:** The proposed application does not propose any structure or building that would require review to determine the potential for flood damage. The proposed bridge span for Wall Street is elevated above the 100-year floodplain. This provision is met.

*B. Special flood hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study of the City of Tigard,” effective February 18, 2005, with accompanying Flood Insurance Rate Maps effective February 18, 2005, is hereby adopted by reference and declared to be a part of this chapter. This Flood Insurance Study is on file at the Tigard Civic Center.*

**Response:** The Flood Insurance Study and accompanying Flood Insurance Rate Maps effective February 18, 2005 were consulted to verify the 100-year floodplain elevation in the project area. This information was cross-referenced with the OBEC Hydraulic Analysis performed as part of the Alternatives Analysis (Exhibit K) to confirm the floodplain elevation and impacts related to the proposed roadway and bridge extension. As stated in Exhibit O, the research was conclusive that the floodplain elevation is consistent between both sources at 141.4. This provision is met.

*C. Base flood elevation data. When base flood elevation data has not been provided in accordance with Section 18.775.040.B above, the Director shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 18.775.040.M and 18.775.040.N below).*

**Response:** Base flood elevation data is available for the project area as discussed in the finding for 18.775.040.B above. This provision does not apply.

*D. Test of reasonableness. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that the potential for flood damage to the proposed construction will be minimized. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these sensitive land areas may result in higher insurance rates.*

**Response:** Base flood elevation data is available for the project area as discussed in the finding for 18.775.040.B above. This provision does not apply.

*E. Resistant to flood damage. All new construction and substantial improvements, including manufactured homes, shall be constructed with materials and utility equipment resistant to flood damage.*

**Response:** The proposed application does not include improvements in the form of structures or buildings. The proposed roadway will be constructed on materials resistant to flood damage. This provision does not apply.

*F. Minimize flood damage. All new construction and substantial improvements, including manufactured homes, shall be constructed using methods and practices that minimize flood damage.*

**Response:** The proposed application does not include improvements in the form of structures or buildings. The proposed roadway will be constructed on materials resistant to flood damage. This provision does not apply.

*G. Equipment protection. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.*

**Response:** The proposed roadway extension does not include these types of equipment or service facilities. This provision does not apply.

*H. Water Supply Systems. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.*

**Response:** The proposed roadway extension does not include water supply systems. This provision does not apply.

*I. Anchoring. All new construction, all manufactured homes and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.*

**Response:** The proposed application does not include improvements in the form of structures or buildings. The proposed roadway will be constructed on materials resistant to flood damage. This provision does not apply.

*J. Sanitary sewerage systems. New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharge from the systems into floodwater.*

**Response:** The proposed roadway extension does not include sanitary sewerage systems. This provision does not apply.

*K. On-site water disposal systems. On-site water disposal systems shall be located to avoid impairment to them or contamination from them during flooding.*

**Response:** The proposed roadway extension does not include on-site water disposal systems. This provision does not apply.

*L. Residential Construction.*

*1. New construction and substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor, including the basement, elevated at least one foot above base flood elevation;*

*2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:*

- a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;*
- b. The bottom of all openings shall be no higher than one foot above grade; and*
- c. Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of flood waters.*

*3. Manufactured homes shall be securely anchored to an adequately anchored permanent foundation system. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.*

**Response:** No residential construction is proposed. These provisions do not apply.

*M. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation, or together with attendant utility and sanitary facilities, shall:*

- 1. Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;*
- 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;*
- 3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in Section 18.775.030.E.2; and*
- 4. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 18.775.040.L.2. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).*

**Response:** No nonresidential construction of structures is proposed with this application. These provisions do not apply.

*N. Subdivisions and partitions in 100-year floodplain. Subdivisions and partitions in the 100-year floodplain shall meet the following criteria:*

- 1. The design shall minimize the potential for flood damage;*
- 2. Public utilities and facilities such as sewer, gas, electrical, and water systems shall be located and constructed so as to minimize flood damage;*
- 3. Adequate drainage shall be provided to reduce exposure to flood damage; and*
- 4. For subdivisions or partitions which contain more than 50 lots or 5 acres and where base flood elevation data is not available from the Federal Emergency Management Agency (FEMA) or another authoritative source, the applicant shall generate base flood elevation data to be reviewed as part of the application.*

**Response:** A subdivision or partition is not included with this application. These provisions do not apply.

*O. Recreational vehicles. Recreational vehicles placed on sites within zones A1-A30, AH, and AE on the community's Flood Insurance Rate Map either:*

- 1. Are on the site for fewer than 180 consecutive days;*
- 2. Are fully licensed and ready for highway use:
 
  - a. Are on wheels or jacking system,*
  - b. Are attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or*
  - c. Meet the requirements of E, F, I, and L above and the elevation and anchoring requirements for manufactured homes. (Ord. 05-01)**

**Response:** These provisions do not apply to the proposed application as the project area is not within zones A1-A30, AH and AE nor does it include provisions related to recreational vehicles.

**18.775.050 General Provisions for Wetlands**

*A. Code compliance requirements. Wetland regulations apply to those areas classified as significant on the City of Tigard “Wetland and Streams Corridors Map”, and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, per “Table 3.1 Vegetated Corridor Widths” and “Appendix C” Natural Resource Assessments” of the CWS “Design and Construction Standards”. Wetland locations may include but are not limited to those areas identified as wetlands in “Wetland Inventory and Assessment for the City of Tigard, Oregon,” Fishman Environmental Services, 1994.*

*B. Delineation of wetland boundaries. Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineation will be done by qualified professionals at the applicant’s expense.*

**Response:** Fanno Creek, abutting significant wetlands and associated Tigard riparian setbacks are mapped within the area proposed for the extension of Wall Street on the City of Tigard Wetland and Stream Corridors Map. Several delineations by qualified professionals have been conducted to determine the actual boundary of wetlands within the project area as shown on the attached plans. These surveyed boundaries have been concurred with by DSL and were used for plans necessary to obtain the Joint Fill permit from the Corps and DSL. Additionally, the wetland boundaries and survey information were used to determine vegetated corridor widths in the project area. This provision has been satisfied.

**18.775.070 Sensitive Lands Permits**

*A. Permits required. An applicant, who wishes to develop within a sensitive area, as defined in Chapter 18.775, must obtain a permit in certain situations. Depending on the nature and intensity of the proposed activity within a sensitive area, either a Type II or Type III permit is required, as delineated in Sections 18.775.020.F and 18.775.020.G. The approval criteria for various kinds of sensitive areas, e.g., floodplain, are presented in Sections 18.775.070.B – 18.775.070.E below.*

**Response:** The proposed street extension requires minor wetland impacts to a manmade pond (East Pond) and wetlands located east of Fanno Creek. Additional impacts to the 100-year floodplain are proposed including structural roadway fill and retaining walls on the east side of the extension to support the roadway. The bridge spans Fanno Creek and its associated floodway, with minor impacts related to the placement of the steel support pilings. Due to the impacts to both wetlands and 100-year floodplain, this application requests a Sensitive Lands Permit for this project. This provision is satisfied.

*B. Within the 100-year floodplain. The Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:*

- 1. Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless*

*certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;*

**Response:** An OBEC Consulting Engineers/West Consultants team was retained by the City previously to analyze hydraulic impacts associated with various bridge alternatives (Exhibit K). The study concluded that a 320' bridge would span the floodway and would meet City / FEMA requirements related to no rise in the floodplain elevation with a balance of earthwork volumes. A memo summarizing the information in this report has been prepared, for further information see Exhibit O. Mitigation will be identified off-site to balance the required fill volumes in accordance with this standard. This criterion is satisfied.

*2. Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;*

**Response:** The project area includes a 662' expansion of Wall Street over three residentially designated tax lots. The applicable zoning districts of R-12 and R-25 allow public support facilities as a permitted use. Wall Street is identified as a collector per the City's TSP, and Phase 1 has been constructed. This term is not defined in Chapter 18.120, and as such we have interpreted this term by citing other references in the Tigard Development Code.

As the term is used in 18.775.030.E.1.a, it is interpreted that this term is meant to allow a public roadway to be constructed above a floodplain in a residential zone as long as the roadway is elevated above the floodplain elevation. This interpretation would allow 100-year floodplain impacts supporting the proposed roadway such as pilings, cut and fill to support the construction of the roadway.

Floodplain impacts associated with the proposed extension are limited to placement of roadway structural fill in the areas west and east of the proposed bridge and support piles. Impacts are further limited to match previous design assumptions through the construction of wing and retaining walls on both sides of the bridge span. An OBEC Consulting Engineers/West Consultants team was retained by the City previously to analyze hydraulic impacts associated with various bridge alternatives (Exhibit K). The study concluded that a 320' bridge would span the floodway and would meet City / FEMA requirements related to no rise in the floodplain elevation. A memo summarizing the information in this report has been prepared for further information see Exhibit O.

As the roadway itself does not have floodplain impacts, and the structural fill supports the proposed public roadway, the proposed 100-year floodplain impacts are allowed as public support facilities as the term is used in 18.775.020e.1.a above. These thresholds are met. This criterion is satisfied.

*3. Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;*

**Response:** An OBEC Consulting Engineers/West Consultants team was retained by the City previously to analyze hydraulic impacts associated with various bridge alternatives (Exhibit K). The study concluded that a 320' bridge would span the floodway and would meet City / FEMA requirements related to no rise in the floodplain elevation with a balance of earthwork volumes. A memo summarizing the information in this report has been prepared, for further information see Exhibit O. Mitigation to balance the earthwork volumes will occur off-site in an area to be determined in accordance with this standard. This criterion is satisfied.

*4. The land form alteration or development plan includes a pedestrian/bicycle pathway in accordance with the adopted pedestrian/bicycle pathway plan, unless the construction of said pathway is deemed by the Hearings Officer as untimely;*

**Response:** As is shown on Sheet R8.1 of Exhibit L, the proposed road extension includes bicycle paths and sidewalks on either side of the road in compliance with the collector designation per the City's TSP. This criterion is satisfied.

*5. Pedestrian/bicycle pathway projects within the floodplain shall include a wildlife habitat assessment that shows the proposed alignment minimizes impacts to significant wildlife habitat while balancing the community's recreation and environmental educational goals.*

**Response:** The proposed project involves pedestrian/bicycle connectivity as an element of the proposed public street extension. This criterion does not apply.

*6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS permits and approvals shall be obtained; and*

**Response:** Included as Exhibit H in this application is the previously issued Joint Fill permit from the Corps and DSL. This permit authorized the impact and mitigation related to wetland impacts associated with the full extension of Wall Street (ie. Phase 1 and 2). Construction activities associated with Phase 1 completed mitigation to a level, as approved, which included Phase 2 impacts (see Exhibit N). Although this permit has since expired, the mitigation requirements remain unchanged. A renewed Joint Fill permit will be obtained after approval from City Council.

An updated CWS SPL has been obtained for this application and has been included as Exhibit P. Conditions of this permit will be met as required prior to the issuance of a Stormwater Connection Permit and building permit from the City of Tigard. Accepting a condition of approval requiring the necessary permits to be obtained prior to building permit issuance satisfies this criterion.

*7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the comprehensive plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle pathway plan.*

**Response:** The proposed extension of Wall Street proposes improvements within a 72' right-of-way. A dedication and public utility easement will be granted to the City to facilitate the construction of the proposed public improvements. This criterion is satisfied.

C. *With steep slopes. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit on slopes of 25% or greater or unstable ground*

*based upon findings that all of the following criteria have been satisfied:*

- 1. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than that required for the use;*
- 2. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property;*
- 3. The structures are appropriately sited and designed to ensure structural stability and proper drainage of foundation and crawl space areas for development with any of the following soil conditions: wet/high water table; high shrink-swell capability; compressible/organic; and shallow depth-to-bedrock; and*
- 4. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in accordance with Chapter 18.745, Landscaping and Screening.*

**Response:** These criterion are not applicable as the project area does not contain any areas with slopes of 25% or greater.

D. *Within drainageways. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit within drainageways based upon findings that all of the following criteria have been satisfied:*

- 1. The extent and nature of the proposed land form alteration or development will not create site disturbances to the extent greater than that required for the use.*
- 2. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property.*
- 3. The water flow capacity of the drainageway is not decreased.*
- 4. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in accordance with Chapter 18.745, Landscaping and Screening.*
- 5. The drainageway will be replaced by a public facility of adequate size to accommodate maximum flow in accordance with the adopted 1981 Master Drainage Plan.*
- 6. The necessary US Army Corps of Engineers and State of Oregon Land Board, Division of State Lands approvals shall be obtained.*
- 7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the Comprehensive Plan.*

**Response:** TDC 18.120.130.A.60 defines a drainageway as follows, “ “Drainage way” - Undeveloped land inundated during a 25-year storm with a peak flow of at least five cubic feet per second and conveyed, at least in part, by identifiable channels that either drain to the Tualatin River directly or after flowing through other drainage ways, channels, creeks or floodplain.” The only drainageway within the project area per this definition is Fanno Creek. No impacts associated with the proposed extension of Wall Street are proposed to Fanno Creek. These criteria do not apply.

E. *Within wetlands. The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:*

1. *The proposed land form alteration or development is neither on wetland in an area designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map nor is within the vegetative corridor established per "Table 3.1 Vegetative Corridor Widths" and Appendix C: Natural Resources Assessments" of the CWS Design and Construction Standards," for such a wetland;*

**Response:** The proposed extension of Wall Street impacts 0.19 acres of wetland designated as significant on the Comprehensive Plan Wetlands & Stream Corridors Map. This application includes a Comprehensive Plan Map Amendment to remove this designation from the impacted wetlands. The revised wetland mitigation plan previously approved by DSL and the Corps as part of the wetland permits issued for the entire project has been included as Exhibit N. Mitigation for the wetland impacts has been constructed with Phase 1 of the Wall Street extension.

The proposed roadway alignment also impacts 0.65 acres (27,381 SF) of CWS vegetated corridor. A vegetated corridor mitigation plan has been approved by CWS as part of the Service Provider Letter issued for the project (Exhibit P). A landscape plan has been provided in accordance with draft landscape plan details provided by Pacific Habitat Services (Exhibit Q). As specified on sheet R2.5of Exhibit L the enhancements will include the removal of non-native vegetation in accordance with CWS Design and Construction Standards Appendix A as adopted by R&O 07-20. A total of 30,021 SF of enhancement is provided along with 27,383 SF of mitigation enhancement for a total of 57,404 SF of vegetated corridor plantings. These areas will remove non-native species and will be densely planted with 312 trees and 2,114 shrubs. All remaining areas not planted will receive a native herbaceous seed mixture.

This criterion is met by demonstrating approval of the standards as specified in 18.775.130, effectively removing the significant designation from impacted wetlands and through the wetland mitigation already completed and the proposed CWS vegetated corridor enhancement.

2. *The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;*

**Response:** The Alternatives Analysis conducted for the project demonstrates that the proposed wetland and 100-year floodplain impacts are the minimum practicable for the project. No other alternative exists to provide access to the applicant's property. Eliminating the planter strip on the 320' bridge portion has minimized the extent of the proposed roadway extension. The remainder of the proposed extension meets the design standards of a collector facility as specified in Table 18.810.1 per the TSP, and therefore cannot minimize disturbances further. This criterion is met.

3. *Any encroachment or change in on-site or off-site drainage which would adversely impact wetland characteristics have been mitigated;*

**Response:** The only change in drainage associated with this proposal is the conveyance of stormwater associated with the road and bridge. All such stormwater is directed towards a water quality facility. Treated stormwater from the water quality facility will be directed into the wetland mitigation area to ensure that wetland hydrology on the site is maintained and that development does not adversely impact existing wetlands. No additional impacts are associated with the proposed extension. See sheet R2.2 of Exhibit L. This criterion is therefore met.

4. *Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in accordance with Chapter 18.745, Landscaping and Screening;*

**Response:** Erosion control provisions of Washington County's Surface Water Management program will be met (see sheet R2.2 of Exhibit L). All disturbed areas that are not covered with impervious surfaces will be seeded and planted upon completion of construction. The 50-foot vegetated corridors adjacent to Fanno Creek and wetlands will be planted to meet Clean Water Services Design and Construction Standards. Planting plans are included in the CWS approval (Exhibit Q) for Phase 2. This criterion is met.

5. *All other sensitive lands requirements of this chapter have been met;*

**Response:** As this narrative demonstrates, all applicable requirements of the Sensitive Lands Chapter are met.

6. *The necessary US Army Corps or Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained;*

**Response:** Included as Exhibit H in this application is the previously issued Joint Fill permit from the Corps and DSL. This permit authorized the impact and mitigation related to wetland impacts associated with the full extension of Wall Street (ie. Phase 1 and 2). Construction activities associated with Phase 1 completed mitigation to a level, as approved, which included Phase 2 impacts (see Exhibit N). Although this permit has since expired, the mitigation requirements remain unchanged. A renewed Joint Fill permit will be obtained after approval from City Council.

An updated CWS SPL has been obtained for this application and has been included as Exhibit P. Conditions of this permit will be met as required prior to the issuance of a Stormwater Connection Permit and building permit from the City of Tigard. Accepting a condition of approval requiring the necessary permits to be obtained prior to building permit issuance satisfies this criterion.

7. *The provisions of Chapter 18.790, Tree Removal, shall be met;*

**Response:** TDC 18.790.030 lists the threshold criteria for requiring a Tree Plan Review to remove trees. As the proposed application does not involve a subdivision, partition, site development review, or conditional use, a Tree Plan Review is not required. However, a Tree Removal Permit subject to a Type I procedure is necessary for the removal of trees associated with the proposed

extension of Wall Street. A separate, but concurrent Tree Removal Permit has been applied for which addresses the provisions of TDC 18.790.050. These provisions are met.

8. *Physical Limitations and Natural Hazards, Floodplains and Wetlands, Natural Areas, and Parks, Recreation and Open Space policies of the Comprehensive Plan have been satisfied.*

**Response:** The following identifies the applicable policies of the Comprehensive Plan and addresses how the proposed road extension meet each.

#### ENVIRONMENTAL QUALITY – GOAL 6.2

*Ensure land use activities protect and enhance the community’s water quality.*

**Response:** The proposed roadway expansion involves work within wetlands and 100-year floodplain associated with Fanno Creek. As mentioned in the application, no impacts are proposed to Fanno Creek or its floodway as the proposed 320’ bridge will span Fanno Creek and its floodway. Actual installation of the bridge will be subject to a DEQ 1200C permit and an updated Corps/DSL Section 404 permit allowing work within wetlands. Such permits require extensive erosion control measures to prevent siltation of waterways during construction activity. Once the roadway extension is constructed, a stormwater system will convey runoff from the new impervious areas to water quality facilities (i.e., vegetated swales). Stormwater treatment facilities as well as erosion control measures will ensure that the community’s water quality is protected. Preliminary plans demonstrating the proposed stormwater and erosion control measures have been provided with this application (Exhibit L). This goal is met.

*Policy 3.* *The City shall encourage the use of low impact development practices that reduce stormwater impacts from new and existing development.*

**Response:** Although the standards applying to public road construction somewhat limit the extent to which low impact development techniques can be used, nearly all available low impact solutions were selected for this project. An example would be the use of a longer 320 ft. bridge span, which will help preserve much of the existing vegetation within the floodway. Also, the use of water pre-treatment and bioswales will both ensure a high level of water quality and enhance the natural environment. In summary, the project utilizes low impact design alternatives to the greatest practical extent and thereby is consistent with this policy.

*Policy 4.* *The City shall protect, restore, and enhance, to the extent practical, the natural functions of stream corridors, trees, and water resources for their positive contribution to water quality.*

**Response:** Wetland mitigation for impacts for the full extension have been approved and constructed. Additional plantings are proposed as required by CWS to mitigate vegetated corridor impacts. The end result of the natural functions of the project area is far greater than its current state due to the required mitigation measures. These plantings, and proposed vegetated water quality swales will provide increased positive contributions to water quality. This Policy is met.

*Policy 5. The City shall require measures to minimize erosion and storm run-off from development sites during and after construction.*

**Response:** The project will include an erosion control plan meeting both City of Tigard and CWS requirements. In addition, the project will meet the erosion control and water quality conditions contained in the DSL and Corps wetland permits and in the water quality certification issued by DEQ as part of the Corps permit. Erosion control measures will be regularly inspected and maintained during project construction. The project will be consistent with this policy through the implementing measures discussed above. Preliminary plans demonstrating the proposed stormwater and erosion control measures have been provided with this application (Exhibit L).

*Policy 7. The City shall investigate and use, to the extent practical, measures that limit the community's effective impervious area.*

**Response:** A new street extension requires that some impervious area be created in order to provide for safe transportation conditions and public access. To minimize the impacts of impervious area, the proposed application includes treating stormwater through the existing water quality facility located near the City Library, as well as an additional bioswale with an outfall into the existing wetland area. These measures are considered best practices for treating runoff created by impervious areas. Further, the impervious area proposed is the minimum required to construct the public facility based upon compliance with the City-defined collector standard. The proposal is consistent with this standard.

#### HAZARDS – GOAL 7.1

*Protect people and property from flood, landslide, earthquake, wildfire, and severe weather hazards.*

**Response:** The proposed bridge extension does not affect the City's protection against potential hazards listed above. The preliminary design indicates the bridge section profile maintains the required 1' freeboard clearance over the 100-year floodplain elevation of 141.1' determined at the crossing location. The proposal is thereby consistent with this goal.

*Policy 8. The City shall prohibit any land form alterations or developments in the 100- year floodplain which would result in any rise in elevation of the 100-year floodplain.*

**Response:** The proposed application does not propose any significant impacts in the 100-year floodplain. The conclusions of the Hydraulic Analysis (Exhibit 5) state that the base flood and floodway water surface elevations upstream of the proposed bridge would be less than the design base flood elevation of the City Library. However, in order to prevent increase in the base flood elevation the bridge would have to span a length of 320 feet. As currently proposed, the bridge will span 320 feet with impacts resulting from the necessary bridge pile supports and fill slopes. To ensure compliance with the conclusions of the Hydraulic Analysis and no impacts to the 100-year floodplain, mitigation in the form of excavation within the floodplain to balance earthwork volumes will be provided off-site in a location to be determined. This Policy is met.

*Policy 9. The City shall not allow land form alterations or development within the 100-year floodplain outside the zero-foot rise floodway unless:*

- A. The streamflow capacity of the zerofoot rise floodway is maintained; and*
- B. Engineered drawings and/or documentation shows there will be no detrimental upstream or downstream effects in the floodplain area.*

**Response:** As previously indicated, there will be a revision in a portion of the 100-year floodplain with the proposed extension. The Revised Wall Street Alternatives Analysis (March 2005) indicated that the preferred alternative for bridge construction (which is here again proposed) does not present any detrimental upstream or downstream impacts that would result from the proposed Wall Street extension. In fact, the Alternatives Analysis (Exhibit 1) showed that an extension of Wall Street would have positive benefits on the streamflow of Pinebrook and Fanno Creeks by re-directing the flow on Pinebrook Creek and disconnecting it from a nutrient-rich pond. "Reconnecting Pinebrook Creek to this historic channel and taking the East Pond off-line from Pinebrook Creek will eliminate overflows of warm, nutrient-rich water from the East Pond into Fanno Creek."

The creation/restoration of wetlands in the area of the two ponds during Phase 1 was predicted to have positive affects on water storage capacity during flood events. Phase 2 improvements have been shown not to increase the level of the 100-year floodplain as the bridge itself will be elevated above the base flood elevation by mitigating the fill volumes off-site in a location to be determined.

Further, Corps/DSL requirements prohibit downstream siltation/water quality impacts and prescribe a monitoring program to ensure that such impacts do not occur. Given that the project will not increase the severity of the mapped 100-year floodplain, because water storage capacity was increased with Phase 1, and because it will very likely cause improvements to the upstream and downstream water quality, the proposal is consistent with this policy.

*Policy 10. The City shall work with Clean Water Services to protect natural drainageways and wetlands as valuable water retention areas and, where possible, find ways to restore and enhance these areas.*

**Response:** This application does not propose impacts to Fanno Creek, a natural drainageway. Necessary wetland impacts related to the proposed extension of Wall Street were reviewed by CWS with the Phase 1 application. The previously issued service provider letter indicated detailed mitigation plantings for vegetated corridor impacts for the full extension. This application includes an updated CWS service provider letter which states the required plantings to mitigate impacts to, and restore the regulated vegetated corridors. As shown on Sheet R2.5, a total of 57,404 SF of vegetated corridor plantings are proposed. These areas will remove non-native species and will be densely planted with 312 trees and 2,114 shrubs. All remaining areas not planted will receive a native herbaceous seed mixture. The end result of these plantings will likely be an enhanced drainageway and wetland near the proposed street extension. The proposal is consistent with this policy.

*Policy 11. The City shall comply with Metro Title 3 Functional Plan requirements for balanced fill and removal in the floodplain.*

**Response:** Metro Title 3 broadly sets forth performance standards governing impacts to floodways, floodplains, and drainageways. These include standards related to water quality, vegetated corridors, and erosion/sedimentation. Although this is now an applicant-driven infrastructure proposal, it largely builds upon the plans completed by the City for the same extension project in 2005. The proposed application does not propose any significant impacts in the 100-year floodplain. The conclusions of the Hydraulic Analysis (Exhibit 5) state that the base flood and floodway water surface elevations upstream of the proposed bridge would be less than the design base flood elevation of the City Library. However, in order to prevent an increase in the base flood elevation the bridge would have to span a length of 320 feet. As currently proposed, the bridge will span 320 feet with impacts resulting from the necessary bridge pile supports and fill slopes. To ensure compliance with the conclusions of the Hydraulic Analysis and no impacts to the 100-year floodplain, mitigation in the form of excavation within the floodplain to balance earthwork volumes will be provided off-site in a location to be determined. Sufficient evidence has been submitted in order to show that compliance with Title 3 is feasible (Exhibits K, M, and O), and because most of Title 3 sets forth performance rather than design standards, conformity will be monitored during development. This Policy is met.

## SUMMARY

As demonstrated in the consideration of the sections above, the proposal is consistent with the specified portions of the Tigard Comprehensive Plan.

### ***18.775.090 Special Provisions for Development within Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and South Fork of Ash Creek***

*A. In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 666-023-0030) pertaining to wetlands, all wetlands classified as significant on the City of Tigard “Wetlands and Streams Corridors Map” are protected. No land form alterations or developments are allowed within or partially within a significant wetland, except as allowed/approved pursuant to Section 18.775.130.*

**Response:** As stated throughout this application, the proposed roadway extension of Wall Street requires wetland impacts in the form of grading and filling to support the new public road. Wetlands within the project area are designated as significant on the City of Tigard Wetlands and Streams Corridors Map. In order to allow these impacts a comprehensive plan amendment to remove this designation for 0.19 acres of wetlands is proposed pursuant to Section 18.775.130. This provision is satisfied.

*B. In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of the bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.*

1. *The standard width for “good condition” vegetated corridors along the Tualatin River is 75 feet, unless wider in accordance with CWS “Design and Construction Standards”, or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard “Wetlands and Streams Corridors Map”) is located within the 75-foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.*

**Response:** The proposed application does not involve the vegetated corridors along the Tualatin River. This provision does not apply.

2. *The standard width for “good condition” vegetated corridors along Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50 feet, unless wider in accordance with CWS “Design and Construction Standards”, or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard “Wetlands and Streams Corridors Map”) is located within the 50 foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.*

**Response:** Utilizing the survey and wetland delineations prepared by quality professionals, the required vegetated corridor has been shown on the attached drawings in accordance with CWS standards for a width of 50’. This provision is satisfied.

3. *The minimum width for “marginal or degraded condition” vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50% of the standard width, unless wider in accordance with CWS “Design and Construction Standards”, or modified in accordance with Section 18.775.130.*

**Response:** Existing vegetated corridors adjacent to Fanno Creek and its wetlands are largely marginal or degraded per CWS standards. However, with the proposed enhancement plan, these will be densely planted and will meet the ‘good’ standard as a result. This provision is satisfied.

4. *The determination of corridor condition shall be based on the Natural Resource Assessment guidelines contained in the CWS “Design and Construction Standards”.*

**Response:** A natural resource assessment has been prepared by Pacific Habitat Services as part of the request for a service provider letter. See Exhibit P. This provision is satisfied.

5. *The standard setback distance or vegetated corridor area applies to all development proposed on property located within or partially within the vegetated corridors, except as allowed below:*

- a. *Roads, pedestrian or bike paths crossing the vegetated corridor from one side to the other in order to provide access to the sensitive area or across the sensitive area, as approved by the City per Section 18.775.070 and by CWS “Design and Construction Standards”;*
- b. *Utility/service provider infrastructure construction (i.e. storm, sanitary sewer, water, phone, gas, cable, etc.), if approved by the City and CWS;*
- c. *A pedestrian or bike path, not exceeding 10 feet in width and meeting the CWS “Design and Construction Standards”;*
- d. *Grading for the purpose of enhancing the vegetated corridor, as approved by the City and CWS;*
- e. *Measures to remove or abate hazards, nuisances, or fire and life safety violations, as approved by the regulating jurisdiction;*

- f. Enhancement of the vegetated corridor for water quality or quantity benefits, fish, or wildlife habitat, as approved by the City and CWS;
- g. Measures to repair, maintain, alter, remove, add to, or replace existing structures, roadways, driveways, utilities, accessory uses, or other developments provided they are consistent with City and CWS regulations, and do not encroach further into the vegetated corridor or sensitive area than allowed by the CWS “Design and Construction Standards.

**Response:** The proposed roadway expansion includes grading and fills for the construction of a new public road which will include sidewalks and bike paths. The proposed expansion fully mitigates necessary impacts to vegetated corridor as specified in the attached service provider letter and as demonstrated on the proposed landscape plan (Exhibits P and Q). This provision is satisfied.

6. Land form alterations or developments located within or partially within the Goal 5 safeharbor setback or vegetated corridor areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek that meet the jurisdictional requirements and permit criteria of the CWS, U.S. Army Corps of Engineers, Division of State Lands, and/or other federal, state, or regional agencies, are not subject to the provisions of Section 18.775.090.B, except where the:

- a. Land form alterations or developments are located within or partially within a good condition vegetated corridor, as defined in Sections 18.775.090.B.1 and 18.775.090.B.2;
- b. Land form alterations or developments are located within or partially within the minimum width area established for marginal or a degraded condition vegetated corridor, as defined in Section 18.775.090.B.3.

*These exceptions reflect instances of the greater protection of riparian corridors provided by the safe harbor provisions of the Goal 5 administrative rule.*

**Response:** The proposed roadway expansion meets the permit criteria of CWS per the attached service provider letter through the proposed enhancement and mitigation. DSL and Corps permits have already been issued for the proposed wetland impacts, and the Phase 1 construction has already mitigated for these impacts. The proposed roadway expansion impacts vegetated corridors that are currently marginal or degraded. As such the provisions of this section apply and have been addressed above. This provision is satisfied.

### **Section 18.775.130**

*Any owner of property affected by the Goal 5 safeharbor (1) protection of significant wetlands and/or (2) vegetated areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek may apply for a quasi-judicial comprehensive plan amendment under Type IV procedure. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove Goal 5 protection from the property, but not to remove the requirements related to the CWS Stormwater Connection Permit, which must be addressed separately through an Alternatives Analysis, as described in Section 3.02.5 of the CWS “Design and Construction Standards”. The applicant shall demonstrate that such an amendment is justified by either of the following:*

**Response:** Section 18.775.130 of the code provides the option for a Type IV Comprehensive Plan Amendment to remove Goal 5 protection from a parcel based on a specific development proposal. This amendment does not remove the requirements related to the CWS Stormwater Connection Permit. A specific development proposal has been prepared, which is based on the previously

designed Phase 2 extension proposed by the City. The applicant will comply with the requirements related to the service provider letter and will obtain a CWS Stormwater Connection permit prior to construction of the proposed roadway extension.

Demonstration that an amendment is justified can be done by either an ESEE analysis or a Determination of “insignificance.” The following addresses the ESEE analysis option for a Comprehensive Plan Amendment to remove Goal 5 protection from the site and remove the site from the inventory.

- A. *ESEE analysis. The applicant may prepare an Environmental, Social, Economic, and Energy (ESEE) consequences analysis prepared in accordance with OAR 660-23-040.*
  - 1. *The analysis shall consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and the comparison with other comparable sites within the Tigard Planning Area.*

**Response:** This application contains an ESEE analysis (Exhibit R) for the project site and compares this site to others throughout the City. The ESEE has been prepared using a methodology used by the City for the Phase 1 of Wall Street that is compliant with the ESEE methodologies currently in use by Metro and the Tualatin Basin Partners for Natural Places (TBPNP) of which the City of Tigard is a member. The ESEE more thoroughly contemplates and better balances the environmental, social, economic, and energy implications of developing this particular site with this particular proposal.

- 2. *The ESEE analysis must demonstrate to the satisfaction of the Tigard City Council that the adverse economic consequences of not allowing the conflict use are sufficient to justify the loss, or partial loss, of the resource.*

**Response:** The ESEE contains an explanation of the impact to the natural resources and the economic importance of providing public access to a significant amount of residentially zoned land that is currently land-locked. The ESEE conclusions demonstrate how the project has been designed to minimize impacts to the natural resources on the site. In addition, providing the requested extension will allow for development of the subject site that will be of significant economic and social benefit to the city of Tigard.

- 3. *In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning area that can meet the specific needs of the proposed use.*

**Response:** The ESEE discusses that ten alternative road alignments were identified and explored in the Alternatives Analysis prepared for the previous Joint Fill permit for the full extension of Wall Street. The Analysis determined that the preferred Alternative 9 minimized both wetland and 100-year floodplain impacts to the extent practicable. In addition, the applicant has exhausted all other alternative access options to serve the subject site as is discussed earlier in the narrative. The proposed extension is aligned with the only easement access route that the applicant has to the property. The proposed extension of Wall Street remains the only viable access option to serve property east of Fanno Creek. Furthermore, this access has been identified through the various agreements between the City and the applicant since the sale of the Library property to the City. The proposed extension to Wall Street complies

with the City's designation on the TSP as a collector. The project description describes multiple other transportation projects that were analyzed in the transportation plan as potential alternatives to this project in this area. For the reasons discussed above and laid out in the ESEE, no other sites within Tigard can meet the specific needs of the proposed use.

4. *The ESEE analysis shall be prepared by a team consisting of a wildlife biologist or wetlands ecologist and a land use planner or land use attorney, all of whom are qualified in their respective fields and experienced in the preparation of Goal 5 ESEE analysis.*

**Response:** The ESEE analysis has been prepared by Pacific Habitat Services and a land use planner from Group Mackenzie; both are qualified in their respective fields.

5. *If the application is approved, then the ESEE analysis shall be incorporated by reference into the Tigard Comprehensive Plan, and the "Tigard Wetland and Stream Corridor Map" shall be amended to remove the site from the inventory.*

**Response:** This application includes mapping materials used in the preparation of the report. These GIS mapping products include updated natural resource site locations based upon site-specific delineation of natural resources and professional land surveying. These materials may be used to update the natural resource inventory for the site, as well as the sensitive lands overlay zone. Upon approval of the requested application, the Tigard Wetland and Stream Corridor Map can be amended similar to Phase 1.

#### IV. COMPREHENSIVE PLAN AMENDMENT

The 0.19 acres of wetland impact to the man-made East Pond and wetlands east of Fanno Creek proposed with the roadway extension are mapped on the City of Tigard's Wetlands & Stream Corridors Map. Pursuant to Section 18.775.130, a quasi-judicial Comprehensive Plan Amendment is requested to remove the locally significant designation from these elements. The following addresses the applicable criteria for the amendment.

##### *Section 18.390.060 - Type IV Procedure*

**Response:** Section 18.390.060.G includes the factors that the Planning Commission and City council should consider in a Comprehensive Plan Amendment. These factors are identified and addressed below.

##### *1. The Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes Chapter 197;*

**Response:** The following identifies and addresses how the proposed project complies with the applicable Statewide Planning Goals and Guidelines.

##### *Goal 1 – Citizen Involvement*

**Response:** The neighborhood meeting, public notice and public hearings associated with this application ensure compliance with this goal.

##### *Goal 2 – Land Use Planning*

**Response:** This goal's main focus is to direct jurisdictions regarding the creation of land use plans and ordinances. The City of Tigard has an acknowledged comprehensive plan and, as discussed in this narrative, this proposal complies with applicable policies as adopted by the City Council. The review of this application and the requirements to meet specific criteria prior to approval ensure the proposed project complies with the standards of this goal.

##### *Goal 5 – Natural Resources, Scenic and Historic Areas, and Open Spaces*

##### *Goal 6 – Air, Water, and Land Resources Quality*

**Response:** These goals are intended to protect natural resources, historic areas, and related resources. This application proposes an amendment to the City of Tigard Wetland and Stream Corridors Map to remove the wetland and East Pond impacted by the proposed project from the map. The Phase 1 approval removed 0.11 acres of significant land from the map through a similar request including a portion of the East Pond.

The impacts and the mitigation proposed have been previously reviewed and permitted by the US Army Corps of Engineers and the Oregon Department of State Lands. Furthermore, Phase 1 provided the mitigation for the Phase 2 impacts. A Service Provider Letter has been obtained from Clean Water Services. This review, with the permits listed above, ensures that the impacts to the identified natural resources have been appropriately protected and mitigated in compliance with these goals.

*Goal 8 – Recreational Needs*

**Response:** This goal’s main focus is related to large-scale resort opportunities and is not applicable to this application. However, the proposed street alignment does include sidewalks and bike lanes, providing connections to other pathways in the area that provide recreational opportunities within the community.

*Goal 10 – Housing*

**Response:** The proposed project meets this goal by providing access to the applicant’s property to the east of Fanno Creek. A recent comprehensive plan and zone change was approved by City Council. The result is a significant parcel of R-25 zoned property primed for development, with the exception of access. This application will provide public access to this property allowing development and the economic and social benefits to the City to be realized.

*Goal 11 – Public Facilities and Services*

**Response:** This goal requires that jurisdictions plan and ensure adequate and appropriate extension of public facilities and services to direct development. The subject site does not currently access, however does have utilities in the abutting railroad right-of-way and in the western portion of the site available to serve the site. The request provides access to the subject site with the only viable option by way of an extension of Wall Street as previously proposed by the City over an existing access easement. The City of Tigard Transportation Systems Plan already reflects this proposed extension of Wall Street.

*Goal 12 – Transportation*

**Response:** This goal requires that local governments provide “a safe, convenient and economic transportation system,” and it requires adoption of transportation plans designed to implement the goal. Wall Street is a public support facility called for by the Street Improvement Plan of the City’s Transportation System, which has been adopted by the City Council and acknowledged by DLCDD. This request allows for the logical planned extension of Wall Street to provide access to the subject site similar to that planned/built to serve the Tigard Library and the Fanno Pointe Condominiums (i.e. Phase 1).

2. *Any federal or state statutes or regulations found applicable;*

**Response:** The subject street extension, its impacts, and mitigation have received prior approval from the US Army Corps of Engineers, the Oregon Department of State Lands, and Clean Water Services. An updated CWS SPL has been included in this application. Updated Corps and DSL permits will be necessary and the information required for such a permit will be provided before construction of the proposed extension.

3. *Any applicable METRO regulations;*

**Response:** Metro’s Urban Growth Management Functional Plan (“Functional Plan”) is a regional policy tool that requires changes to city and county comprehensive plans and land use ordinances to implement regional goals and objectives. The following addresses how the proposed project meets the applicable titles of the Functional Plan.

*Title 1 – Housing and Employment*

**Response:** Title 1 of the Functional Plan promotes more efficient use of land by setting target capacities for jobs and housing. The proposed Comprehensive Plan Amendment does not affect job or housing capacities, as it is associated with a revision to the Wetland & Stream Corridor Map, and not the zoning of the property. However, it does facilitate the development of a significant parcel of residentially zoned property, thereby meeting the City’s and Metro density requirements.

*Title 2 – Regional Parking Policy*

**Response:** This title creates region-wide parking policies that set the minimum and maximum number of parking spaces that can be required by local governments for certain types of new development. This title is not applicable as this request does not include parking.

*Title 3 – Water Quality and Flood Management*

**Response:** This title aims to reduce flood and landslide hazards, control erosion, and reduce water pollution. The performance standards of this title are addressed through the City’s sensitive lands requirements of Section 18.755 and Clean Water Service Requirements. Section III of the above narrative addresses these requirements.

*Title 6 – Regional Accessibility (Regional Transportation Plan)*

**Response:** This title addresses the coordination of transportation and land use planning by requiring improvements to local street grids, mode split targets in regional centers, and the revisions to level of service standards. Wall Street is a public support facility called for by the Street Improvement Plan of the City’s Transportation System, which has been adopted by the City Council and acknowledged by DLCD. Approval of this request will allow for the extension of Wall Street to provide access to a land-locked parcel of land. No other alternatives exist. Therefore, with the extension of Wall Street from its current terminus into the applicant’s property, exercising the existing access easement, compliance with the City adopted TSP is achieved.

4. *Any applicable comprehensive plan policies; and*

**Response:** Applicable Comprehensive Plan policies are addressed in Section III.

5. *Any applicable provisions of the City's implementing ordinances.*

**Response:** Applicable provisions of the City’s Development Code are addressed in Section V.

### **Section 18.390.050 Type III Procedure**

#### **18.390.050.B.2.e Decision Making Procedure / Impact Study**

*Include an impact study. The impact study shall quantify the effect of the development on public facilities and services. The study shall address, at a minimum, the transportation system, including bikeways, the drainage system, the parks system, the water system, the sewer system, and the noise impacts of the development. For each public facility system and type of impact, the study shall propose improvements necessary to meet City standards and to minimize the impact of the development on the public at large, public facilities systems, and affected private property users. In situations where the Community Development Code requires the dedication of real property interests, the applicant shall either specifically concur with the dedication requirements, or provide evidence which supports the conclusion that the real property dedication requirement is not roughly proportional to the projected impacts of the development.*

**Response:** The following demonstrates compliance with this Section:

#### Transportation System

As mentioned above, the current proposed extension of Wall Street is in compliance with the City's designation on the adopted TSP. Bicycle lanes have been provided with the proposed bridge design, which will connect to Phase 1 and eventually onto Hall Boulevard. The proposed removal of the significant wetlands designation itself will not have impact on the transportation system.

#### Drainage System

The only change in drainage associated with this proposal is the conveyance of stormwater associated with the road and bridge. All such stormwater is directed towards a water quality facility. Treated stormwater from the water quality facility will be directed into the wetland mitigation area to ensure that wetland hydrology on the site is maintained and that development does not adversely impact existing wetlands. No additional impacts are associated with the proposed extension. Certain aspects of the previous Wall Street design and the Library design involved mutual issues. Kurahashi & Associates, Inc. led the civil design for the Library, and DeHaas & Associates, Inc. led the civil design for Wall Street. Kurahashi & Associates covered the water quality requirements for both projects. Page 2 of the Phase 1 Stormwater Report (referenced in Exhibit O) indicates the swale constructed for the Library was sized to accommodate the street impervious area from the Wall Street Extension (Phase 1). Additional impervious area will be handled by this bioswale for new impervious area on the west end of the proposed bridge crossing.

A new bioswale is proposed to be constructed east of Fanno Creek to treat runoff from Phase 2 consisting of the proposed bridge and associated sidewalks. A detailed description of the design can be found on Page 3 of Exhibit B of the Joint Permit Application (Exhibit H). Preliminary calculations for conveyance and treatment of flows from Phase 2 are described by Exhibit M.

#### Parks System

The project area is not located within the City's parks system; therefore neither construction of the proposed extension or the removal of the significant designation will affect the City's park system.

The water system

There are no additional users of the City's water system as a result of the proposed extension of Wall Street. The proposed removal of the significant designation will not, in itself, have any impact on the water system in the City.

The sewer system

There are no additional users of the City's sewer system as a result of the proposed extension of Wall Street. The proposed removal of the significant designation will not, in itself, have any impact on the water system in the City.

Noise impacts of the development

A temporary increase in noise levels will occur during construction of the project due to the presence of heavy equipment. Sensitive noise receptors adjacent to the project include users of the Tigard Library, and residents of the Fanno Pointe Condominiums. Upon completion of construction, regular use of the extension will have usual noise associated with similar sized facilities.

## V. OTHER APPLICABLE CODE SECTIONS

Additional sections of the City of Tigard Community Development Code are applicable to the proposed project. The following identifies these code sections and addresses how the proposed road extension meets each.

### ***18.510 Residential Zoning District***

**Response:** The project area includes two separate residential zoning districts: R-12 and R-25. The proposed extension is a public support facility identified in the Street Improvement Plan of the City's Transportation System Plan and is a permitted use in both residential zoning districts affecting the project area. No residential development that would be subject to the development standards in this section is proposed. The proposed roadway will connect to the Phase 1 terminus of Wall Street which is also located on residentially zoned property.

### ***18.725 Environmental Performance Standards***

**Response:** The project will comply with all applicable state and federal regulations pertaining to noise, odor and discharge of matter into the atmosphere, ground, sewer system, or streams.

### ***18.775 Sensitive Lands Review***

**Response:** The applicable code sections of Chapter 18.775 are addressed in this application. See Section III of this narrative.

### ***18.790 Tree Removal***

**Response:** TDC 18.790.030 lists the threshold criteria for requiring a Tree Plan Review to remove trees. As the proposed application does not involve a subdivision, partition, site development review, or conditional use, a Tree Plan Review is not required. However, a Tree Removal Permit subject to a Type I procedure is necessary for the removal of trees associated with the proposed extension of Wall Street. A separate, but concurrent Tree Removal Permit has been applied for which addresses the provisions of TDC 18.790.050. These provisions are met.

### ***18.795 Visual Clearance Areas***

**Response:** The roadway will comply with all standards for visual clearance areas at its intersection with Hall Boulevard and both driveways as the previous application demonstrated compliance and this application is merely an extension.

### ***18.810 Street and Utility Standards***

**Response:** The roadway is designed to comply with the standards of this section as follows:

#### *.030 Streets*

##### *A. Improvements:*

- 1. No development shall occur unless the development has frontage or approved access to a public street.*

2. *No development shall occur unless streets within the development meet the standards of this chapter.*
3. *No development shall occur unless the streets adjacent to the development meet the standards of this chapter, provided, however, that a development may be approved if the adjacent street does not meet the standards but half-street improvements meeting the standards of this title are constructed adjacent to the development.*
- 4 *Any new street or additional street width planned as a portion of an existing street shall meet the standards of this chapter;*
5. *If the City could and would otherwise require the applicant to provide street improvements, the City Engineer may accept a future improvements guarantee in lieu of street improvements if one or more of the following conditions exist:*
  - a. *A partial improvement is not feasible due to the inability to achieve proper design standards;*
  - b. *A partial improvement may create a potential safety hazard to motorists or pedestrians;*
  - c. *Due to the nature of existing development on adjacent properties it is unlikely that street improvements would be extended in the foreseeable future and the improvement associated with the project under review does not, by itself, provide a significant improvement to street safety or capacity;*
  - d. *The improvement would be in conflict with an adopted capital improvement plan;*
  - e. *The improvement is associated with an approved land partition on property zoned residential and the proposed land partition does not create any new streets; or*
  - f. *Additional planning work is required to define the appropriate design standards for the street and the application is for a project which would contribute only a minor portion of the anticipated future traffic on the street.*

**Response:** The proposed road extension will facilitate the development of the applicant's property east of Fanno Creek by providing public access and frontage to Wall Street. The proposed design of the roadway meets the standards of this Chapter as is shown on the attached drawings, except as described below pursuant to Section 18.810.030.A.6 &7. In order for development to occur at the applicant's property, the proposed roadway extension will need to be constructed. No future improvements guarantee is proposed with this application. These standards are met.

6. *The standards of this chapter include the standard specifications adopted by the City Engineer pursuant to Section 18.810.020.B.*
7. *The approval authority may approve adjustments to the standards of this chapter if compliance with the standards would result in an adverse impact on natural features such as wetlands, bodies of water, significant habitat areas, steep slopes, or existing mature trees. The approval authority may also approve adjustments to the standards of this chapter if compliance with the standards would have a substantial adverse impact on existing development or would preclude development on the property where the development is proposed. In approving an adjustment to the standards, the approval authority shall balance the benefit of the adjustment with the impact on the public interest represented by the standards. In evaluating the impact on the public interest, the approval authority shall consider the criteria listed in Section 18.810.030.E.1. An adjustment to the standards may not be granted if the adjustment would risk public safety.*

**Response:** An adjustment to the standards for a collector is necessary as there is not an adopted collector bridge cross section per Table 18.810.1. The requested adjustment removes the planter strip from the proposed cross section in order to ensure minimum impacts necessary to natural features. The removal of this portion of the cross section does not impact the public benefit of the proposed public support facility, as the proposed roadway extension will continue to allow vehicle, pedestrian and bicycles access. Please see the following narrative which addresses the adjustment criteria as stated in Section 18.370.020.C.11.

*11. Adjustments for street improvement requirements (Chapter 18.810). By means of a Type II procedure, as governed by Section 18.390.040, the Director shall approve, approve with conditions, or deny a request for an adjustment to the street improvement requirements, based on findings that the following criterion is satisfied: Strict application of the standards will result in an unacceptably adverse impact on existing development, on the proposed development, or on natural features such as wetlands, bodies of water, significant habitat areas, steep slopes or existing mature trees. In approving an adjustment to the standards, the Director shall determine that the potential adverse impacts exceed the public benefits of strict application of the standards. (Ord. 06-20)*

**Response:** As mentioned above, additional impacts to natural features would result if planter strips are proposed on the bridge portion of the proposed extension. This would result in additional impacts that would be inconsistent with the preferred Alternative 9, as well as the previously approved Joint Fill permit and would require additional wetland and vegetated corridor impacts. In order to minimize impacts to the greatest extent practicable, an adjustment to the proposed collector cross section is requested for the bridge portion of the proposed extension to remove the required 5' planter strip. This criterion is met.

*B. Creation of rights-of-way for streets and related purposes. Rights-of-way shall be created through the approval of a final subdivision plat or major partition; however, the Council may approve the creation of a street by acceptance of a deed, provided that such street is deemed essential by the Council for the purpose of general traffic circulation:*

*1. The Council may approve the creation of a street by deed of dedication without full compliance with the regulations applicable to subdivisions or major partitions if any one or more of the following conditions are found by the Council to be present:*

*a. Establishment of a street is initiated by the Council and is found to be essential for the purpose of general traffic circulation, and partitioning or subdivision of land has an incidental effect rather than being the primary objective in establishing the road or street for public use; or*

*b. The tract in which the road or street is to be dedicated is an isolated ownership of one acre or less and such dedication is recommended by the Commission to the Council based on a finding that the proposal is not an attempt to evade the provisions of this title governing the control of subdivisions or major partitions.*

*2. With each application for approval of a road or street right-of-way not in full compliance with the regulations applicable to the standards, the proposed dedication shall be made a condition of subdivision and major partition approval:*

*a. The applicant shall submit such additional information and justification as may be necessary to enable the Commission in its review to determine whether or not a recommendation for approval by the Council shall be made;*

*b. The recommendation, if any, shall be based upon a finding that the proposal is not in conflict with the purpose of this title;*

*c. The Commission in submitting the proposal with a recommendation to the Council may attach conditions which are necessary to preserve the standards of this title; and*

*3. All deeds of dedication shall be in a form prescribed by the City and shall name "the public," as grantee.*

**Response:** The proposed application does not include a subdivision, major partition or other land division. The proposed extension provides a public street and bridge crossing. As mentioned previously, the final design has not been selected; however the plans attached demonstrate the preliminary design in accordance with the drawings previously prepared for the City. Currently, a 72' right-of-way is proposed which will be deeded to the City per the appropriate documents at the appropriate time. These standards are met.

*C. Creation of access easements. The approval authority may approve an access easement established by deed without full compliance with this title provided such an easement is the only reasonable method by which a lot large enough to develop can be created:*

*1. Access easements shall be provided and maintained in accordance with the Uniform Fire Code, Section 10.207;*

*2. Access shall be in accordance with Sections 18.705.030.H and 18.705.030.I.*

**Response:** No access easements are currently proposed. These standards do not apply.

*D. Street location, width and grade. Except as noted below, the location, width and grade of all streets shall conform to an approved street plan and shall be considered in their relation to existing and planned streets, to topographic conditions, to public convenience and safety, and in their appropriate relation to the proposed use of the land to be served by such streets:*

*1. Street grades shall be approved by the City Engineer in accordance with Subsection N below; and*

*2. Where the location of a street is not shown in an approved street plan, the arrangement of streets in a development shall either:*

*a. Provide for the continuation or appropriate projection of existing streets in the surrounding areas, or*

*b. Conform to a plan adopted by the Commission, if it is impractical to conform to existing street patterns because of particular topographical or other existing conditions of the land. Such a plan shall be based on the type of land use to be served, the volume of traffic, the capacity of adjoining streets and the need for public convenience and safety.*

**Response:** The Wall Street extension is identified in the TSP in the general location of the proposed alignment. The design of the proposed extension has been completed to conform with the TSP designation, and the approved Alternatives Analysis prepared by the City. The grade of the road and bridge are dictated by the current grades of the terminus of Wall Street and the floodplain elevation. The review of the design plans by the City Engineer ensures compliance with City standards. The proposed eastern terminus allows the further construction to the north over the railroad tracks using an on-grade crossing. Private street circulation systems associated with future development will be provided with future applications. These standards are met.

*E. Minimum rights-of-way and street widths. Unless otherwise indicated on an approved street plan, or as needed to continue an existing improved street, street right-of-way and roadway widths shall not be less than the minimum width described below. Where a range is indicated, the width shall be determined by the decision-making authority based upon anticipated average daily traffic (ADT) on the new street segment. (The City Council may adopt by resolution, design standards for street construction and other public improvements. The design standards will provide guidance for determining improvement requirements within the specified ranges.) These are presented in Table 18.810.1.*

*1. The decision-making body shall make its decision about desired right-of-way width and pavement width of the various street types within the subdivision or development after consideration of the following:*

- a. The type of road as set forth in the Comprehensive Plan Transportation Chapter - Functional Street Classification;*
- b. Anticipated traffic generation;*
- c. On-street parking needs;*
- d. Sidewalk and bikeway requirements;*
- e. Requirements for placement of utilities;*
- f. Street lighting;*
- g. Drainage and slope impacts;*
- h. Street tree location;*
- i. Planting and landscape areas;*
- j. Safety and comfort for motorists, bicyclists, and pedestrians;*
- k. Access needs for emergency vehicles.*

**Response:** The City of Tigard TSP (Figure 8-3) identifies Wall Street as a proposed collector. TDC 18.810 and Table 18.810.1 define the requirements for a collector street. The proposed extension has been designed in accordance with right-of-way requirements for a collector street and matches the existing right-of-way provided with Phase 1. Table 1 at the beginning of this narrative demonstrates the proposed cross-section and dimensions of the proposed improvements. This standard is met.

*F. Future street plan and extension of streets.*

*1. A future street plan shall:*

- a. Be filed by the applicant in conjunction with an application for a subdivision or partition. The plan shall show the pattern of existing and proposed future streets from the boundaries of the proposed land division and shall include other parcels within 530 feet surrounding and adjacent to the proposed land division. At the applicant's request, the City may prepare a future streets proposal. Costs of the City preparing a future streets proposal shall be reimbursed for the time involved. A street proposal may be modified when subsequent subdivision proposals are submitted.*
- b. Identify existing or proposed bus routes, pullouts or other transit facilities, bicycle routes and pedestrian facilities on or within 530 feet of the site.*

**Response:** The proposed roadway extension does not include a request for a subdivision, partition or other land division. This standard does not apply.

*2. Where necessary to give access or permit a satisfactory future division of adjoining land, streets shall be extended to the boundary lines of the tract to be developed, and*

- a. These extended streets or street stubs to adjoining properties are not considered to be cul-de-sac since they are intended to continue as through streets at such time as the adjoining property is developed.*
- b. A barricade shall be constructed at the end of the street by the property owners which shall not be removed until authorized by the City Engineer, the cost of which shall be included in the street construction cost.*
- c. Temporary hammerhead turnouts or temporary cul-de-sac bulbs shall be constructed for stub street in excess of 150 feet in length.*

**Response:** A purpose of this application is to fill in the gap created by the terminus of Phase 1 and the applicant's property, which would not be necessary had the City complied with this requirement. Nonetheless, the proposed roadway extension has been designed to allow the future extension of Wall Street in accordance with the TSP. Additional private access supporting future development of the applicant's property can be provided with the proposed terminus of Wall Street. This standard is met.

*G. Street spacing and access management:*

**Response:** See response to H below.

*H. Street alignment and connections.*

- 1. Full street connections with spacing of no more than 530 feet between connections is required except where prevented by barriers such as topography, railroads, freeways, pre-existing developments, lease provisions, easements, covenants or other restrictions existing prior to May 1, 1995 which preclude street connections. A full street connection may also be exempted due to a regulated water feature if regulations would not permit construction.*
- 2. All local, neighborhood routes and collector streets which abut a development site shall be extended within the site to provide through circulation when not precluded by environmental or topographical constraints, existing development patterns or strict adherence to other standards in this code. A street connection or extension is considered precluded when it is not possible to redesign or reconfigure the street pattern to provide required extensions. Land is considered topographically constrained if the slope is greater than 15% for a distance of 250 feet or more. In the case of environmental or topographical constraints, the mere presence of a constraint is not sufficient to show that a street connection is not possible. The applicant must show why the constraint precludes some reasonable street connection.*
- 3. Proposed street or street extensions shall be located to provide direct access to existing or planned transit stops, commercial services, and other neighborhood facilities, such as schools, shopping areas and parks.*
- 4. All developments should provide an internal network of connecting streets that provide short, direct travel routes and minimize travel distances within the development.*

**Response:** The purpose of this application is to complete a connection from Wall Street to the applicant's property. If a future street extension is necessary, the proposed roadway has been designed to accommodate an on-grade crossing

of the northerly abutting railroad tracks as previously designed by the City in compliance with the TSP. This standard is met.

*I. Intersection angles. Streets shall be laid out so as to intersect at an angle as near to a right angle as practicable, except where topography requires a lesser angle, but in no case shall the angle be less than 75°, unless there is special intersection design, and:*

- 1. Streets shall have at least 25 feet of tangent adjacent to the right-of-way intersection unless topography requires a lesser distance;*
- 2. Intersections which are not at right angles shall have a minimum corner radius of 20 feet along the right-of-way lines of the acute angle; and*
- 3. Right-of-way lines at intersection with arterial streets shall have a corner radius of not less than 20 feet.*

**Response:** No new intersections are proposed with the roadway extension. As previously approved and constructed, the intersection of the proposed Wall Street extension and Hall Boulevard meets the requirements of this section.

*J. Existing rights-of-way. Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or development.*

**Response:** The proposed extension will be constructed within dedicated right-of-way that will match the western right-of-way provided with Phase 1. This standard is met.

*K. Partial street improvements. Partial street improvements resulting in a pavement width of less than 20 feet; while generally not acceptable, may be approved where essential to reasonable development when in conformity with the other requirements of these regulations, and when it will be practical to require the improvement of the other half when the adjoining property developed.*

**Response:** No partial street improvements are proposed with this project. This standard does not apply.

*L. Culs-de-sacs. A cul-de-sac shall be no more than 200 feet long shall not provide access to greater than 20 dwelling units, and shall only be used when environmental or topographical constraints, existing development pattern, or strict adherence to other standards in this code preclude street extension and through circulation:*

- 1. All culs-de-sac shall terminate with a turnaround. Use of turnaround configurations other than circular, shall be approved by the City Engineer; and*
- 2. The length of the cul-de-sac shall be measured from the centerline intersection point of the two streets to the radius point of the bulb.*
- 3. If a cul-de-sac is more than 300 feet long, a lighted direct pathway to an adjacent street may be required to be provided and dedicated to the City.*

**Response:** No cul-de-sac is proposed with this application. TVF&R has previously determined that turnaround opportunities in both the Fanno Pointe development and the Library parking lot are acceptable. Future development of the subject site will provide required turnaround opportunities where required without the need for a cul-de-sac, but will be determined during Site Design Review for a specific project. This standard does not apply.

*M. Street names. No street name shall be used which will duplicate or be confused with the names of existing streets in Washington County, except for extensions of existing streets. Street names and numbers shall conform to the established pattern in the surrounding area and as approved by the City Engineer.*

**Response:** This road extension is named Wall Street as selected by the City of Tigard. This standard is met.

*N. Grades and curves.*

*1. Grades shall not exceed ten percent on arterials, 12% on collector streets, or 12% on any other street (except that local or residential access streets may have segments with grades up to 15% for distances of no greater than 250 feet), and*

*2. Centerline radii of curves shall be as determined by the City Engineer.*

**Response:** The road extension is designed to not exceed a grade of 12%, per the standards of this section.

*O. Curbs, curb cuts, ramps, and driveway approaches. Concrete curbs, curb cuts, wheelchair, bicycle ramps and driveway approaches shall be constructed in accordance with standards specified in this chapter and Section 15.04.080; and:*

*1. Concrete curbs and driveway approaches are required; except*

*2. Where no sidewalk is planned, an asphalt approach may be constructed with City Engineer approval; and*

*3. Asphalt and concrete driveway approaches to the property line shall be built to City configuration standards.*

**Response:** Concrete curbs will be provided as is shown on the attached cross section. This standard is met.

*P. Streets adjacent to railroad right-of-way. Wherever the proposed development contains or is adjacent to a railroad right-of-way, provision shall be made for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land. The distance shall be determined with due consideration at cross streets or the minimum distance required for approach grades and to provide sufficient depth to allow screen planting along the railroad right-of-way in nonindustrial areas.*

**Response:** Future development of the applicant's property will address this standard. The proposed extension of Wall Street allows future extensions to cross, at grade, the abutting railroad right-of-way as previously contemplated by the City and as shown on the TSP. This standard is met.

*Q. Access to arterials and collectors. Where a development abuts or is traversed by an existing or proposed arterial or collector street, the development design shall provide adequate protection for residential properties and shall separate residential access and through traffic, or if separation is not feasible, the design shall minimize the traffic conflicts. The design shall include any of the following:*

*1. A parallel access street along the arterial or collector;*

*2. Lots of suitable depth abutting the arterial or collector to provide adequate buffering with frontage along another street;*

*3. Screen planting at the rear or side property line to be contained in a nonaccess reservation along the arterial or collector; or*

*4. Other treatment suitable to meet the objectives of this subsection;*

*5. If a lot has access to two streets with different classifications, primary access should be from the lower classification street.*

**Response:** While Wall Street is designated as a collector on the City's TSP, this street may be limited to serving only future development on the subject site along with the existing Tigard Library and the Fanno Pointe Condominiums. Future development on the applicant's property will be required to demonstrate compliance with this standard, should Wall Street remain designated as a collector. This standard is met.

*R. Alleys, public or private:*

**Response:** No alleys are proposed. These standards do not apply.

*S. Survey monuments. Upon completion of a street improvement and prior to acceptance by the City, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the City that all boundary and interior monuments shall be reestablished and protected.*

**Response:** The requirements of this section will be met by the developer's surveyor.

*T. Private streets.*

- 1. Design standards for private streets shall be established by the City Engineer; and*
- 2. The City shall require legal assurances for the continued maintenance of private streets, such as a recorded maintenance agreement.*
- 3. Private streets serving more than six dwelling units are permitted only within planned developments, mobile home parks, and multi-family residential developments.*

**Response:** No private streets are proposed with this application. Future development on the applicant's property will require consultation with the City Engineer to determine private street requirements, if proposed, and provide the necessary assurances required by this standard. Additionally, in the event that future development elects to construct more than six dwelling units to be served by a private street, a planned development application will be required. This standard is met.

*U. Railroad crossings. Where an adjacent development results in a need to install or improve a railroad crossing, the cost for such improvements may be a condition of development approval, or another equitable means of cost distribution shall be determined by the public works Director and approved by the Commission.*

**Response:** No railroad crossings are proposed, although the proposed extension does not preclude a future extension across the railroad should it be approved by the railroad. This standard does not apply.

*V. Street signs. The City shall install all street signs, relative to traffic control and street names, as specified by the City Engineer for any development. The cost of signs shall be the responsibility of the developer.*

**Response:** Street signs will be installed in compliance with these standards.

*W. Mailboxes. Joint mailbox facilities shall be provided in all residential developments, with each joint mailbox serving at least two dwelling units.*

- 1. Joint mailbox structures shall be placed adjacent to roadway curbs;*
- 2. Proposed locations of joint mailboxes shall be designated on a copy of the preliminary plat or development plan, and shall be approved by the City Engineer/US Post Office prior to final plan approval; and*

3. *Plans for the joint mailbox structures to be used shall be submitted for approval by the City Engineer/US Post Office prior to final approval.*

**Response:** This standard does not apply to this proposal as mailboxes are not proposed.

*X. Traffic signals. The location of traffic signals shall be noted on approved street plans. Where a proposed street intersection will result in an immediate need for a traffic signal, a signal meeting approved specifications shall be installed. The cost shall be included as a condition of development.*

**Response:** A traffic signal was constructed at the Hall Boulevard/Wall Street intersection during Phase 1 in accordance with ODOT standards. No additional signal improvements are proposed or required. This standard is met.

*Y. Street light standards. Street lights shall be installed in accordance with regulations adopted by the City's direction.*

**Response:** Street lights will be installed in compliance with these standards during construction of the proposed extension. This standard is met.

*Z. Street name signs. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.*

**Response:** Additional street name signs, if required, will be installed in compliance with these standards.

*AA. Street cross-sections. The final lift of asphalt concrete pavement shall be placed on all new constructed public roadways prior to final City acceptance of the roadway and within one year of the conditional acceptance of the roadway unless otherwise approved by the City Engineer. The final lift shall also be placed no later than when 90% of the structures in the new development are completed or three years from the commencement of initial construction of the development, whichever is less.*

1. *Sub-base and leveling course shall be of select crushed rock;*
2. *Surface material shall be of Class C or B asphaltic concrete;*
3. *The final lift shall be placed on all new construction roadways prior to City final acceptance of the roadway; however, not before 90% of the structures in the new development are completed unless three years have elapsed since initiation of construction in the development;*
4. *The final lift shall be Class C asphaltic concrete as defined by A.P.W.A. standard specifications;and*
5. *No lift shall be less than 1-1/2 inches in thickness.*

**Response:** Cross-section construction and specifications will comply with the requirements of this section.

*AB. Traffic calming. When, in the opinion of the City Engineer, the proposed development will create a negative traffic condition on existing neighborhood streets, such as excessive speeding, the developer may be required to provide traffic calming measures. These measures may be required within the development and/or offsite as deemed appropriate. As an alternative, the developer may be required to deposit funds with the City to help pay for traffic calming measures that become necessary once the development is occupied and the City Engineer determines that the additional traffic from the development has triggered the need for traffic calming measures. The City Engineer will determine the amount of funds required, and will collect said funds from the developer prior to the issuance of a certificate of occupancy, or in the case of*

*subdivision, prior to the approval of the final plat. The funds will be held by the City for a period of five (5) years from the date of issuance of certificate of occupancy, or in the case of a subdivision, the date of final plat approval. Any funds not used by the City within the five-year time period will be refunded to the developer.*

**Response:** Traffic calming devices are not proposed as a specific development is not proposed with this application. This standard does not apply.

*AC. Traffic study.*

*1. A traffic study shall be required for all new or expanded uses or developments under any of the following circumstances:*

- a. When they generate a 10% or greater increase in existing traffic to high collision intersections identified by Washington County.*
- b. Trip generations from development onto the City street at the point of access and the existing ADT fall within the following ranges:*

*Existing ADT*

*0—3,000 vpd*

*3,001—6,000 vpd*

*>6,000 vpd*

*ADT to be added by development*

*2,000 vpd*

*1,000 vpd*

*500 vpd or more*

- c. If any of the following issues become evident to the City Engineer:*
  - (1) High traffic volumes on the adjacent roadway that may affect movement into or out of the site;*
  - (2) Lack of existing left-turn lanes onto the adjacent roadway at the proposed access drive(s);*
  - (3) Inadequate horizontal or vertical sight distance at access points;*
  - (4) The proximity of the proposed access to other existing drives or intersections is a potential hazard;*
  - (5) The proposal requires a conditional use permit or involves a drive-through operation;*
  - (6) The proposed development may result in excessive traffic volumes on adjacent local streets.*

*2. In addition, a traffic study may be required for all new or expanded uses or developments under any of the following circumstances:*

- a. When the site is within 500 feet of an ODOT facility; and/or*
- b. Trip generation from a development adds 300 or more vehicle trips per day to an ODOT facility; and/or*
- c. Trip generation from a development adds 50 or more peak hour trips to an ODOT facility.*

**Response:** A traffic study is not necessary for the proposed extension as no specific development is proposed with this application. This standard does not apply.

*.040 Blocks*

*A. Block design. The length, width and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control and safety of street traffic and recognition of limitations and opportunities of topography.*

*B. Sizes.*

1. *The perimeter of blocks formed by streets shall not exceed 2,000 feet measured along the centerline of the streets except:*
  - a. *Where street location is precluded by natural topography, wetlands, significant habitat areas or bodies of water, or pre-existing development, or*
  - b. *For blocks adjacent to arterial streets, limited access highways, collectors or railroads;*
  - c. *For non-residential blocks in which internal public circulation provides equivalent access.*
2. *Bicycle and pedestrian connections on public easements or right-of-ways shall be provided when full street connection is exempted by Subsection B.1 above. Spacing between connections shall be no more than 330 feet, except where precluded by environmental or topographical constraints, existing development patterns, or strict adherence to other standards in the code.*

**Response:** These standards are not applicable to the proposed project.

*.050 Easements*

*A. Easements. Easements for sewers, drainage, water mains, electric lines or other public utilities shall be either dedicated or provided for in the deed restrictions, and where a development traversed by a watercourse, or drainageway, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the watercourse.*

*B. Utility easements. A property owner proposing a development shall make arrangements with the City, the applicable district and each utility franchise for the provision and dedication of utility easements necessary to provide full services to the development. The City's standard width for public main line utility easements shall be 15 feet unless otherwise specified by the utility company, applicable district, or City Engineer.*

**Response:** The proposed roadway extension includes a proposed 8' public utility easement on either side of the proposed roadway. These standards are met.

*.060 Lots*

*A. Size and shape. Lot size, width, shape and orientation shall be appropriate for the location of the development and for the type of use contemplated, and:*

1. *No lot shall contain part of an existing or proposed public right-of-way within its dimensions;*
2. *The depth of all lots shall not exceed 2-1/2 times the average width, unless the parcel is less than 1-1/2 times the minimum lot size of the applicable zoning district;*
3. *Depth and width of properties zoned for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use proposed.*

*B. Lot frontage. Each lot shall abut upon a public or private street, other than an alley, for a width of at least 25 feet unless the lot is created through a minor land partition in which case Subsection 18.162.050.C applies, or unless the lot is for an attached single-family dwelling unit, in which case the lot frontage shall be at least 15 feet.*

*C. Through lots. Through lots shall be avoided except where they are essential to provide separation of residential development from major traffic arterials or to overcome specific disadvantages of topography and orientation, and:*

1. *A planting buffer at least ten feet wide is required abutting the arterial rights-of-way; and*
2. *All through lots shall provide the required front yard setback on each street.*

*D. Lot side lines. The side lines of lots, as far as practicable, shall be at right angles to the street upon which the lots front.*

*E. Large lots. In dividing tracts into large lots or parcels which at some future time are likely to be redivided, the Commission may require that the lots be of such size and shape, and be so divided into building sites, and contain such site restrictions as will provide for the extension and*

*opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size. The land division shall be denied if the proposed large development lot does not provide for the future division of the lots and future extension of public facilities.*

**Response:** The proposed road bisects two lots currently owned by the City to the extent that the access easement granted by the City affects them. Dedication of right-of-way will be completed and will provide frontage to the currently land-locked property owned by the applicant. No land division is proposed with this application. These standards are met.

*.070 Sidewalks*

*A. Sidewalks. All industrial streets and private streets shall have sidewalks meeting City standards along at least one side of the street. All other streets shall have sidewalks meeting City standards along both sides of the street. A development may be approved if an adjoining street has sidewalks on the side adjoining the development, even if no sidewalk exists on the other side of the street.*

*B. Requirement of developers.*

*1. As part of any development proposal, or change in use resulting in an additional 1,000 vehicle trips or more per day, an applicant shall be required to identify direct, safe (1.25 x the straight line distance) pedestrian routes within 1/2 mile of their site to all transit facilities and Neighborhood Activity Centers (schools, parks, libraries, etc.). In addition, the developer may be required to participate in the removal of any gaps in the pedestrian system off-site if justified by the development.*

*2. If there is an existing sidewalk, on the same side of the street as the development, within 300 feet of a development site in either direction, the sidewalk shall be extended from the site to meet the existing sidewalk, subject to rough proportionality (even if the sidewalk does not serve a neighborhood activity center).*

*C. Planter strip requirements. A planter strip separation of at least five feet between the curb and the sidewalk shall be required in the design of streets, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant portions of the street; it would conflict with the utilities, there are significant natural features (large trees, water features, significant habitat areas, etc) that would be destroyed if the sidewalk were located as required, or where there are existing structures in close proximity to the street (15 feet or less). Additional consideration for exempting the planter strip requirement may be given on a case-by-case basis if a property abuts more than one street frontage.*

*D. Sidewalks in central business district. In the central business district, sidewalks shall be 10 feet in width, and:*

*1. All sidewalks shall provide a continuous unobstructed path; and*

*2. The width of curbside sidewalks shall be measured from the back of the curb.*

*E. Maintenance. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner.*

*F. Application for permit and inspection. If the construction of a sidewalk is not included in a performance bond of an approved subdivision or the performance bond has lapsed, then every person, firm or corporation desiring to construct sidewalks as provided by this chapter, shall, before entering upon the work or improvement, apply for a street opening permit to the Engineering Department to so build or construct:*

*1. An occupancy permit shall not be issued for a development until the provisions of this section are satisfied.*

*2. The City Engineer may issue a permit and certificate allowing temporary noncompliance with the provisions of this section to the owner, builder or contractor when, in his opinion, the construction of the sidewalk is impractical for one or more of the following reasons:*

- a. Sidewalk grades have not and cannot be established for the property in question within a reasonable length of time;
  - b. Forthcoming installation of public utilities or street paving would be likely to cause severe damage to the new sidewalk;
  - c. Street right-of-way is insufficient to accommodate a sidewalk on one or both sides of the street; or
  - d. Topography or elevation of the sidewalk base area makes construction of a sidewalk impractical or economically infeasible; and
3. The City Engineer shall inspect the construction of sidewalks for compliance with the provision set forth in the standard specifications manual.
- G. Council initiation of construction. In the event one or more of the following situations are found by the Council to exist, the Council may adopt a resolution to initiate construction of a sidewalk in accordance with City ordinances:
- 1. A safety hazard exists for children walking to or from school and sidewalks are necessary to eliminate the hazard;
  - 2. A safety hazard exists for pedestrians walking to or from a public building, commercial area, place of assembly or other general pedestrian traffic, and sidewalks are necessary to eliminate the hazard;
  - 3. 50% or more of the area in a given block has been improved by the construction of dwellings, multiple dwellings, commercial buildings or public buildings and/or parks; and
  - 4. A criteria which allowed noncompliance under Subsection E.1.b above no longer exists and a sidewalk could be constructed in conformance with City standards. (Ord. 06-20; Ord. 02-33; Ord.99-22)

**Response:** 6-foot-wide sidewalks are proposed on both sides of the road extension. No planter strip is proposed for the 320' bridge portion of the proposed extension in order to minimize impacts to significant lands. Other standards listed in this section will be addressed during the building permit process or during construction. These standards are met.

*.080 Public Use Areas*

*A. Dedication requirements.*

- 1. Where a proposed park, playground or other public use shown in a development plan adopted by the City is located in whole or in part in a subdivision, the Commission may require the dedication or reservation of such area within the subdivision, provided that the reservation or dedication is roughly proportional to the impact of the subdivision on the park system.
- 2. Where considered desirable by the Commission in accordance with adopted Comprehensive Plan policies, and where a development plan of the City does not indicate proposed public use areas, the Commission may require the dedication or reservation of areas within the subdivision or sites of a character, extent and location suitable for the development of parks or other public use, provided that the reservation or dedication is roughly proportional to the impact of the subdivision on the park system.

*B. Acquisition by public agency. If the developer is required to reserve land area for a park, playground, or other public use, such land shall be acquired by the appropriate public agency within 18 months following plat approval, at a price agreed upon prior to approval of the plat, or such reservation shall be released to the subdivider. (Ord. 99-22)*

**Response:** This application does not include development, a land division, or public use areas. These standards do not apply.

*.090 Sanitary Sewers*

*A. Sewers required. Sanitary sewers shall be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in Design and*

*Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments) and the adopted policies of the Comprehensive Plan.*

*B. Sewer plan approval. The City Engineer shall approve all sanitary sewer plans and proposed systems prior to issuance of development permits involving sewer service.*

*C. Over-sizing. Proposed sewer systems shall include consideration of additional development within the area as projected by the Comprehensive Plan.*

*D. Permits denied. Development permits may be restricted by the Commission or Hearings Officer where a deficiency exists in the existing sewer system or portion thereof which cannot be rectified within the development and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of the sewage treatment system.*

**Response:** An existing sanitary sewer line runs along with western boundary of the applicant's property. Future development will be required to analyze this utility to ensure it is sufficient to accommodate development. This standard is met.

*.100 Storm Drainage*

*A. General provisions. The Director and City Engineer shall issue a development permit only where adequate provisions for storm water and flood water runoff have been made, and:*

*1. The storm water drainage system shall be separate and independent of any sanitary sewerage system;*

*2. Where possible, inlets shall be provided so surface water is not carried across any intersection or allowed to flood any street; and*

*3. Surface water drainage patterns shall be shown on every development proposal plan.*

*B. Easements. Where a development is traversed by a watercourse, drainageway, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantial with the lines of such watercourse and such further width as will be adequate for conveyance and maintenance.*

*C. Accommodation of upstream drainage. A culvert or other drainage facility shall be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the development, and:*

*1. The City Engineer shall approve the necessary size of the facility, based on the provisions of Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments).*

*D. Effect on downstream drainage. Where it is anticipated by the City Engineer that the additional runoff resulting from the development will overload an existing drainage facility, the Director and Engineer shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with the Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments).*

**Response:** See Exhibit L, "Preliminary Utility Plan" and Exhibit M, "Stormwater Report" for Phase 2 of the Wall Street Extension. These standards are met.

*.110 Bikeways and Pedestrian Pathways*

*A. Bikeway extension.*

*1. As a standard, bike lanes shall be required along all arterial and collector routes and where identified on the City's adopted bicycle plan in the Transportation System Plan (TSP). Bike lane requirements along collectors within the Downtown Urban Renewal District shall be determined*

by the City Engineer.

2. Developments adjoining proposed bikeways identified on the City's adopted pedestrian/bikeway plan shall include provisions for the future extension of such bikeways through the dedication of easements or rights-of-way, provided such dedication is directly related to and roughly proportional to the impact of the development.

3. Any new street improvement project shall include bicycle lanes as required in this document and on the adopted bicycle plan.

B. Cost of construction. Development permits issued for planned unit developments, conditional use permits, subdivisions and other developments which will principally benefit from such bikeways shall be conditioned to include the cost or construction of bikeway improvements in an amount roughly proportional to the impact of the development.

C. Minimum width.

1. Minimum width for bikeways within the roadway is five (5) feet per bicycle travel lane.

2. Minimum width multi-use paths separated from the road is ten (10) feet. The width may be reduced to eight (8) feet if there are environmental or other constraints.

3. The minimum width for pedestrian only off-street paths is five (5) feet.

4. Design standards for bike and pedestrian-ways shall be determined by the City Engineer.

**Response:** 6-foot-wide sidewalks are provided on both sides of the road as part of the improvements proposed. Additionally 6' wide bike lanes are provided with the proposed roadway extension. These standards are met.

.120 Utilities:

A. Underground utilities. All utility lines including, but not limited to those required for electric, communication, lighting and cable television services and related facilities shall be placed underground, except for surface mounted transformers, surface mounted connection boxes and meter cabinets which may be placed above ground, temporary utility service facilities during construction, high capacity electric lines operating at 50,000 volts or above, and:

1. The developer shall make all necessary arrangements with the serving utility to provide the underground services;

2. The City reserves the right to approve location of all surface mounted facilities;

3. All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and

4. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

B. Information on development plans. The applicant for a development shall show on the development plan or in the explanatory information, easements for all underground utility facilities, and:

1. Plans showing the location of all underground facilities as described herein shall be submitted to the City Engineer for review and approval; and

2. Care shall be taken in all cases to ensure that above ground equipment does not obstruct vision clearance areas for vehicular traffic.

C. Exception to undergrounding requirement.

1. The developer shall pay a fee in-lieu of undergrounding costs when the development is proposed to take place on a street where existing utilities which are not underground will serve the development and the approval authority determines that the cost and technical difficulty of under-grounding the utilities outweighs the benefit of undergrounding in conjunction with the development. The determination shall be on a case-by-case basis. The most common, but not the only, such situation is a short frontage development for which undergrounding would result in the placement of additional poles, rather than the removal of above-ground utilities facilities.

2. An applicant for a development which is served by utilities which are not underground and which are located across a public right-of-way from the applicant's property shall pay the fee in-lieu of undergrounding.

3. Properties within the CBD zoning district shall be exempt from the requirements for undergrounding of utility lines and from the fee in-lieu of undergrounding.

4. The exceptions in Paragraphs 1 through 3 of this Subsection C shall apply only to existing utility lines. All new utility lines shall be placed underground.

*D. Fee in-lieu of undergrounding.*

1. The City Engineer shall establish utility service areas in the City. All development which occurs within a utility service area shall pay a fee in-lieu of undergrounding for utilities if the development does not provide underground utilities, unless exempted by this code.

2. The City Engineer shall establish the fee by utility service area which shall be determined based upon the estimated cost to underground utilities within each service area. The total estimated cost for undergrounding in a service area shall be allocated on a front-foot basis to each party within the service area. The fee due from any developer shall be calculated based on a front-foot basis.

3. A developer shall receive a credit against the fee for costs incurred in the undergrounding of existing overhead utilities. The City Engineer shall determine the amount of the credit, after review of cost information submitted by the applicant with the request for credit.

4. The funds collected in each service area shall be used for undergrounding utilities within the City at large. The City Engineer shall prepare and maintain a list of proposed undergrounding projects which may be funded with the fees collected by the City. The list shall indicate the estimated timing and cost of each project. The list shall be submitted to the City Council for their review and approval annually.

**Response:** All franchise and public utilities are available on the east side of the Fanno Creek bridge crossing such that these criteria are met, and no new utilities are proposed. These standards are met.

*.130 Cash or Bond Required:*

A. *Guarantee.* All improvements installed by the developer shall be guaranteed as to workmanship and material for a period of one year following acceptance by the City Council.

B. *Cash deposit or bond.* Such guarantee shall be secured by cash deposit or bond in the amount of the value of the improvements as set by the City Engineer.

C. *Compliance requirements.* The cash or bond shall comply with the terms and conditions of Section 18.430.090.

**Response:** Compliance with these standards will occur as required with future improvements.

*.140 Monuments:*

A. *Replacement required.* Any monuments that are disturbed before all improvements are completed by the subdivider shall be replaced prior to final acceptance of the improvements.

**Response:** A land division is not proposed, however any monuments disturbed during the construction of the proposed extension will be replaced. This standard is met.

*.150 Installation Prerequisite:*

A. *Approval required.* No public improvements, including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting or other requirements shall be undertaken except after the plans have been approved by the City, permit fee paid, and permit issued.

B. *Permit fee.* The permit fee is required to defray the cost and expenses incurred by the City for

*construction and other services in connection with the improvement. The permit fee shall be set by Council resolution.*

**Response:** The review and issuance of construction permits for the road extension ensure compliance with these requirements.

*.160 Installation Conformation:*

*A. Conformance required. In addition to other requirements, improvements installed by the developer either as a requirement of these regulations or at his/her own option, shall conform to the requirements of this chapter and to improvement standards and specifications followed by the City.*

*B. Adopted installation standards. The Standard Specifications for Public Works Construction, Oregon Chapter A.P.W.A., and Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments) shall be a part of the City's adopted installation standard(s); other standards may also be required upon recommendation of the City Engineer.*

**Response:** Conformance with the requirements of this section will occur during building permit review and construction.

*.170 Plan Check:*

*A. Submittal requirements. Work shall not begin until construction plans and construction estimates have been submitted and checked for adequacy and approved by the City Engineer in writing. The developer can obtain detailed information about submittal requirements from the City Engineer.*

*B. Compliance. All such plans shall be prepared in accordance with requirements of the City.*

**Response:** The review and issuance of construction permits for the road extension ensure compliance with these requirements.

*.180 Notice to City:*

*A. Commencement. Work shall not begin until the City has been notified in advance.*

*B. Resumption. If work is discontinued for any reason, it shall not be resumed until the City is notified.*

**Response:** City notification of construction will occur in compliance with these requirements.

*.190 City Inspection:*

*A. Inspection of improvements. Improvements shall be constructed under the inspection and to the satisfaction of the City. The City may require changes in typical sections and details if unusual conditions arising during construction warrant such changes in the public interest.*

**Response:** Inspections will occur as part of the construction process.

*.200 Engineers Certification:*

*A. Written certification required. The developer's engineer shall provide written certification of a form provided by the City that all improvements, workmanship and materials are in accord with current and standard engineering and construction practices, and are of high grade, prior to City acceptance of the subdivision's improvements or any portion thereof for operation and maintenance.*

**Response:** This certification will be provided upon completion of the road extension.



January 15, 2010 (*Revised June 14, 2010*)

City of Tigard  
Attention: Cheryl Caines  
13125 SW Hall Boulevard  
Tigard, OR 97223

Re: **Completeness Response**  
*CPA2009-00004, SLR2009-00004, and SLR2009-00005*  
Project Number 2070334.06

Dear Cheryl:

The following information has been prepared in response to your letter of incomplete application submittal, dated October 30, 2009, regarding the request for the extension of Wall Street. We have addressed the items below, with our responses following your comments. With this additional information, we feel that the burden of proof has been substantially met and no additional information is necessary to deem the proposed application complete. Our intent with this submittal is to clarify the pertinent details of this application so as to better articulate the proposed extension, and demonstrate compliance with the approval criteria. The following are our detailed responses to incomplete items.

## 1. APPLICATION FORM

The property owner of tax lot 2S102DA-00690 has been contacted and a copy of the signed application form is attached to this response (Exhibit A).

## 2. NARRATIVE

### *Comprehensive Plan*

#### *Natural Resources and Historic Areas – Goal 5.1*

*Protect natural resources and the environmental and ecological functions they provide and, to the extent feasible, restore natural resources to create naturally functioning systems and high levels of biodiversity.*

**Response:** The proposed extension of Wall Street presents several conflicts with current comprehensive plan goals and policies including transportation, public facilities and services, and economic development and those related to natural resources and environmental quality. Careful consideration of the balance between these goals and policies has been the forefront of the extension of Wall Street since the initial planning stages related to Phase 1 in 2002. Evidence of this consideration is found in the Alternatives Analysis prepared for the full extension of Wall Street (included as Exhibit K), of which this application is in full compliance. The City determined that Alternative 9 was preferred as it would avoid and minimize impacts to wetlands, floodplains, and natural resources to the greatest extent practicable. The proposed extension is in full compliance with Alternative 9.

RiverEast Center | 1515 SE Water Avenue, Suite 100 | Portland, OR 97214  
P.O. Box 14310 | Portland, OR 97293  
Tel: 503.224.9560 Web: www.grpmack.com Fax: 503.228.1285

Group  
Mackenzie,  
Incorporated

Architecture

Interiors

Structural  
Engineering

Civil Engineering

Land Use Planning

Transportation  
Planning

Landscape  
Architecture

Locations:

Portland, Oregon

Seattle, Washington

Vancouver, Washington

Wetland mitigation for proposed impacts has been designed to improve the functional attributes of wetlands and associated riparian habitats. Functional attributes that will result in improvements or gains as a result of the mitigation efforts will be water storage and delay, nitrogen removal, thermoregulation, anadromous fish habitat support, invertebrate habitat support, amphibian and turtle habitat, wintering and migratory waterbird support, and songbird habitat support. Mitigation for both phases of construction was proposed in the vicinity of Pinebrook Creek, a perennial stream just south of the alignment of Phase 1 of the project, because the creek and adjacent wetlands had been degraded by historic straightening of the Pinebrook Creek channel, and by routing the creek through two in-line ponds. These ponds contributed to thermal pollution, and also negatively affected dissolved oxygen and nutrient inputs into both Pinebrook and Fanno Creeks. Mitigation for both phases of this project included routing the channel of Pinebrook Creek away from the in-line ponds (the western pond was eliminated during Phase 1 of construction).

Mitigation elements have been implemented to benefit water quality in Fanno Creek by eliminating the warm nutrient rich waters from the remaining pond from entering Fanno Creek. The new alignment of the creek will allow fish passage from Fanno Creek to Pinebrook Creek. Other functions and values that have been restored or improved as a result of wetland mitigation are discussed below, as summarized from the details included in the project's stream restoration and mitigation plan document (prepared by Zion Natural Resources Consulting, 2007).

*With the use of berms and Newberry riffles there will be an increase in water storage during the wet season that will delay the movement of hydrology towards Fanno Creek. Nitrogen removal will be increased and accomplished through the placement of native vegetation, seasonal inundation, and the placement of downed large diameter trees placed throughout the mitigation site.*

*The function of thermoregulation will increase over time through the overshadowing of the Pinebrook Creek and wetland areas by the planting of trees and shrubs to eventually reduce the temperatures of the water as the vegetation matures.*

*The design of this mitigation area is specifically oriented toward anadromous fish habitat. This design incorporates the reduction of water velocities, provides refuge for young fish during high flow times, will likely increase the presence of invertebrates, and prevents fish entrapment as the hydrology recedes from the site. Invertebrate habitat support and amphibian and turtle support will be accomplished in the same manner through the placement of large boulders and downed wood, variable vegetation forms, and seasonal pools associated with Pinebrook Creek. Seasonal pools, increased native vegetation, and the contributing watershed upstream will provide an increase in functions for wintering and migratory waterbird support.*

*There is expected to be no loss of functions through the impact of the wetlands once compensated through the implementation of this mitigation plan.*

Though native species are locally abundant, the existing ecological area is dominated by invasive species and is in degraded condition. By mitigating impacts resulting from the construction of the extension of Wall Street, the ecological function will be vastly improved both from a water quality and habitat perspective. The result of this extensive mitigation, including the removal of invasive species, will be a naturally functioning system with high levels of biodiversity. Through demonstration of other alternatives and restoration activities, the proposed extension of Wall Street demonstrates compliance with this goal.

Policy 7

*The City shall protect and restore riparian and upland habitats to the maximum extent feasible on public and private lands.*

**Response:** The proposed extension of Wall Street proposes the minimum impacts practicable. Through the Alternatives Analysis process, the City previously determined that Alternative 9 was preferred as it would avoid and minimize impacts to wetlands, floodplains, and natural resources to the greatest extent practicable. The proposed extension is in full compliance with Alternative 9. Furthermore, restoration of riparian habitats will include removal of noxious invasive species and the installation of nearly 3,000 native trees, shrubs, and herbaceous plants over an area of greater than 1.25 acres. These actions will not only serve to restore habitats disturbed during bridge construction, it will also support habitat connectivity and diversity in adjoining areas. This policy is met.

Policy 8

*The City shall protect and, to the extent feasible, restore the diverse ecological and non-ecological functions and services of streams, wetlands, and associated riparian corridors.*

**Response:** Impacts to Fanno Creek and wetlands within the project area have been minimized through an extensive analysis of alternative roadway alignments. Unavoidable impacts to wetlands are being mitigated through implementation of a wetland mitigation plan that has been approved by the Oregon Department of State Lands and the US Army Corps of Engineers. See Goal 5.1 for a discussion of ecological functions that will be restored or enhanced as a result of these mitigation elements. Specifically, restoration of riparian habitats will include removal of noxious invasive species and the installation of nearly 3,000 native trees, shrubs, and herbaceous plants over an area of greater than 1.25 acres. These actions will not only serve to restore habitats disturbed during bridge construction, it will also support habitat connectivity and diversity in adjoining areas. This policy is met.

Hazards – Goal 7.1

*Protect people and property from flood, landslide, earthquake, wildfire, and severe weather hazards.*

**Response:** The Flood Insurance Study and accompanying Flood Insurance Rate Maps, effective February 18, 2005, were consulted to verify the 100-year floodplain elevation in the project area. This information was cross-referenced with the OBEC Consulting Engineers/West Consultants Hydraulic Analysis performed as part of the Alternatives

Analysis (Exhibit K) to confirm the floodplain elevation and impacts related to the proposed roadway and bridge extension. As stated in Exhibit O, the research was conclusive that the floodplain elevation is consistent between both sources at 141.4.

The previously prepared Alternatives Analysis considered the impacts of the full extension of Wall Street including floodplain impacts. The selected design (Alternative 9) demonstrated the most minimal impacts practicable and was, therefore, approved by the City as the preferred alternative. An OBEC Consulting Engineers/West Consultants team was retained by the City previously to analyze hydraulic impacts associated with various bridge alternatives (Exhibit K). The study concluded that a 320-foot bridge would span the floodway, and bridge piling supports would have minimal impacts on the floodway. The 320-foot bridge also meets FEMA requirements related to no rise in the floodplain elevation. A memorandum summarizing the information in this report relative to the proposed extension has been prepared (Exhibit O).

Floodplain impacts associated with the proposed extension are limited to placement of roadway structural fill in the areas west and east of the proposed bridge and support piles. Impacts are further limited to match previous design assumptions through the placement of wing and retaining walls on both sides of the bridge span. Total floodplain impacts indicated for the proposed extension, prior to mitigation, are 2010 CY (over a 0.56 AC footprint). To ensure compliance with the conclusions of the Hydraulic Analysis and no impacts to the 100-year floodplain, mitigation in the form of excavation within the floodplain to balance earthwork volumes will be provided off-site in a location to be determined. This application does not propose any work within the stream corridor associated with Fanno Creek. The actual paved surface and related improvements do not create 100-year floodplain impacts and the bottom chord of the bridge structure is elevated above the floodplain elevation to exceed the required 1-foot freeboard. The proposed structural fill is needed to elevate the proposed public roadway above the 100-year floodplain. Required grading associated with the proposed road construction has been designed using BMP's from DEQ and CWS to minimize erosion and potential sedimentation of Fanno Creek (see sheet R2.2 of Exhibit L). This goal is met.

*Policy 4*

*The City shall design and construct public facilities to withstand hazardous events with a priority on hazard protection of public services and facilities that are needed to provide emergency response services.*

**Response:** The proposed extension of Wall Street is designed as a public collector street and will serve future residential development on the Fields property. The proposed 320-foot bridge was selected due to the width of the floodway at the proposed extension of Wall Street, and minimizes impacts to meet FEMA requirements related to no rise in the floodplain elevation. The proposed impacts in the floodplain are necessary to elevate the roadway and bridge extension above the 100-year floodplain elevation with 1 foot of freeboard in order to ensure that the constructed roadway will be able to provide emergency response services in the event of a flood, and have been mitigated by balancing earthwork locally. This policy is met.

Policy 7

*The City shall comply with the Federal Emergency Management Agency (FEMA) flood regulations, which include standards for base flood levels, flood proofing, and minimum finished floor elevations.*

**Response:** The proposed design complies with the base flood elevation determined through the Flood Insurance Study and accompanying Flood Insurance Rate Maps, effective February 18, 2005. No structures are proposed with this application and, therefore, flood proofing and floor elevations are not applicable. This policy is met.

Parks, Recreation, Trails, and Open Space – Goal 8.1

*Provide a wide variety of high quality park and open spaces for all residents, including both:*

- A. *developed areas with facilities for active recreation; and*
- B. *undeveloped areas for nature-oriented recreation and the protection and enhancement of valuable natural resources within the parks and open space system.*

**Response:** The City of Tigard Parks Master Plan (Res. 09-53) indicates that the proposed extension lies within Fanno Creek Park. This park is indicated as a Linear Park, which abuts designated public open space to the south of the proposed extension. Linear parks are described as follows, “[l]inear parks offer opportunities for trail-oriented outdoor recreation along built or natural corridors, connect residences to major community destinations and provide some active and passive recreation facilities to meet neighborhood needs.” A master plan was developed in 2003 for the Fanno Creek Park specific to the area east of Hall Boulevard surrounding the Library. The master plan documents acknowledge the proposed extension of Wall Street on the existing and natural conditions exhibit. The proposed extension of Wall Street as indicated on the City’s TSP and acknowledged in the master planning process, does not include any impacts to existing or planned active recreation activities. The existing trail-oriented recreation along the natural area abutting Fanno Creek is proposed to remain unaltered with the exception of the large enhancement activities proposed to meet CWS requirements. The result of these enhancements will be the removal of existing invasive species which dominate a majority of this area, and an improved habitat for a variety of wildlife, as well as positive water-quality benefits. This goal is met.

Policy 17

*The City shall maintain and manage its parks and open space resources in ways that preserve, protect, and restore Tigard’s natural resources, including rare, or state and federally listed species, and provide “Nature in the City” opportunities.*

**Response:** As indicated above, the City has acknowledged the proposed extension with its master planning process of Fanno Creek Park. The proposed extension will meet or allow the facilitation of the recommendations of the Wildlife/Habitat Analysis of the Fanno Creek Master Plan as it relates to sensitive plant and animals species. The large enhancement effort proposed to meet CWS requirements will restore and greatly improve the surrounding natural resources for a variety of purposes, including wildlife habitat (both existing and potential) and water quality. Further details regarding habitat species can be found on the attached letter from Pacific Habitat Services. This policy is met.

*Public Facilities and Services – Goal 11.1*

*Develop and maintain a stormwater system that protects development, water resources, and wildlife habitat.*

**Response:** A new bioswale will be constructed east of Fanno Creek to treat runoff from the proposed extension. The proposed bioswale is consistent with the plans previously prepared for the City, and includes capacity to treat impervious surfaces from the streets and sidewalks associated with the Phase 2 impacts, as well as future extension to a proposed high point in the profile east of the existing railroad track crossings. As designed and accounted for by previous design and construction, a portion of the Phase 2 stormwater runoff from the new impervious surfaces to the west of the bridge span will be treated with the water quality facility constructed with Phase 1. The previous approval sized this facility appropriately for the ultimate build-out of both phases. Preliminary calculations are provided in Exhibit M per City and Clean Water Services standards. The two stormwater facilities will meet and exceed water quality treatment standards for the new impervious areas and will maintain or increase the water quality and habitat values of Fanno Creek. This goal is met.

*Policy 1*

*The City shall require that all new development:*

- A. *construct the appropriate stormwater facilities or ensure construction by paying their fair share of the cost;*
- B. *comply with adopted plans and standards for stormwater management; and*
- C. *meet or exceed regional, state, and federal standards for water quality and flood protection*

**Response:** A new bioswale will be constructed east of Fanno Creek to treat runoff from the proposed extension. The proposed bioswale is consistent with the plans previously prepared for the City, and includes capacity to treat impervious surfaces from the streets and sidewalks associated with the Phase 2 impacts as well as future extension to a proposed high point in the profile east of the existing railroad track crossings. As designed and accounted for by previous design and construction, a portion of the Phase 2 stormwater runoff from the new impervious surfaces to the west of the bridge span will be treated with the water quality facility constructed with Phase 1. The previous approval sized this facility appropriately for the ultimate build-out of both phases. Preliminary calculations are provided in Exhibit M per City and CWS standards. The two stormwater facilities will meet and exceed water quality treatment standards for the new impervious areas, and will increase the water quality and habitat values of Fanno Creek. This policy is met.

*Policy 6*

*The City shall maintain streams and wetlands in their natural state, to the extent necessary, to protect their stormwater conveyance and treatment functions.*

**Response:** The proposed extension of Wall Street does not impact the stream channel of Fanno Creek. Wetland impacts include 0.19 acre to construct the westerly bridge wing wall and the roadway and fill slopes for the remainder of the project. Wetland impacts are mainly associated with emergent/scrub-shrub wetlands that are currently dominated by invasive species. These impacts are consistent with the prior Corps/DSL fill permits and the City's

Alternatives Analysis. Wetland mitigation for the full extension of Wall Street was constructed with Phase 1 of the road extension. Mitigation included 0.20 acres of wetland restoration, 0.29 acres of wetland enhancement, and 0.08 acres of wetland creation. Mitigation and monitoring efforts are ongoing and appear on track to meet the conditions of permits that have been issued by the Oregon Department of State Lands and the US Army Corps of Engineers. While no additional wetland mitigation measures are proposed, additional plantings within CWS buffer is proposed including approximately 326 trees and 2,144 shrubs. The result of the prior wetland mitigation and proposed buffer mitigation is a high-quality and functional natural system. The addition of a new bioswale on the east end of the proposed extension will treat runoff from the new impervious areas prior to the release into the abutting wetlands. This policy is met.

Goal 11.4

*Maintain adequate public facilities and services to meet the health, safety, education, and leisure of all Tigard residents.*

**Response:** The proposed public road extension has been designed in accordance with the collector designation per the City's TSP. The width of the extension will be accessible to serve emergency vehicles. This goal is met.

Policy 4-D

*The City shall require that all new development:*

*Have a street layout and design that is accessible by emergency vehicles; and*

**Response:** The proposed extension of Wall Street is designed to be accessible by emergency vehicles that will be needed to serve future residential development on Mr. Fields' property. This policy is met.

Transportation – Goal 12.1

Policy 1 – Transportation System

*Plan, design, and construct transportation facilities in a manner which enhances the livability of Tigard by:*

- A. *Proper location and design of transportation facilities.*
- B. *Encouraging pedestrian accessibility by providing safe, secure and desirable pedestrian routes.*
- C. *Addressing issues of excessive speeding and through traffic on local residential streets through a neighborhood traffic program. The program should address corrective measures for existing problems and assure that development incorporates traffic calming.*

**Response:** The proposed extension of Wall Street is shown on the City's TSP as a future collector. The proposed design provides standard width sidewalks that will accommodate pedestrian accessibility. This policy is met.

Policy 2

*Provide a balanced transportation system, incorporating all modes of transportation (including motor vehicle, bicycle, pedestrian, transit and other modes) by:*

- A. *The development of and implementation of public street standards that recognize the multi-purpose nature of the street right-of-way for utility, pedestrian, bicycle, transit, truck and auto use.*
- B. *Coordination with TriMet, and/or any other transit providers serving Tigard, to improve transit service to Tigard. Fixed route transit will primarily use arterial and collector streets in Tigard. Development adjacent to transit routes will provide direct pedestrian accessibility.*
- C. *Construction of bicycle lanes on all arterials and collectors within Tigard consistent with the bicycle master. All schools, parks, public facilities, and retail areas shall strive to have direct access to a bikeway.*
- D. *Construction of sidewalks on all streets within Tigard. All schools, parks, public facilities, and retail areas shall strive to have direct access to a sidewalk.*
- E. *Development of bicycle and pedestrian plans which link to recreational trails.*
- F. *Design local streets to encourage a reduction in trip length by providing connectivity and limiting out-of-direction travel and provide connectivity to activity centers and destinations with a priority for bicycle and pedestrian connections.*
- G. *Tigard will participate in vehicle trip reduction strategies developed regionally targeted to achieve non-single occupant vehicle levels outlined in table 1.3 of the regional transportation plan.*
- H. *Tigard will support the development of a commuter rail system as part of the regional transit network.*

**Response:** The proposed extension of Wall Street has been designed in accordance with public street standards, and provides a balance of different modes of transportation modes including motor vehicle, pedestrian, and bicycles. This policy is met.

Policy 3

*Strive to achieve a safe transportation system by the development of street standards, access management policies and speed controls when constructing streets, and by making street maintenance a priority and through a comprehensive program of engineering, education, and enforcement.*

- G. *New roadways shall meet appropriate lighting standards. Existing roadways shall be systematically retrofitted with roadway lighting.*

**Response:** The proposed extension of Wall Street will include lighting in accordance with the public street standards, which will be reviewed with the final design plans submitted for building permit. This policy is met.

Policy 5

*Develop transportation facilities which are accessible to all members of the community and minimize out of direction travel by:*

- A. *The design and construction of transportation facilities to meet the requirements of the Americans with Disabilities Act.*

**Response:** The roadway and sidewalk slopes do not exceed ADA maximums. The design meets the requirements of ADA. This policy is met.

Goal 12.2 – Trafficways

Policy 6

*The City shall adopt the following transportation improvement strategy in order to accommodate planned land uses in the Tigard Triangle:*

*E. Analysis indicates that there is a long term (20-30 years) need for Dartmouth Road to continue over Highway 217 and potentially south to Hall Boulevard as well as for extending the collector distributor roads from the Highway 217/72nd Avenue interchange through the Highway 217/Highway 99W interchange. The Highway 217 corridor analysis to be performed by Metro and ODOT should consider the advantages and disadvantages of these improvements. The Dartmouth extension to Hall Boulevard should be constructed only if further system improvements to Hall Boulevard are made concurrently. If additional capacity is not added to Hall Boulevard south of where the Dartmouth extension would be connected, the effectiveness of this connection would be diminished. Alternatively, another roadway could be constructed that provides a connection from the Dartmouth extension to Hall Boulevard in the vicinity of McDonald Street.*

**Response:** Although the above connection is not shown on the current TSP, it is assumed that the extension of Wall Street as proposed could facilitate the connection from Hall Boulevard to Dartmouth Road. The proposed extension is in compliance with the collector designation on the TSP for Wall Street, and does not preclude the future extension of Wall Street to connect with Dartmouth. This policy is met.

***Tigard Community Development Code***

18.775 – Sensitive Lands

**Response:** The previously submitted narrative and supporting exhibits addressed this section in detail. No further information is necessary to demonstrate compliance with TDC 18.775 – Sensitive Lands section of the Community Development Code for completeness purposes.

***Tigard Municipal Code***

7.40.090 – Greenway Maintenance

- A. *The owner or responsible party shall be responsible for the maintenance of the property, subject to an easement to the City or to the public for greenway purposes. Except as otherwise provided by this section and Sections 7.40.050 through 7.40.120, the standards for maintenance shall be as follows:*
- 1. The land shall remain in its natural topographic condition. No private structures, culverts, excavations or fills shall be constructed within the easement area unless authorized by the City Engineer based on a finding of need in order to protect the property or the public health, safety of welfare.*

2. *No tree over five feet in height shall be removed unless authorized by the Planning Director based on a finding that the tree constitutes a nuisance or a hazard.*
  3. *Grass shall be kept cut to a height not exceeding ten inches, except when some natural condition prevents cutting.*
- B. *In situations where the approval authority establishes different standards or additional standards, the standards shall be in writing and shall be recorded. No person shall be found in violation of this section of the code unless the person has been given actual or constructive notice of the standards prior to the time the violation occurred.*

**Response:** TMC 7.40.090 is a nuisance provision that governs maintenance of greenway easement areas. Because no greenway easements exists on this site and because TMC 7.40.090 is a nuisance provision and not a development regulation, it does not apply to our application.

Chapter 9.06 – Trees on City Property

9.06.030 Tree Planting

- (A) *No person other than the City shall plant a tree on City property without the written approval of the Public Works Director or designee. In approving tree plantings, the Public Works Director or designee may impose conditions of approval;*
- (B) *Any City department responsible for City property shall consult with the Public Works Director or designee before planting trees on City property;*
- (C) *The Public Works Director or designee may grant approval of tree-planting on City property under subsection a of this section only if the applicant has submitted a tree plan showing compliance with the standards set forth in the Tree Manual, and has signed a maintenance agreement consistent with the standards set forth in the Tree Manual. The requirement for a maintenance agreement may be waived if the tree-planting is voluntary and not required by any City code provision or condition of approval;*
- (D) *All tree plantings on City property shall be undertaken in a manner consistent with the approval of the Public Works Director or designee and the standards set forth in the Tree Manual;*
- (E) *Only trees listed in the Street Tree List or those specifically approved by the Public Works Director or designee may be planted as street trees.*

**Response:** Trees proposed to be planted with the extension of Wall Street are required as conditions of the Service Provider Letter issued by CWS (Exhibit P). A total of 318 trees are proposed to be planted within the project area to meet CWS standards for enhancement and mitigation. Most of these trees are to be planted on City property. The details of the proposed plantings are provided in Exhibit Q, including a landscape plan (Sheet R2.5). Prior to installation of the proposed trees, coordination with the City Public Works Director, or designee, will occur to coordinate proposed species and planting details. In the event the City Public Works Director requires a maintenance agreement, in addition to any other special requirements by CWS, an agreement will be provided prior to issuance of building permit. The standards for planting requirements will be coordinated between the Tigard Tree Manual and CWS R&O 07-20 Appendix A. This standard is met.

*9.06.040 Tree Care and Maintenance*

*(1) General Provisions*

- (A) All trees planted pursuant to the written approval of the Public Works Director or designee under Section 9.06.040 shall be cared for and maintained according to the standards set forth in the City Tree Care Manual.*

**Response:** In the event that the Public Works Director, or designee, deems a maintenance agreement necessary, such an agreement will be provided prior to issuance of building permit for the extension of Wall Street. This standard is met.

*9.06.050 Tree Protection*

- (1) Care of Trees on City Property. The City shall follow the Tree Manual in caring for and protecting trees on City property.*
- (2) These requirements shall provide for the proper protection of tree roots, trunk(s) (or stem(s)), branches, and foliage within a tree's critical root zone for any tree on City property during any type of construction activity or project (excavation, demolition or any other type of disturbance);*

**Response:** The construction of Wall Street requires the excavation of previously placed fill material to the north of the proposed extension. Trees on the City's property in this area proposed to be saved will protect the critical root zone by providing a buffer in compliance with the definition in the Tree Manual under 020.6.c. Circular areas demonstrating the critical root zone are shown on the tree removal exhibit included with the Arborist Report as Exhibit T, which are areas not to be disturbed. Final construction plans will demonstrate details for construction fencing and other details to ensure no impacts to the trees and their critical root zone occur in accordance with these standards, as specified in the arborist's recommendations. This standard is met.

*9.06.060 Removal of Hazardous Trees from City Property*

*(1) Removal Priority*

- (A) When any person reports to the Public Works Director or designee that a tree on City property is hazardous, the Public Works Director, or appointed designee, shall evaluate the condition of the tree. The Public Works Director or designee shall establish a removal priority among trees determined to be hazardous and the City shall proceed with removal of hazardous trees from City property according to the priority established by the Public Works Director or designee, subject to the availability of financial and other resources.*

**Response:** An arborist study was prepared for the second phase extension of Wall Street as proposed with this application which has been included as Exhibit T. The study analyzed a total of 26 trees (four trees were inventoried with the phase one arborist study). Of the 26 trees inventoried, 21 trees are located on City property and are subject to these regulations.

The study concluded that of the 21 trees inventoried on City property, five were considered dead or hazard trees, and were recommended for immediate removal. While not delineated as hazardous, an additional 12 trees were identified as having "poor form, internal decay or other defects that make them poor specimens, unsuitable for retention in an ornamental landscape or potential hazard trees as they continue to deteriorate" and recommended for removal. The

four remaining trees on City property were not identified in the above categories; however, are necessary for removal to accommodate the proposed construction activities related to the extension of Wall Street. Three trees are proposed to be preserved (number 56, 57, and 58) as they are not directly impacted by the proposed development.

According to Section 090.2 of the Tree Manual, the extension of existing streets as shown on the Transportation System Plan is exempt for the tree mitigation requirements. As such, no mitigation is required. Nonetheless, a total of 318 trees are proposed to be planted within the vegetated corridors within the project area. This standard is met.

(2) *Removal of Hazardous Trees*

- (A) *The removal of hazardous trees from City property shall be performed by City of Tigard employees or contracted commercial tree care companies with experience in tree removal. The Public Works Director or designee shall provide guidance as to the disposition of any wood or debris from any tree removal on City property.*

**Response:** Prior to removal of the hazardous trees, the City of Tigard will inform the applicant whether they will be removing the hazardous trees and specific details regarding the disposition of debris. This standard is met.

9.06.070 *Removal of Trees from City Property*

- (1) *Removal of Trees from City Property other than Right of Way Prohibited. No person other than the City or a person acting under contract with the City shall remove a tree from any City park or any City-owned property without written approval of the Public Works Director or designee. Any person removing a tree from City property other than right of way shall provide mitigation as specified in the Tree Manual.*

**Response:** The trees proposed to be removed will fall under right-of-way that will be dedicated prior to issuance of building permit for the construction of the road. According to Section 090.2 of the Tree Manual, the extension of existing streets as shown on the Transportation System Plan is exempt for the tree mitigation requirements. As such, no mitigation is required. Nonetheless, a total of 318 trees are proposed to be planted within the project area. This standard is met.

- (2) *Removal of Trees from Right of Way. No person other than the City or a person acting under contract with the City shall remove a tree from any City right of way without written approval of the Public Works Director or designee. As part of the written approval for tree removal from right of way, the Public Works Director or designee shall require mitigation as specified in the Tree Manual.*

**Response:** The trees proposed to be removed will fall under right-of-way that will be dedicated prior to issuance of building permit for the construction of the road. According to Section 090.2 of the Tree Manual, the extension of existing streets as shown on the Transportation System Plan is exempt for the tree mitigation requirements. As such, no mitigation is required. Nonetheless, a total of 318 trees are proposed to be planted within the project area. This standard is met.

City of Tigard  
Completeness Response  
Project Number 2070334.06  
January 15, 2010  
Page 13

- (3) *Removal of Wood or Tree Debris from City Property. No person shall remove wood or tree debris from City property without written approval of the Public Works Director or designee, provided however that the Public Works Director or designee may retroactively approve removal of wood or tree debris from City property if the removal was under emergency circumstances. This section does not prohibit clearing of paths or other clean-up that leaves wood or tree debris on City property.*

**Response:** The removal of wood or other tree debris from the proposed removal of trees, will be coordinated with the City Public Works Director and Arborist. This standard is met.

### ***Metro Urban Functional Growth Management Plan***

#### ***Title 13 – Nature in Neighborhoods***

**Response:** Title 13 (Nature in Neighborhoods) of the Metro Urban Functional Growth Management Plan sets forth regulations and standards for implementation by each local jurisdiction. According to review of Ordinance 06-20, the City of Tigard has adopted regulations and code amendments to ensure compliance with Title 13. In the City's Comprehensive Plan, Chapter 5, goals and policies have been adopted to enforce the policies in Title 13. Similarly, the purpose statement, as listed in TDC 18.775.010.D, comments that its intent is to implement the Metro Urban Growth Management Functional Plan and Title 13. By demonstrating compliance with the applicable provisions of both Chapter 5 and the Sensitive Lands chapter, this request is in compliance with Title 13.

### **3. SUPPORTING DOCUMENTS**

#### ***ESEE***

*Please provide on the document the names and titles of those who prepared it. Also provide the facts, findings, and conclusions in the narrative to show how 18.775.130.A criteria are met. Does this updated analysis consider changes that may have occurred since the original ESEE was completed for Phase 1?*

**Response:** The revised ESEE for the Phase 2 extension of Wall Street includes the recent changes in zoning of Mr. Fields' property. No other changes have occurred since the completion of Phase 1. The ESEE submitted for Phase 2 was prepared by John van Staveren and Shawn Eisner with Pacific Habitat Services (PHS) and Tom Wright, AICP of Group Mackenzie. The prior narrative adequately addresses the relevant criteria in 18.775.130.A, as are further supported by the revised ESEE document attached. No additional analysis is necessary.

The ESEE analysis was prepared by the following PHS staff: John van Staveren, Professional Wetland Scientist (PWS) and Shawn Eisner, Wetland Biologist/ Project Manager. PHS is a natural resource consulting firm with expertise in wetland functional assessment and Oregon Statewide Planning Goal 5 work. PHS has completed nearly two dozen Goal 5 projects in the State of Oregon since the early 1990's, many of which included ESEE elements.

City of Tigard  
Completeness Response  
Project Number 2070334.06  
January 15, 2010  
Page 14

John van Staveren, PWS, (B.S. Marine biology and limnology) is the senior scientist at PHS. As Senior Scientist, Mr. van Staveren directs the firm's environmental and regulatory compliance activities. He has conducted thousands of wetland delineations, 24 Local Wetland Inventories and riparian inventories, designed and implemented dozens of freshwater and estuarine wetland mitigation plans, provided expert witness testimony, and testified at numerous public hearings.

Shawn Eisner (B.S. in Environmental Science and Earth Science; Graduate Certificate in Environmental Geology) is a wetland/environmental assessment project manager. His recent Goal 5 experience includes preparation of local wetland inventories for the planned communities of North Bethany and Bull Mountain in Washington County, as well as for Arch Cape in Clatsop County. Shawn also provides specialized support pertaining to wetland delineations, biological assessments on transportation (bridge) projects, and the environmental permitting process in general.

#### ***Alternatives Analysis***

*Page 8 of the analysis is not legible. Please ensure that future copies of this page are legible for readers. Was the wildlife biologist/wetlands ecologist involved with analyzing the environmental impact of the two new alternatives?*

**Response:** A revised copy of the Alternatives Analysis has been provided with this response. Methodology used to analyze the two new additional access points was consistent with that used to prepare the previous Alternatives Analysis. Impacts were calculated using Arc View based upon the approximate location of the road alignments, estimated width or road grading limits, and natural resource mapping. PHS was involved to help analyze and determine impacts of each additional alternative.

#### ***Department of State Lands Removal/Fill Permit***

*Permit 31719-RF has expired and you state that a new permit will be requested. The supporting documents for this permit were prepared several years ago and will likely be required by the permitting agency. Please provide copies of updated supporting documents.*

**Response:** The previously approved joint fill permit from DSL and the Corps approved wetland impacts associated with the full extension of Wall Street. Approved mitigation was also included with this permit, and constructed with the first phase of the extension. The permit expired January 27, 2008, and the impacts for Phase 2 will require a new permit. Per recent discussions with representatives of both DSL and Corps new permits will be necessary and the mitigation completed with Phase 1 can be applied to the impacts proposed with this application. It is possible that updated supporting documents will be required by the agencies; however, this information is not necessary for the City to approve this application.

#### 4. ADJUSTMENT

**Response:** The additional fee of \$310.50 has been provided with this re-submittal.

#### 5. TREE REMOVAL PERMITS

**Response:** A separate, but concurrent, Tree Removal Permit request has been submitted with this re-submittal. Per TDC 18.790.050, Tree Removal Permits are processed as Type I applications. These standards are met.

#### 6. PUBLIC FACILITY ITEMS

##### *Street Issues*

##### *Right-of-way clearly shown?*

**Response:**

1. An adjustment is requested pursuant to TDC 18.810.030.A.6&7 in order to minimize impacts to the natural features in the area of the proposed bridge over Fanno Creek. These features include wetlands, vegetated corridors, trees, and additional floodplain impacts. The proposed section eliminates the planter section on the bridge portion of the extension; however, continues to provide the required travel lanes, bike lanes, and sidewalks.
2. A 72-foot right-of-way dedication is proposed along the entire length, even in locations where the two-lane improvement section is proposed.
3. Dedication of right-of-way and easements is shown on the typical section of Sheet R8.1.
4. Noted: See previous comment and Sheet R8.1.

##### *Street right-of-way widths dimensioned and appropriate?*

**Response:** While the road is limited to two-lanes in the bridge section, right-of-way width is maintained at 72 feet for the length of the project. See Sheets R2.1 and R8.1.

##### *Other?*

**Response:**

1. Final development plans will demonstrate details for both street lighting and street trees.
2. Final development plans will provide details for franchise utility placement underground on either side of the bridge, and attached with the bridge where appropriate.
3. At a previous meeting with City staff, it was indicated the City would defer to TVF&R review. Our discussions with TVF&R indicated that without any structures to protect, no turnaround would be necessary with this phase of work. With any future

development, circulation and access requirements will have to be followed, including providing an adequate turnaround in compliance with TVF&R requirements.

### ***Sanitary Sewer Issues***

*Existing/proposed lines shown?*

**Response:** Agreed.

### ***Water Issues***

*Existing/proposed lines with sizes noted?*

**Response:** Water lines have been added to Sheet R2.3.

*Existing/proposed fire hydrants shown?*

**Response:** Agreed. Hydrants will be added with future development according to applicable standards.

*Proposed fire protection system shown?*

**Response:** Agreed. See TVF&R response note above.

### ***Storm Drainage and Water Quality Issues***

*Existing/proposed lines shown?*

**Response:** Catch basins have been added at approximately Station 18+25, providing a spacing of approximately 390 feet from the westerly roadway profile crest, which meets the City/CWS catch basin maximum spacing requirement (400 feet maximum).

*Preliminary sizing calcs for water quality/detention provided?*

**Response:**

1. Preliminary calculations are included in the application materials as Exhibit M. Final calculations will be part of the permit application.
2. Fees for detention will be paid with the issuance of construction permits.

## **7. ARBORIST COMMENTS**

The provisions of TMC 9.06 and 18.790.050 are addressed above. The following addresses the additional code provisions noted by the Arborist.

### ***18.745 Landscaping and Screening***

#### ***18.745.030 General Provisions***

- A. *Obligation to maintain. Unless otherwise provided by the lease agreement, the owner, tenant and his agent, if any, shall be jointly and severally responsible for the*

*maintenance of all landscaping and screening which shall be maintained in good condition so as to present a healthy, neat and orderly appearance, shall be replaced or repaired as necessary, and shall be kept free from refuse and debris.*

**Response:** This application does not include any landscape or screening materials, as the proposal is for the extension of a public road. CWS buffer enhancement and mitigation plantings are proposed to their “good” standard; however, will be maintained in accordance with CWS standards. Trees proposed to be planted on City-owned property will be maintained in accordance with TMC 9.06.040, or other agreement. This provision is met.

*B. Pruning required. All plant growth in landscaped areas of developments shall be controlled by pruning, trimming or otherwise so that:*

- 1. It will not interfere with the maintenance or repair of any public utility;*
- 2. It will not restrict pedestrian or vehicular access; and*
- 3. It will not constitute a traffic hazard because of reduced visibility.*

**Response:** This application does not include any proposed pruning or trimming of existing landscaping or trees. This provision is not applicable.

*C. Installation requirements. The installation of all landscaping shall be as follows:*

- 1. All landscaping shall be installed according to accepted planting procedures;*
- 2. The plant materials shall be of high grade, and shall meet the size and grading standards of the American Standards for Nurberg Stock (ANSI Z60, 1-1986, and any future revisions); and*
- 3. Landscaping shall be installed in accordance with the provisions of this title.*

**Response:** Proposed buffer enhancement and mitigation plantings will be provided in accordance with CWS standards, which meet or exceed the City’s requirements. This provision is met.

*D. Certificate of occupancy. Certificates of occupancy shall not be issued unless the landscaping requirements have been met or other arrangements have been made and approved by the City such as the posting of a bond.*

**Response:** This application is for an extension of a public roadway, therefore, this provision is not applicable.

*E. Protection of existing vegetation. Existing vegetation on a site shall be protected as much as possible:*

- 1. The developer shall provide methods for the protection of existing vegetation to remain during the construction process; and*
- 2. The plants to be saved shall be noted on the landscape plans (e.g., areas not to be disturbed can be fenced, as in snow fencing which can be placed around individual trees).*

**Response:** The proposed plans demonstrate the trees and vegetation to be protected. Additional construction details and methods will be specified during the building permit process. This provision is met.

*F. Care of landscaping along public rights-of-way. Appropriate methods for the care and maintenance of street trees and landscaping materials shall be provided by the owner of the property abutting the rights-of-way unless otherwise required for emergency conditions and the safety of the general public.*

**Response:** No impacts are proposed to existing plant materials adjacent to public rights-of-way. This provision does not apply.

*G. Conditions of approval of existing vegetation. The review procedures and standards for required landscaping and screening shall be specified in the conditions of approval during development review and in no instance shall be less than that required for conventional development.*

**Response:** Appropriate conditions of approval on the proposed extension of Wall Street may be specified, and will be complied with during the construction process. This provision is met.

*H. Height restrictions abutting public rights-of-way. No trees, shrubs or plantings more than 18 inches in height shall be planted in the public right-of-way abutting roadways having no established curb and gutter.*

**Response:** No landscape plantings are proposed abutting the proposed Wall Street right-of-way with the exception of street trees. A curb and gutter will protect these plantings in compliance with this provision.

#### 18.745.040 Street Trees

*A. Protection of existing vegetation. All development projects fronting on a public street, private street or a private driveway more than 100 feet in length approved after the adoption of this title shall be required to plant street trees in accordance with the standards in Section 18.745.040.C.*

*B. Street tree planting list. Certain trees can severely damage utilities, streets and sidewalks or can cause personal injury. Approval of any planting list shall be subject to review by the Director.*

*C. Size and spacing of street trees.*

*1. Landscaping in the front and exterior side yards shall include trees with a minimum caliper of two inches at four feet in height as specified in the requirements stated in Section 18.745.040.C.2 below.*

*2. The specific spacing of street trees by size of tree shall be as follows:*

*a. Small or narrow-stature trees under 25 feet tall and less than 16 feet wide branching at maturity shall be spaced no greater than 20 feet apart;*

*b. Medium-sized trees 25 feet to 40 feet tall, 16 feet to 35 feet wide branching at maturity shall be spaced no greater than 30 feet apart;*

*c. Large trees over 40 feet tall and more than 35 feet wide branching at maturity shall be spaced no greater than 40 feet apart;*

*d. Except for signalized intersections as provided in Section 18.745.040.H, trees shall not be planted closer than 20 feet from a street intersection, nor closer than two feet from private driveways (measured at the back edge of the sidewalk), fire hydrants or utility poles to maintain visual clearance;*

- e. No new utility pole location shall be established closer than five feet to any existing street tree;*
  - f. Tree pits shall be located so as not to include utilities (e.g., water and gas meters) in the tree well;*
  - g. On-premises utilities (e.g., water and gas meters) shall not be installed within existing tree well areas;*
  - h. Street trees shall not be planted closer than 20 feet to light standards;*
  - i. New light standards shall not be positioned closer than 20 feet to existing street trees except when public safety dictates, then they may be positioned no closer than 10 feet;*
  - j. Where there are overhead power lines, the street tree species selected shall be of a type which, at full maturity, will not interfere with the lines;*
  - k. Trees shall not be planted within two feet from the face of the curb; and*
  - l. Trees shall not be planted within two feet of any permanent hard surface paving or walkway:
    - (1) Space between the tree and the hard surface may be covered by a nonpermanent hard surface such as grates, bricks on sand, paver blocks and cobblestones; and*
    - (2) Sidewalk cuts in concrete for tree planting shall be at least four by four feet to allow for air and water into the root area.**
- D. Pruning requirements. Trees, as they grow, shall be pruned to provide at least eight feet of clearance above sidewalks and 13 feet above local street, 15 feet above collector street, and 18 feet above arterial street roadway surfaces.*
- E. Cut and fill around existing trees. Existing trees may be used as street trees if no cutting or filling takes place within the drip-line of the tree unless an adjustment is approved by the Director by means of a Type I procedure, as governed by Section 18.390.030, using approval criteria in Section 18.370.020.C.4.a.*
- F. Replacement of street trees. Existing street trees removed by development projects or other construction shall be replaced by the developer with those types of trees approved by the Director. The replacement trees shall be of a size and species similar to the trees that are being removed unless lesser sized alternatives are approved by the Director.*
- G. Granting of adjustments. Adjustments to the street tree requirements may be granted by the Director by means of a Type I procedure, as regulated in Section 18.390.030, using approval criteria in Section 18.370.020.C.6.b.*
- H. Location of trees near signalized intersections. The Director may allow trees closer to specified intersections which are signalized, provided the provisions of Chapter 18.795, Visual Clearance, are satisfied. (Ord. 09-13)*

**Response:** The first phase extension of Wall Street provided 2-inch caliper Oregon White Oak (*Quercus Garryana*). This species and spacing will be continued with the proposed extension of Wall Street, with the exception of where the planting strip has been eliminated with the bridge crossing. These standards are met.

18.745.060 Re-Vegetation

- A. *When re-vegetation is required. Where natural vegetation has been removed through grading in areas not affected by the landscaping requirements and that are not to be occupied by structures, such areas are to be replanted as set forth in this section to prevent erosion after construction activities are completed.*
- B. *Preparation for re-vegetation. Topsoil removed from the surface in preparation for grading and construction is to be stored on or near the sites and protected from erosion while grading operations are underway; and*
  - 1. *Such storage may not be located where it would cause suffocation of root systems of trees intended to be preserved; and*
  - 2. *After completion of such grading, the topsoil is to be restored to exposed cut and fill embankments or building pads to provide a suitable base for seeding and planting.*
- C. *Methods of re-vegetation.*
  - 1. *Acceptable methods of re-vegetation include hydro-mulching or the planting of rye grass, barley, or other seed with equivalent germination rates, and:*
    - a. *Where lawn or turf grass is to be established, lawn grass seed or other appropriate landscape cover is to be sown at not less than four pounds to each 1,000 square feet of land area;*
    - b. *Other re-vegetation methods offering equivalent protection may be approved by the approval authority;*
    - c. *Plant materials are to be watered at intervals sufficient to ensure survival and growth; and*
    - d. *The use of native plant materials is encouraged to reduce irrigation and maintenance demands.*

**Response:** The areas proposed to be disturbed with grading and excavation activities will be planted and re-vegetated in accordance with the planting plan developed to meet CWS standards listed in R&O 07-05 Appendix A. The methods for species removal and re-planting will be consistent with CWS standards, which meet or exceed these standards.

## 8. AREAS OF CONCERN

*The narrative reads, under TDC 18.775.070.B.2, that code references are cited to support your interpretation of the term "public support facilities." There is one citation, no discussion of how this term has been previously interpreted by the City, and how the proposed interpretation is different.*

**Response:** In the first area of concern, the City asks for additional information about the meaning of the term "public support facility." The only development allowed in residentially zoned floodplains are those associated with community recreation uses, utilities, or public support facilities. The relevant code provision reads:

*Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation*

City of Tigard  
Completeness Response  
Project Number 2070334.06  
January 15, 2010  
Page 21

*uses, utilities, or **public support facilities** as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards." TDC 18.775.070.B.2.*

As is stated in the application, the land form alterations and support structures for the bridge that are in the floodplain are "public support facilities." In meetings with Mr. Fields, staff has questioned if the land form alterations and support structures for the bridge qualify as "public support facilities." This term is not defined in the Tigard Development Code.

As the applicant's lawyer, Mr. Grillo, explained at the pre-application meeting with staff, the "text in context" rule under PGE v. BOLI provides the appropriate methodology for analyzing the code's meaning in using this ambiguous phrase.<sup>1</sup> The PGE test involves a two-step analysis. First, the text and context of the provision are examined. Second, if the meaning of the provision is not clear from the first level of analysis, the decision-maker considers legislative history.<sup>2</sup>

The text of TDC 18.775.070.B.2 quoted above gives little insight to the meaning of "public support facility;" however, another provision in the sensitive lands code gives more explanation of this term. TDC 18.775.020.E.1 provides that, "The City Engineer shall review the installation of **public support facilities** such as underground utilities and construction of roadway improvements including sidewalks, curbs, streetlights, and driveway aprons \* \* \*."

The inclusion of the phrase "construction of roadway improvements" in this description of public support facilities strongly indicates that roadway construction is allowed in residential floodplains. It indicates even more strongly that support structures for bridges are public support facilities. As was mentioned in the application, the entire proposed roadway is elevated above the floodplain. It is only support structures for the road that are in the floodplain. Furthermore, this must include land form alterations because constructing roadways, sidewalks, and driveway aprons inherently involves land form alterations.

A less plausible interpretation would be that land form alterations and support structures for the street and bridge do not qualify as "public support facilities" because streets are not public facilities. The plausibility of this interpretation is eliminated when the purpose provision in the streets section of the code is considered. TDC 18.810.010 provides that, "The purpose of this chapter is to provide construction standards for the implementation of public and private facilities and utilities such as streets, sewers, and drainage" (emphasis added). By this provision, public streets are public facilities. Wall Street is a public street as contemplated in the TSP and as designed. It is, therefore, a public facility. The support structures for public facilities are naturally public support facilities.

Staff's completeness review requests a discussion of how the term "public support facilities" has been previously interpreted by the City. A search for Tigard land use decisions pertaining

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<sup>1</sup> PGE v. BOLI, 317 Or 606, 859 P2d 1143 (1993).

<sup>2</sup> PGE, 317 at 610-11.

to bridge applications over floodplains resulted in only one other bridge application since adoption of the TDC 18.775.070.B.2 provision regarding “public support facilities” quoted above. In SLR 2009-0002, the City approved a bridge and pathway across the Fanno Creek floodplain on this same residentially zoned property approximately 180 meters upstream from the proposed location of Mr. Fields’ bridge. As is explained in Mr. Grillo’s letter to the City dated December 1, 2009 (attached), the City Hearings Officer found that such a bridge was allowed, so long as the road surface was elevated above the floodplain.

In meetings with Mr. Fields, staff indicated that the City has not approved a bridge or street over a residentially zoned floodplain since the “public support facility” provision quoted above was adopted. Staff also expressed a belief that such a bridge or street may not be allowed because of staff’s long-standing practice to not allow such facilities. While we respect staff’s position on this issue, it is not based on the text of the code or even prior land use decisions. As is discussed above, the text and context of the code indicates that grading and supports for bridges over the floodplain are allowed as “public support facilities.”

*Is this design the most environmentally friendly? The applicant is requesting exceptions/adjustments to the street design to avoid impacts to natural areas, but then is proposing fill within these same natural areas.*

**Response:** The proposed extension of Wall Street presents several conflicts with current Comprehensive Plan Goals and Policies, including transportation, public facilities and services, and economic development and those related to natural resources and environmental quality. Careful consideration of the balance between these goals and policies has been the forefront of the extension of Wall Street since the initial planning stages related to Phase 1 in 2002. Evidence of this consideration is found in the Alternatives Analysis prepared for the full extension of Wall Street (included as Exhibit K), of which this application is in full compliance. The City determined that Alternative 9 was preferred as it would avoid and minimize impacts to wetlands, floodplains and natural resources to the greatest extent practicable. The proposed extension is in full compliance with Alternative 9.

Wall Street is classified as a future collector per the City’s TSP. The proposed design is in conformance with the collector standards, with the exception of where the proposed bridge crosses Fanno Creek. The improvement width has been reduced to eliminate the planter strip from the bridged portion of the extension to ensure that impacts to the natural resources (including wetlands, vegetated corridor, floodplain, and trees) are minimized. Furthermore the placement of wing and retaining walls on both sides of the bridge span limit additional grading and wetland fills, although at a higher cost of construction. A design adjustment has been included with this application as allowed in 18.810.030.A.6&7. With the elimination of the required planter strip, impacts are minimized to these natural features in accordance with the previously selected preferred alternative.

*Beginning on page 8 of the narrative, you briefly outline the impacts to the on-site sensitive areas. These impacts are a key concern of the stakeholders. Please ensure that impacts to the natural areas and wildlife are clearly outlined. Document where and from whom this information was obtained.*

City of Tigard  
Completeness Response  
Project Number 2070334.06  
January 15, 2010  
Page 23

**Response:** The impacts proposed with this application are based upon several documents including the original Alternatives Analysis which identified the proposed design as the preferred alternative. Information presented in this application has been provided by professionals in their respective fields, including an arborist, natural resources consultant, civil engineers, and land use attorneys. Several previous studies have been used to base conclusions of this application, which have been reviewed and concurred with by applicable professionals. The proposed extension of Wall Street has been designed to minimize impacts to natural resources to the greatest extent practicable, as is evident by the Alternatives Analysis. Furthermore, this extension has been designed in conformance with the City's TSP to provide access to Mr. Fields' property in accordance with prior agreements with the City of Tigard.

Thank you for your response to our application. We look forward to further pursuing this request and working with staff for the upcoming public hearings. Please let us know if you have any questions or comments.

Sincerely,



Rhys Konrad, Planner, LEED AP  
Associate

Exhibits: Signed Application Form from A. Eikrem (to be included with prior Exhibit A)  
Alternatives Analysis (to replace prior Exhibit K)  
ESEE (to replace prior Exhibit R)  
S. January 14, 2010 Pacific Habitat Services Habitat Memorandum  
T. Arborist Study  
U. December 1, 2009 Letter From Phil Grillo

PRE-APP. HELD BY:



# CITY OF TIGARD PLANNING DIVISION LAND USE PERMIT APPLICATION

City of Tigard Permit Center, 13125 SW Hall Blvd., Tigard, OR 97223  
Phone: 503.639.4171 Fax: 503.598.1960

File #  Other Case #

Date  By  Receipt #  Fee  Date Complete

### TYPE OF PERMIT YOU ARE APPLYING FOR

- Adjustment/Variance (I or II)
- Comprehensive Plan Amendment (IV)
- Conditional Use (III)
- Historic Overlay (II or III)
- Home Occupation (II)
- Minor Land Partition (II)
- Planned Development (III)
- Sensitive Lands Review (I, II or III)
- Site Development Review (II)
- Subdivision (II or III)
- Zone Change (III)
- Zone Change Annexation (IV)
- Development Code Amendment (IV)

LOCATION WHERE PROPOSED ACTIVITY WILL OCCUR (Address if available)

TAX MAPS & TAX LOT NOS.

2S102DD00100; 2S102DD00200; 2S101000100

TOTAL SITE SIZE

ZONING CLASSIFICATION

R-12 & R-25

APPLICANT\*

Fred Fields

MAILING ADDRESS/CITY/STATE/ZIP

1149 SW Davenport Ave Portland, OR 97201

PHONE NO.

503-228-7084

FAX NO.

N/A

PRIMARY CONTACT PERSON

Rhys Konrad - Group Mackenzie

PHONE NO.

503-224-9560

PROPERTY OWNER/DEED HOLDER (Attach list if more than one)

Same as Applicant.

MAILING ADDRESS/CITY/STATE/ZIP

PHONE NO.

FAX NO.

\*When the owner and the applicant are different people, the applicant must be the purchaser of record or a lessee in possession with written authorization from the owner or an agent of the owner. The owners must sign this application in the space provided on the back of this form or submit a written authorization with this application.

PROPOSAL SUMMARY (Please be specific)

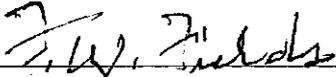
662' extension of Wall Street to serve the applicant's property. A 320' bridge crossing of Fanno Creek is proposed spanning the floodway. Impacts to locally designated significant wetlands, and 100-year floodplain are proposed. Wetland mitigation has been approved and constructed with Phase 1 of Wall Street. Floodplain impacts are proposed to be mitigated with this application.

APPLICATIONS WILL NOT BE ACCEPTED WITHOUT ALL OF THE REQUIRED SUBMITTAL ELEMENTS AS DESCRIBED IN THE "BASIC SUBMITTAL REQUIREMENTS" INFORMATION SHEET.

**THE APPLICANT SHALL CERTIFY THAT:**

- ◆ If the application is granted, the applicant shall exercise the rights granted in accordance with the terms and subject to all the conditions and limitations of the approval.
- ◆ All the above statements and the statements in the plot plan, attachments, and exhibits transmitted herewith, are true; and the applicants so acknowledge that any permit issued, based on this application, may be revoked if it is found that any such statements are false.
- ◆ The applicant has read the entire contents of the application, including the policies and criteria, and understands the requirements for approving or denying the application(s).

**SIGNATURES OF EACH OWNER OF THE SUBJECT PROPERTY ARE REQUIRED.**

 _____ Owner's Signature	_____ Date
_____ Owner's Signature	_____ Date
_____ Owner's Signature	_____ Date
_____ Owner's Signature	_____ Date
_____ Owner's Signature	_____ Date
_____ Applicant/Agent/Representative's Signature	_____ Date
_____ Applicant/Agent/Representative's Signature	_____ Date



# CITY OF TIGARD PLANNING DIVISION LAND USE PERMIT APPLICATION

*City of Tigard Permit Center 13125 SW Hall Blvd., Tigard, OR 97223*  
Phone: 503.639.4171 Fax: 503.598.1960

File #  Other Case #   
 Date  By  Receipt #  Fee  Date Complete

### TYPE OF PERMIT YOU ARE APPLYING FOR

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Adjustment/Variance (I or II)     | <input type="checkbox"/> Minor Land Partition (II)                        | <input type="checkbox"/> Zone Change (III)               |
| <input type="checkbox"/> Comprehensive Plan Amendment (IV) | <input type="checkbox"/> Planned Development (III)                        | <input type="checkbox"/> Zone Change Annexation (IV)     |
| <input type="checkbox"/> Conditional Use (III)             | <input checked="" type="checkbox"/> Sensitive Lands Review (I, II or III) | <input type="checkbox"/> Development Code Amendment (IV) |
| <input type="checkbox"/> Historic Overlay (II or III)      | <input type="checkbox"/> Site Development Review (II)                     |  |
| <input type="checkbox"/> Home Occupation (II)              | <input type="checkbox"/> Subdivision (II or III)                          |  |

LOCATION WHERE PROPOSED ACTIVITY WILL OCCUR (Address if available)

TAX MAPS & TAX LOT NOS.

2S102DD00100; 2S102DD00200; 2S101000100

TOTAL SITE SIZE

ZONING CLASSIFICATION

R-12 & R-25

APPLICANT\*

Fred Fields

MAILING ADDRESS/CITY/STATE/ZIP

1149 SW Davenport Ave Portland, OR 97201

PHONE NO.

503-228-7084

FAX NO.

N/A

PRIMARY CONTACT PERSON

Rhys Konrad - Group Mackenzie

PHONE NO.

503-224-9560

PROPERTY OWNER/DEED HOLDER (Attach list if more than one)

Same as Applicant.

MAILING ADDRESS/CITY/STATE/ZIP

PHONE NO.

FAX NO.

\*When the owner and the applicant are different people, the applicant must be the purchaser of record or a lessee in possession with written authorization from the owner or an agent of the owner. The owners must sign this application in the space provided on the back of this form or submit a written authorization with this application.

PROPOSAL SUMMARY (Please be specific)

662' extension of Wall Street to serve the applicant's property. A 320' bridge crossing of Fanno Creek is proposed spanning the floodway. Impacts to locally designated significant wetlands, and 100-year floodplain are proposed. Wetland mitigation has been approved and constructed with Phase 1 of Wall Street. Floodplain impacts are proposed to be mitigated with this application.

**APPLICATIONS WILL NOT BE ACCEPTED WITHOUT ALL OF THE REQUIRED SUBMITTAL ELEMENTS AS DESCRIBED IN THE "BASIC SUBMITTAL REQUIREMENTS" INFORMATION SHEET.**

**THE APPLICANT SHALL CERTIFY THAT:**

- ◆ If the application is granted, the applicant shall exercise the rights granted in accordance with the terms and subject to all the conditions and limitations of the approval.
- ◆ All the above statements and the statements in the plot plan, attachments, and exhibits transmitted herewith, are true; and the applicants so acknowledge that any permit issued, based on this application, may be revoked if it is found that any such statements are false.
- ◆ The applicant has read the entire contents of the application, including the policies and criteria, and understands the requirements for approving or denying the application(s).

**SIGNATURES OF EACH OWNER OF THE SUBJECT PROPERTY ARE REQUIRED.**

*ASIA IS EIKREMA PERASANA & REP.*  
*She [Signature]*

---

Owner's Signature

*6 JAN 2010*

---

Date

---

Owner's Signature

---

Date

---

Applicant/Agent/Representative's Signature

---

Date

---

Applicant/Agent/Representative's Signature

---

Date

25  
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Washington County, Oregon  
11/14/2002 04:18:51 PM  
D-DW Cnt=1 Str=4 A DUYCK  
\$25.00 \$6.00 \$11.00 - Total=\$42.00

2002-136823



After recording return to:  
City of Tigard  
131.25 SW Hall Blvd  
Tigard, OR 97223

Until a change is requested all tax statements  
shall be sent to the following address:  
City of Tigard  
131.25 SW Hall Blvd  
Tigard, OR 97223

File No.: NCS-4184-OR1 (pb)  
Date: October 22, 2002

THIS SPACE RESERVED



00201948200201368230050058

I, Jerry Hanson, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

*Jerry Hanson*  
Jerry R. Hanson, Director of Assessment and Taxation,  
Ex-Officio County Clerk



TL 100 + 200

Recorded By  
First American Title Insurance Company of Oregon  
No. 99379-*COMM*

**STATUTORY SPECIAL WARRANTY DEED**

Fred W. Fields, Grantor, conveys and specially warrants to **City of Tigard, an Oregon municipal corporation**, the following described real property free of liens and encumbrances created or suffered by the Grantor, except as specifically set forth herein:

See Exhibit "A" attached hereto

This property is free from liens and encumbrances, EXCEPT: See Exhibit "B" attached hereto

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

The true consideration for this conveyance is **\$2,100,000.00**.

*Fred W. Fields*  
\_\_\_\_\_  
Fred W. Fields

ACCEPTED:  
City of Tigard, an Oregon  
municipal corporation

*William A. Monahan*  
\_\_\_\_\_  
William A. Monahan  
City Manager

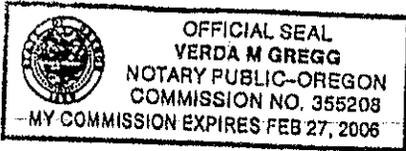
STATE OF Oregon )  
 )ss.  
County of *Washington* )

This instrument was acknowledged before me on this 30<sup>th</sup> day of October, 2002  
by Fred W Fields.

*Verda M. Gregg*

Notary Public for Oregon

My commission expires:



2002-136823

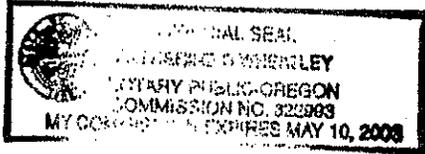
STATE OF OREGON  
County of Clackamas

}  
} SS:



2002-136823

This instrument was acknowledged before me on October 30, 20<sup>02</sup>, by William A. Monahan as City Manager of the City of Tigard, an Oregon municipal corporation, on behalf of the corporation.



Catherine Wheatley  
Notary Public for Oregon  
My Commission Expires 5/10/08

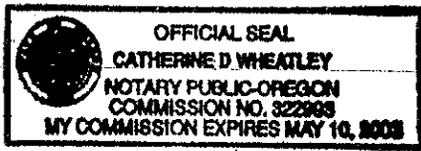


EXHIBIT "A"



PARCEL I:

The North one-half of Lot 1, EDGEWOOD ACRE TRACTS, in the City of Tigard, County of Washington and State of Oregon.

PARCEL II:

The South one-half of Lot 1, EDGEWOOD, in the City of Tigard, County of Washington and State of Oregon.

PARCEL III:

All that certain tract of land in the William Graham Donation Land Claim No. 39 in Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon, conveyed to Beecher B. Robinson by Deed recorded at page 193 of Volume 126, Washington County, Oregon Deed Records, and being more particularly described as follows, to-wit:

Beginning at the Southwest corner of the aforesaid Robinson Tract in the center of the County Road at the Northwest corner of Lot 1, EDGEWOOD, a duly recorded subdivision of Washington County, Oregon, which beginning point is said to bear 5.80 chains West and 21.02 chains North of the Northwest corner of Section 12, Township 2 South, Range 1 West, of the Willamette Meridian; thence from said point of beginning North 0°22' East in the center of the said county road 969.4 feet to the Northwest corner of the said Robinson Tract; thence South 47°43' East 26.9 feet to an iron pipe; thence continuing South 47°43' East 431.1 feet to an iron pipe; thence South 99.0 feet to an alder tree marked "C.S."; thence continuing South 16.0 feet to a point in the center of Fanno Creek, from which point an iron pipe bears North 19.9 feet; thence down stream following the center of Fanno Creek the following courses and distance: South 37°01' East 110.0 feet; South 26°58' West 126.0 feet; South 6°44' West 86.8 feet; South 30°08' East 40.5 feet; South 73°51' East 44.8 feet; North 53°56' East 71.7 feet; South 74°06' East 33.1 feet; South 4°44' West 72.6 feet; South 24°24' East 64.3 feet; South 51°2' East 137.0 feet and South 11°35' West 42.7 feet to a point on the North line of said EDGEWOOD SUBDIVISION; thence North 89°00' West along the North line of aforesaid subdivision 35.1 feet to a point in the center of Fanno Creek, from which point an iron pipe bears South 89°00' East 17.1 feet; thence running downstream in the center of Fanno Creek North 39°18' West 32.8 feet North 58°29' West 104.5 feet, South 86°48' West 41.6 feet and South 12°02' West 76.4 feet to a point on the North line of aforesaid subdivision, from which point an iron pipe bears North 89°00' West 28.0 feet; thence leaving Fanno Creek and running along the North line of said subdivision 528.0 feet to the place of beginning.

SAVE AND EXCEPT THEREFROM that portion conveyed to the State of Oregon, by and through the State Highway Commission recorded August 20, 1965 in Book 656, page 306, Records of Washington County.



2002-136823

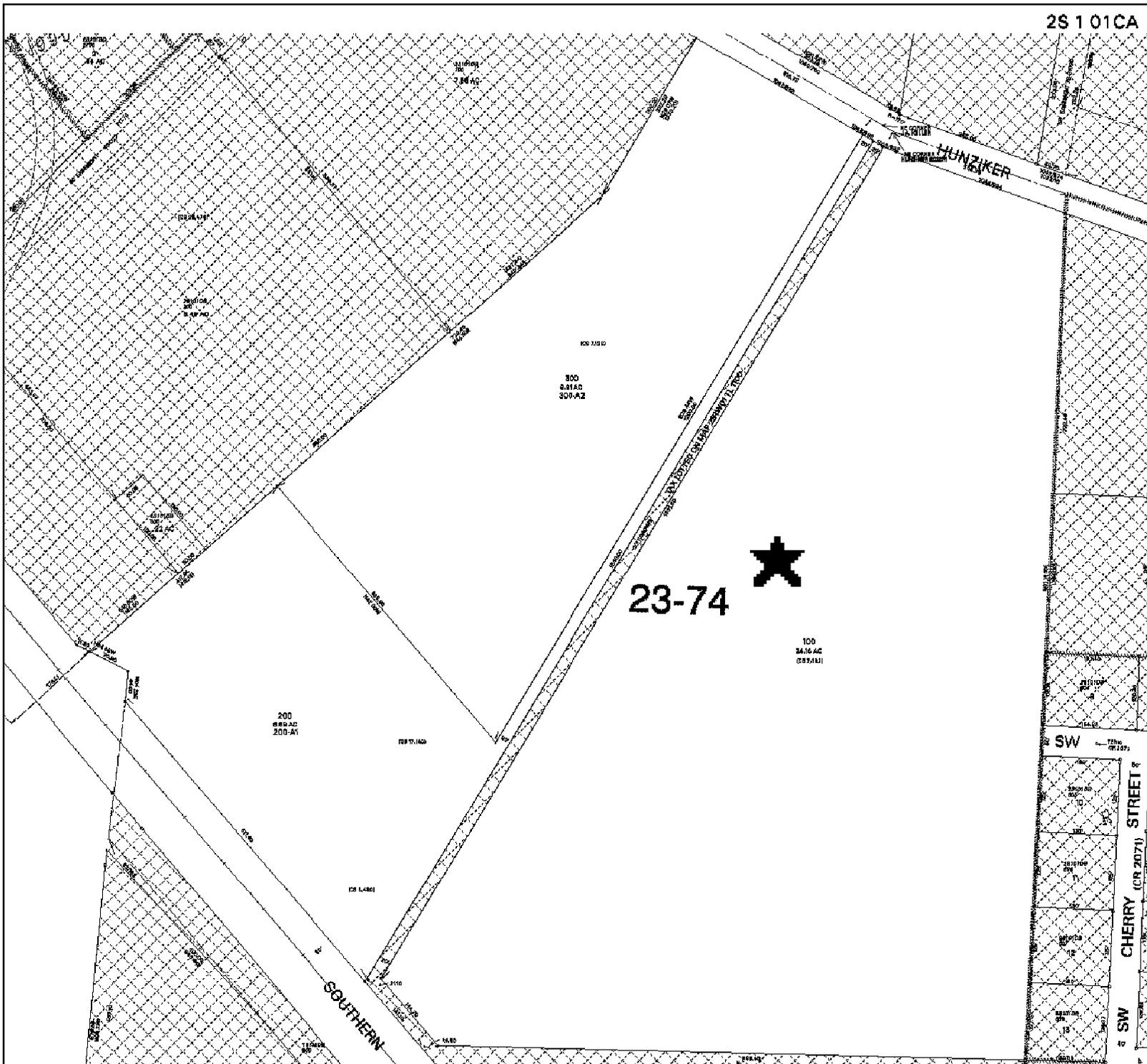
1. Statutory Powers and Assessments of Clean Water Services.
2. Rights of the public and of governmental bodies in and to that portion of the premises herein described lying below the high water mark of Fanno Creek.
3. Any adverse claim based upon the assertion that some portion of said land has been removed from or brought within the boundaries thereof by an avulsive movement of the Fanno Creek or has been formed by the process of accretion or reliction or has been created by artificial means or has accreted to such portion so created.
4. The rights of the public in and to that portion of the premises herein described lying within the limits of roads, streets or highways.
5. An easement created by instrument, including the terms and provisions thereof;  
Recorded : December 15, 1971 in Book 847, page 55  
Favor of : Tigard Water District, a municipal corporation of Washington County, Oregon  
For : Underground pipeline and/or mains
6. An easement created by instrument, including the terms and provisions thereof;  
Recorded : July 20, 1972 in Book 878, page 295  
Favor of : Unified Sewerage Agency of Washington County, a municipal corporation and county service district of the State of Oregon  
For : Sewer
7. An easement created by instrument, including the terms and provisions thereof;  
Recorded : July 20, 1972 in Book 878, page 298  
Favor of : Unified Sewerage Agency of Washington County, a municipal corporation and county service district of the State of Oregon  
For : Sewer





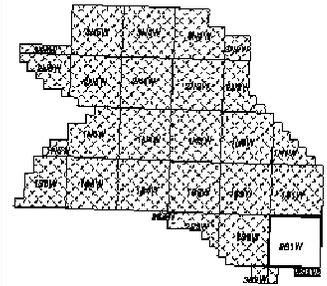




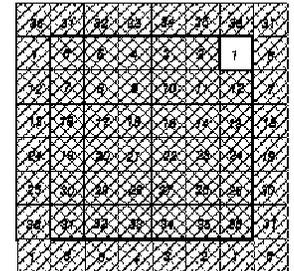


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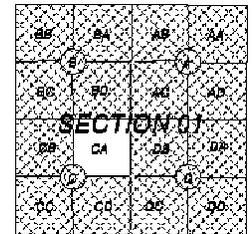
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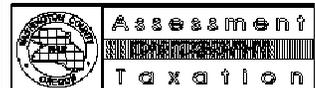
WASHINGTON COUNTY OREGON  
NE 1/4 SW 1/4 SECTION 01 T25 R1W W.M.  
SCALE 1" = 100'



FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT  
[www.co.washington.or.us](http://www.co.washington.or.us)



Cancelled Taxlots For: 2S101CA  
300-A1.



PLOT DATE: September 12, 2005  
FOR ASSESSMENT PURPOSES  
ONLY - DO NOT RELY ON  
FOR OTHER USE

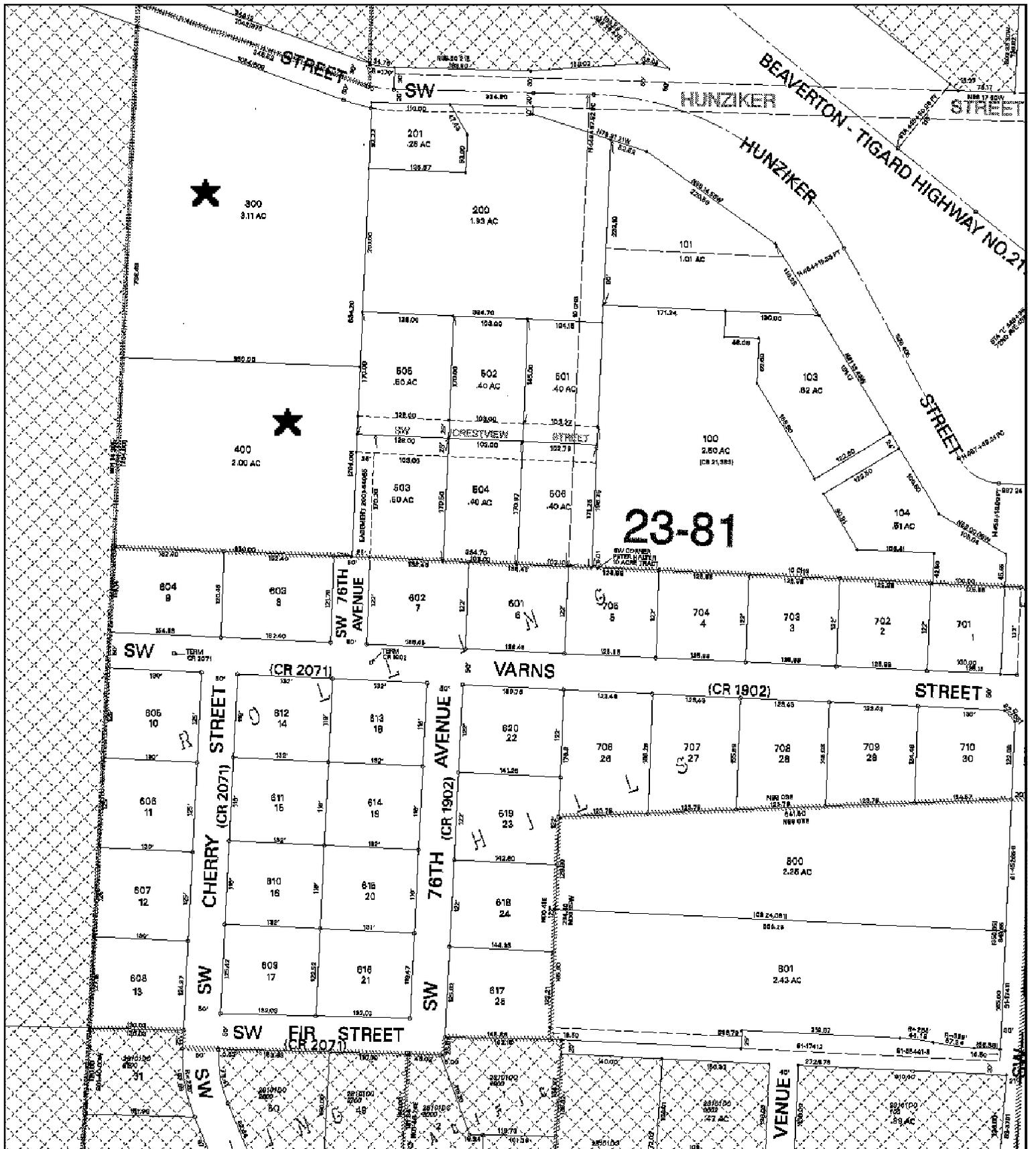
Map areas shown in grey shading or a cross-hatch pattern are for informational only and may not indicate the most current property boundaries. Please consult the appropriate map for the most current information.

2S 1 01CA

TIGARD  
2S 1 01CA





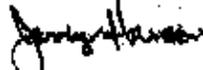


STATE OF OREGON

County of Washington

SS

I, Jerry R. Hansen, Director of Assessment and Taxation and Ex-Officio County Clerk for said county, do hereby certify that the within instrument of writing was received and recorded in book of records of said county.



Jerry R. Hansen, Director of Assessment and Taxation, Ex-Officio County Clerk

Doc # 97097055

Reel: 196171

6073.00

10/16/1997 02:07:58pm

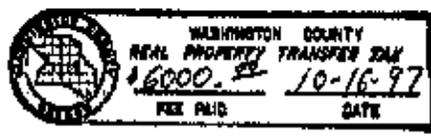
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**BARGAIN AND SALE DEED—STATUTORY FORM**  
CORPORATE GRANTOR

THE COO MANUFACTURING COMPANY, an Ohio corporation into which E.W.E. Investment Company a corporation duly organized and existing under the laws of the State of Oregon was merged 10/28/1990 Grantor, conveys to FRED W. FIELDS

Grantee, the following described real property situated in WASHINGTON County, Oregon, to-wit:  
Legal description on Exhibit "A" attached.



IF SPACE INSUFFICIENT, CONTINUE DESCRIPTION ON REVERSE SIDE  
The true consideration for this conveyance is \$ 6,000,000.00 (Here comply with the requirements of ORS 53.030)

Done by order of the grantor's board of directors with its corporate seal, if any, attested on October 7, 1997.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THE INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. ANY PERSON ACCEPTING THIS INSTRUMENT, THE GRANTOR ASSUMING THE TITLE TO THE PROPERTY, SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 50.030.

The COO Manufacturing Company  
By F. W. Fields, President  
By Garthe Brown, Secretary

STATE OF OREGON, County of Washington  
This instrument was acknowledged before me on October 7, 1997  
by Fred W. Fields  
as President  
of The COO Manufacturing Company



M. Gregg  
Notary Public for Oregon  
My commission expires 6/24/98

**BARGAIN AND SALE DEED**

The COO Manufacturing Company  
Fred W. Fields GRANTOR  
1149 S. W. Dawsonport GRANTOR  
Portland, Oregon 97201 GRANTOR  
GARTHE BROWN, LLC

After recording return to:  
Garthe Brown  
Attorney at Law  
111 S.W. Columbia, Suite 1040  
Portland, Oregon 97201  
NAME, ADDRESS, ZIP

Unless a change is requested, all tax statements shall be sent to the following address:  
Fred W. Fields  
1149 S. W. Dawsonport  
Portland, Oregon 97201  
NAME, ADDRESS, ZIP

STATE OF OREGON, } ss.  
County of \_\_\_\_\_ }  
I certify that the within instrument was received for record on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, at \_\_\_\_\_ o'clock \_\_\_\_\_ M., and recorded in book/roll/volume No. \_\_\_\_\_ on page \_\_\_\_\_ or as fee/film/instrument/microfilm/reception No. \_\_\_\_\_ Record of Deeds of said county.  
Witness my hand and seal of County aforesaid.

NAME TITLE  
By \_\_\_\_\_ Deputy

2

EXHIBIT "A"

PARCEL I.

The North one-half of Lot 1, EDGEWOOD ACRE TRACTS, in the City of Tigard, County of Washington and State of Oregon.

PARCEL II.

The South one-half of Lot 1, EDGEWOOD, in the City of Tigard, County of Washington and State of Oregon.

PARCEL III.

A tract of land in Section 1, Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon, more particularly described as follows:

Beginning at the most Easterly Southeast corner of that certain tract described in deed recorded March 21, 1949 in Deed Book 293, page 529, to Jane Brooks, running thence West along the South line of the Brooks tract above described, a distance of 130 feet; thence Northerly parallel to the most Easterly East line of the said tract described in the Brooks deed above mentioned, to a point on the South line of County Road No. 245; thence southeasterly on the South line of said County Road No. 245 to a point on the East line of the tract described in the Brooks deed above mentioned; thence South along the East line of said Brooks tract to the place of beginning.

PARCEL IV.

All that certain tract of land in the William Graham Donation Land Claim No. 39 in Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon, conveyed to Beecher B. Robinson by deed recorded at page 193 of Volume 126, Washington County, Oregon Deed Records, and being more particularly described as follows, to-wit:

Beginning at the Southwest corner of the aforesaid Robinson tract in the center of the County Road at the Northwest corner of Lot 1 of EDGEWOOD, a duly recorded subdivision of Washington County, Oregon, which beginning point is said to bear 5.69 chains West and 21.62 chains North of the Northwest corner of Section 12, Township 2 South, Range 1 West of the Willamette Meridian; thence from said point of beginning North 5° 22' East in the center of the said County Road 969.4 feet to the Northwest corner of the said Robinson tract; thence South 47° 43' East 25.9 feet to an iron pipe; thence continuing South 47° 43' East 431.1 feet to an

iron pipe; thence South 99.0 feet to an Alder tree marked "C.5"; thence continuing South 16.0 feet to a point in the center of Fanno Creek, from which point an iron pipe bears North 19.9 feet; thence down stream following the center of Fanno Creek the following courses and distances; South 37° 01' East 110.0 feet; South 26° 58' West 136.0 feet; South 6° 46' West 86.8 feet; South 30° 55' East 40.8 feet; South 73° 51' East 44.8 feet; North 53° 56' East 71.7 feet; South 74° 06' East 33.1 feet; South 6° 44' West 72.0 feet; South 24° 24' East 64.3 feet; South 51° 3' East 137.0 feet and South 11° 35' West 42.7 feet to a point on the North line of said EDGEWOOD Subdivision; thence North 89° 50' West along the North line of aforesaid subdivision 35.1 feet to a point in the center of Fanno Creek, from which point an iron pipe bears South 89° 00' East 17.1 feet; thence running downstream in the center of Fanno Creek North 39° 18' West 32.8 feet North 58° 29' West 104.5 feet, South 86° 48' West 41.6 feet and South 12° 02' West 76.4 feet to a point on the North line of aforesaid subdivision, from which point an iron pipe bears North 89° 50' West 28.0 feet; thence leaving Fanno Creek and running along the North line of said subdivision 528.0 feet to the place of beginning.

SAVE AND EXCEPT THEREFROM that portion conveyed to the State of Oregon, by and through the State Highway Commission recorded August 20, 1965 in Book 658, page 308, Records of Washington County.

PARCEL VI:

Beginning at a stone at the Northwest corner of the W.W. Graham Donation Land Claim NO. 39, Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon and running thence South 43° 23' West along the Northwesterly line of said Donation Land Claim 734.8 feet to a point in the center of County Road; thence South 60° 59' East in the center of said County Road; 1814.8 feet to a stone at the Northeast corner of that certain tract of land conveyed to R. and Sophia Hunziker by deed as recorded on Page 271 of Volume 90 of Washington County, Oregon Deed Records; thence South 29° 34' West along the East line of said Hunziker tract 1652.9 feet to a point on the Northerly boundary of the Southern Pacific Railroad right of way; thence South 42° 00' East along said Northerly boundary 120.0 feet to an iron pipe at the true point of beginning of the herein described tract; thence from the above described true point of beginning North 89° 51-1/2' East along the North line of said Hunziker tract 998.4 feet to an iron pipe at the most Easterly Northeast corner thereof; thence South 1° 14' West along the East line of said Hunziker tract 1085.6 feet to an iron pipe at the Northerly boundary line of the Southern Pacific Railroad right of way; thence North 42° 00' West along said Northerly boundary 1457.2 feet to the point of beginning.

PARCEL VI:

Beginning at a stone at the Northwest corner of the W.W. Graham Donation Land Claim No. 39, in Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon, and running thence South 43° 23' West along the Northwesterly line of said Donation Land Claim 734.0 feet to a point in the center of the County Road; thence South 60° 59' East in the center of said County Road 1814.8 feet to a stone at the Northeast corner of that certain tract of land conveyed to R. and Sophia Hunziker by deed as recorded on page 271 of Volume 90 of Washington County, Oregon Deed Records; which point is the true point of beginning of the herein described roadway; thence from the above described true point of beginning South 29° 34' West along the East line of said Hunziker tract 1831.8 feet to an iron pipe; which pipe is 20.8 feet from, when measured at right angles to the Northerly boundary of the Southern Pacific Railway right of way; thence South 42° 00' East parallel to and 20.0 feet from, when measured at right angles to said Northerly boundary a distance of 144.7 feet to an iron pipe on the North line of said Hunziker tract; thence South 89° 51-1/2' West along the said North line 26.8 feet to an iron pipe on the Northerly boundary of said Southern Pacific Railroad right of way; thence North 42° 00' West along said Northerly boundary 141.1 feet to an iron pipe; thence North 29° 34' East parallel and 20.0 feet from, when measured at right angles to the East line of said Hunziker tract a distance of 1645.0 feet to a point in the center of said County Road; thence South 60° 59' East in the center of said road 20.0 feet to the point of beginning.

PARCEL VII:

Beginning at an iron pipe at the reentrant corner on the South line of the W.W. Graham Donation Land Claim No. 39, in Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon and running thence North 1° 27' East 1020.7 feet to a square iron at the Northeast corner of EDGEWOOD; thence North 89° 07' West along the North line of said subdivision 151.1 feet to a corner of that certain tract of land conveyed to R. and Sophia Hunziker by deed as recorded in Deed Book 90, page 271; thence North 4° 13' East along the property line 597.1 feet to the Southwest corner of that certain tract of land conveyed to the Oregon Electric Railway Company by deed as recorded in Deed Book 83, page 163; thence South 43° 44' East along the southerly line of said tract of land 400.0 feet to the most Easterly corner thereof; thence South 41° 35' East along the southerly boundary of the Oregon Electric Railroad right of way 1796.9 feet to an iron pipe on the recognized South line of the said W.W. Graham Donation Land Claim; thence North 89° 23' West on said recognized South line 1387.8 feet to the place of beginning.

5

PARCEL VIII:

Beginning at the Northwest corner of Lot 2 of EDGEWOOD, in the City of Tigard, County of Washington and State of Oregon, and running East 13.24 chains (873.8 feet) to the Northeast corner of said Lot 2; thence South with the East boundary thereof 30 feet; thence West 2.68 chains (176.9 feet); thence North 79° 30' West 0.827 chains (54.6 Feet) to a pipe 3/4" in diameter; thence West 9.80 chains (646.8 feet), more or less, to the West boundary of said Lot 2; thence with said West boundary, North 20 feet to the place of beginning.

PARCEL IX:

Section 1, Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon:

Beginning 20 chains North and 20 chains West of the Southeast corner of the M.W. Graham Donation Land Claim; thence West 17.11 chains to stake; thence North 30° East 26.60 chains to center of County Road; thence South 72° 48' East 9.91 chains to the Southwest corner of J.A. Keller's tract of land; thence South 10 chains to a stake; thence West 5 chains to a stake; thence South 10 chains to place of beginning.

EXCEPTING THEREFROM a certain tract conveyed by Rudolph Hochuli, et ux and George J. Erdner, et ux, to Beaverton and Willsburg Railroad Company as shown by instrument recorded in Deed book 78, page 420, on May 14, 1907.

EXCEPT a tract of land in Section 1, Township 2 South, Range 1 West of the Willamette Meridian, in the City of Tigard, County of Washington and State of Oregon, more particularly described as follows:

Beginning at the most Easterly Southeast corner of that certain tract described in deed recorded March 21, 1849 in Deed Book 293, page 530 to Jana Brooks; running thence West along the South line of the Brooks tract above described, a distance of 130 feet; thence Northerly parallel to the most Easterly East line of the said tract described in the Brooks deed above mentioned to a point on the South line of County Road No. 245; thence Southeasterly on the South line of said County Road No. 245; thence Southeasterly on the South line of said County Road to a point on the East line of the tract described in the Brooks deed above mentioned; thence South along the East line of said Brooks tract to the place of beginning.

**SUBJECT TO:**

1. An easement created by instrument, including the terms and provisions thereof;

Recorded : April 12, 1946 in Book 284, page 406  
Favor of : Tillie Surcher  
Affects : Parcels V & VI

Tillie Surcher conveyed an undivided one-half of her interest in said easement to her husband Paul A. Surcher, by instrument  
Recorded : January 4, 1951 in Book 318, page 386

2. An easement created by instrument, including the terms and provisions thereof;

Recorded : December 31, 1952 in Book 340, page 167  
Favor of : Portland General Electric Company, a corporation of Oregon  
For : Electrical transmission lines  
Affects : Parcels V, VI & IX

3. An easement created by instrument, including the terms and provisions thereof;

Recorded : June 14, 1957 in Book 395, page 58  
Favor of : Portland General Electric Company  
Affects : Parcels V & VI

4. An easement created by instrument, including the terms and provisions thereof;

Recorded : September 12, 1960 in Book 435, page 312  
Favor of : Tigard Water District, a municipal corporation and the South Tigard Sanitary District, a municipal corporation  
For : Sewer lines and water lines  
Affects : Parcel VI

5. An easement created by instrument, including the terms and provisions thereof;

Recorded : October 9, 1961 in Book 451, page 10  
Favor of : Northwest Natural Gas Company, a corporation of the State of Oregon  
For : Pipeline  
Affects : Parcels VI & IX

6. An easement created by instrument, including the terms and provisions thereof;

Recorded : December 8, 1963 in Book 580, page 313  
Favor of : City of Tigard, a municipal corporation of Oregon  
Affects : Parcels VI, VII & VIII

7. An easement created by instrument, including the terms and provisions thereof;

Recorded : December 27, 1965 in Book 575, page 43  
Favor of : D.H. Overmyer Warehouse Co., an Oregon corporation  
For : Railroad spur track  
Affects : Parcels VI & IX

The above easement was assigned by instrument

Dated : June 14, 1966  
Recorded : July 5, 1966 in Book 606, page 590  
To : Southern Pacific Company, a Delaware corporation

8. An easement created by instrument, including the terms and provisions thereof;

Recorded : January 4, 1966 in Book 883, page 258  
Favor of : Northwest Natural Gas Company, an Oregon corporation  
For : Gas pipeline  
Affects : Parcels V & IX

9. An easement created by instrument, including the terms and provisions thereof;

Recorded : March 18, 1966 in Book 592, page 13  
Favor of : Southern Pacific Company, a Delaware corporation  
For : Railroad track  
Affects : Parcel V

10. An easement created by instrument, including the terms and provisions thereof;

Recorded : June 10, 1971 in Book 821, page 413  
Favor of : Tigard Water District, a municipal corporation of Washington County, Oregon  
For : Underground pipeline and/or mains for water  
Affects : Parcel VI

11. An easement created by instrument, including the terms and provisions thereof;

Recorded : September 16, 1971 in Book 835, page 507  
Favor of : Portland General Electric Company, an Oregon corporation  
For : Anchor easement  
Affects : Parcels VI, VII & VIII

12. An easement created by instrument, including the terms and provisions thereof;

Recorded : December 13, 1971 in Book 847, page 53  
Favor of : Tigard Water District, a municipal corporation of Washington County, Oregon  
For : Underground pipeline and/or mains for the purpose of conveying water  
Affects : Parcel IV

13. An easement created by instrument, including the terms and provisions thereof;

Recorded : July 20, 1972 in Book 878, page 295  
Favor of : Unified Sewerage Agency of Washington County, a municipal corporation and county service district of the State of Oregon  
For : Sewer  
Affects : Parcel I

14. An easement created by instrument, including the terms and provisions thereof;  
Recorded : July 20, 1972 in Book 878, page 296  
Favor of : Unified Sewerage Agency of Washington County, a municipal corporation and county service district of the State of Oregon  
For : Sewer  
Affects : Parcel II

15. An easement created by instrument, including the terms and provisions thereof;  
Recorded : April 19, 1973 in Book 928, page 38  
Favor of : Unified Sewerage Agency of Washington County, a municipal corporation and county service district of the State of Oregon  
For : Sewer  
Affects : Parcels VII & VIII

16. An easement created by instrument, including the terms and provisions thereof;  
Recorded : September 15, 1975 in Book 1043, page 992  
Favor of : City of Tigard, a municipality of the State of Oregon  
For : Street dedication and slope easement  
Affects : Parcels VI & IX

17. An easement created by instrument, including the terms and provisions thereof;  
Recorded : September 15, 1975 in Book 1043, page 994  
Favor of : City of Tigard, a municipality of the State of Oregon  
For : Street dedication and slope easement  
Affects : Parcels VI & IX

18. An easement created by instrument, including the terms and provisions thereof;  
Recorded : November 18, 1975 in Book 1054, page 608  
Favor of : City of Tigard, a municipality of the State of Oregon  
For : Street dedication and slope easement  
Affects : Parcel III

19. Any adverse claim based upon the assertion that some portion of said land have been removed from or brought within the boundaries thereof by an avulsive movement of Ferno Creek or has been formed by the process of accretion or reliction. (Affects Parcel IV)



## BARGAIN AND SALE DEED

KNOW ALL MEN BY THESE PRESENTS, that Washington County, a political subdivision of the State of Oregon, hereinafter called "grantor", for the consideration hereinafter stated, does hereby grant, bargain, sell and convey unto Mr. A. Eikrem, hereinafter called "grantee" and unto grantee's heirs, successors, and assigns, all of that certain real property with tenements, hereditaments and appurtenances hereunto belonging or in anywise appertaining, situated in the County of Washington, State of Oregon, described as follows, to wit:

The following described real property situated in Section 2, Township 2 South, Range 1 West, Willamette Meridian, in the County of Washington, State of Oregon, to wit:

Beginning at the Southwest corner of that certain tract of land deeded to Beecher B. Robinson by Book 126, page 193, Deed of Records Washington County, Oregon, said point also being the termination of County Road No. 567 and the Northwest corner of Lot 1 of Edgewood, a subdivision of Washington County, Oregon, thence east along the North line of said Lot 1, 528 feet to the center of Fanno Creek and the true point of beginning; thence N.  $12^{\circ} 02'$  E 76.4 feet to a point, thence N.  $86^{\circ} 48'$  E. 41.6 feet, thence S  $58^{\circ} 29'$  E 104.5, thence S  $39^{\circ} 18'$  E. 32.8 feet to a point on the North line of said lot 1 Edgewood, thence leaving Fanno Creek and running west along the North line of said lot to the North line of said lot to the point of beginning.

more particularly described on:

Map 2S-1-2DA, Lot 690

TO HAVE AND TO HOLD the same unto the said grantee and grantee's heirs, successors and assigns forever,

The true and actual consideration paid for said transfer, stated in terms of dollars is \$100.00,

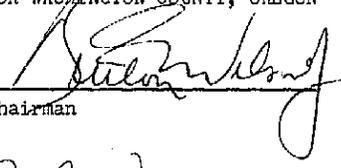
BOOK 1051 PAGE 649

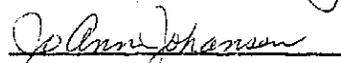
R & O 75-286

IN WITNESS WHEREOF, Washington County, Oregon, the grantor above named, pursuant to Resolution and Order of this Board of County Commissioners has caused these presents to be executed by and through the Chairman of the Board of County Commissioners.

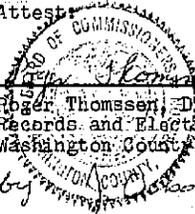
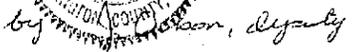
DATED this 28th day of October, 1975.

BOARD OF COUNTY COMMISSIONERS  
FOR WASHINGTON COUNTY, OREGON

  
Chairman

  
Recording Secretary

Attest:

  
Roger Thomssen, Director  
Records and Elections  
Washington County, Oregon  
by 

BOOK 1051 PAGE 650

1 STATE OF OREGON )  
2 County of Washington ) ss

3  
4 On the 28th day of October, 1975, before me  
5 appeared Burton C. Wilson Jr., and Roger Thomssen,  
6 to me personally known, who being first duly sworn, did say that he,  
7 the said Burton C. Wilson Jr. is the duly elected, qualified  
8 and acting Chairman of the Board of County Commissioners of Washington  
9 County, Oregon, and that he, the said Roger Thomssen, is the duly  
10 appointed and acting Director of the Department of Records and Elec-  
11 tions, and ex-officio County Clerk of Washington County, Oregon, and  
12 that the seal affixed to the foregoing instrument is the seal of the  
13 Board of County Commissioners of Washington County, Oregon; that said  
14 instrument was executed by the said Chairman by authority of an order  
15 of said Board of County Commissioners duly and regularly made and  
16 entered; and said Chairman of the Board of County Commissioners of  
17 Washington County, Oregon, acknowledge said instrument to be the free  
18 act and deed of said political subdivision of the State of Oregon.

19 IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed  
20 my seal, the day and year first in this, my certificate, written.

21  
22  
23 Jo Ann Johnson  
Notary Public for Oregon  
My Commission expires 3-16-77

COUNTY COUNSEL, WASHINGTON COUNTY  
HILLSBORO, OREGON

STATE OF OREGON )  
County of Washington ) ss

On the 29 day of October, 1975, before me appeared JoAnn Johansen, to me personally known, who being first duly sworn, did say that she is the duly appointed and acting Clerk of the Board of County Commissioners of Washington County, Oregon, and that said instrument was executed by her by authority of an Order of said Board of County Commissioners duly and regularly made and entered, and that she acknowledges said instrument to be the free act and deed of said political subdivision of the State of Oregon.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal, the day and year first in this, my certificate, written.

*Louise Hanson*  
Notary Public for Oregon  
My Commission Expires: 4/2/77

STATE OF OREGON }  
County of Washington } ss

I, Roger Thomssen, Director of Records and Elections and Ex-Officio Recorder of Conveyances for said county, do hereby certify that the within instrument of writing was received and recorded in book of records.

No. \_\_\_\_\_  
of said County.

Witness my hand and seal affixed.  
ROGER THOMSEN, Director  
of Records & Elections

*Clinton*  
Deputy  
OCT 30 8 51 AM '75

BOOK 1051 PAGE 652

*deeds*

Pre-application notes for  
Fields Comprehensive Plan Map Amendment and Sensitive Lands Review  
April 16, 2009

**STAFF PRESENT:** Cheryl Caines, Dick Bewersdorff, Kim McMillan, Greg Berry, Albert Shields

**APPLICANT:** Rhys Konrad  
Group Mackenzie

**PROPERTY OWNER:** Fred Fields

**PROPERTY LOCATION:** No address for the property located at the end of Wall Street, east of Hall Blvd. and Fanno Creek and west of the railroad tracks.

**TAX MAP/ LOT #:** 2S10100-01200

**PROPOSAL DESCRIPTION:**

A Comprehensive Plan Amendment to remove the Goal 5 protection of significant wetlands and Sensitive Lands Review in order to construct the Wall Street extension across Fanno Creek.

**COMP PLAN DESIGNATION:**

Light Industrial

**ZONING:** I-L, proposed change to R-25.

**PROCESS:** Type IV Procedure

**NEIGHBORHOOD MEETING:**

A neighborhood meeting is required for a comprehensive plan amendment and sensitive lands review.

**NARRATIVE:**

Include a narrative that responds to the applicable review criteria. This checklist is intended to provide guidance in preparation of your application. Additional criteria may be identified dependant upon the nature of the specific application, or as other issues are raised. In other words, this is not an exhaustive list of all criteria. It is the applicant's responsibility to ensure that all applicable standards are met.

In addition a recommendation or a decision to approve, approve with conditions or to deny an application for the amendment shall be based on the following standards:

1. Demonstration of compliance with all applicable comprehensive plan policies; Comprehensive Plan Policies under Goals 2.1, 2.2, 2.3, 5.1, 6.2, 7.1, 12.1 and 12.2. Again this list is for guidance only. Please note that the Comprehensive Plan is currently being amended. To ensure use of current policies, please utilize the online version found at:  
[http://www.tigard-or.gov/city\\_hall/departments/cd/docs/comp\\_plan\\_volume2.pdf](http://www.tigard-or.gov/city_hall/departments/cd/docs/comp_plan_volume2.pdf).

2. Demonstration of compliance with all applicable standards of any provision of the Tigard Development Code: Chapters 18.380, 18.385, 18.390, 18.705, 18.775, 18.790, 18.795, and 18.810
3. Demonstration of compliance with all applicable standards of any provision of other applicable implementing ordinances; (including but not limited to Metro Urban Growth Functional Management Plan (Titles 3, 6 and 13), Statewide Planning Goals 1, 2, 5, 6, 11, and 12; and
4. Evidence of change in the neighborhood or community or a mistake or inconsistency in the comprehensive plan or zoning map as it relates to the property which is the subject of the development application.

**APPLICATION FEES:** Fees for a Legislative Amendment: \$8,886.00. All additional application fees at 50%. Other applications may include sensitive lands review, tree removal permits, and variance/adjustment.

### **ADDITIONAL INFORMATION**

**Sensitive Lands:** Sensitive lands, including Tigard significant wetlands, exist on-site and therefore Sensitive Lands Review is required. No land form alteration or development is allowed within significant wetlands. To do so requires removal of the Goal 5 safeharbor protection through the Type IV process. The process to remove involves either an Environmental, Social, Economic and Energy analysis or determination of “insignificance.” (18.775.130 Plan Amendment Option).

A CWS Service Provider Letter is required at application. A stormwater connection permit is required prior to Public Facility Improvement (PFI) permit issuance if not connecting to the smaller, City line. The applicant should contact Department of State Lands and the Army Corps of Engineers to determine if permits are required. A condition of approval in the land use decision will ensure that all permits from other agencies are obtained prior to site work.

**Plans:** The plans submitted for review must clearly show the work to be done and impact to the sensitive lands in order to determine if the standards are being met. The plans provided for the pre-application conference do not provide sufficient detail. Minimum plan size is 24” x 36”.

**Protection of existing vegetation:** Please provide protection plans for existing vegetation, including trees per 18.745.030.

**Floodplain:** 18.775.070.B.2 (Sensitive Lands) states “Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards.” Both the library site and Mr. Fields property will be zoned residential. Public support facilities do not include roadways. The bridge design will need to span the floodplain to meet this standard.

**Transportation System Plan:** The TSP shows the extension of Wall Street to Hunziker Road. The applicant will need to show how the TSP can be met with the proposed design or amend the TSP to eliminate the connection.

PREPARED BY:

*Cheryl Caines*

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Cheryl Caines  
Associate Planner

## PRE-APPLICATION NOTES ENGINEERING SECTION

SW Wall Street Extension over Fanno Creek

### Sensitive Lands Approval Criteria

**18.775.070 B. Within the 100-year floodplain. The Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:**

*1. Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;*

Show any fill in fringe area. If any how will it be compensated as required by CWS?

*2. Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;*

How will this be met?

*3. Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;*

No filling in floodway is proposed.

*4. The land form alteration or development plan includes a pedestrian/bicycle pathway in accordance with the adopted pedestrian/bicycle pathway plan, unless the construction of said pathway is deemed by the Hearings Officer as untimely;*

Not applicable.

*5. The plans for the pedestrian/bicycle pathway indicate that no pathway will be below the elevation of an average annual flood;*

Not applicable.

*6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS permits and approvals shall be obtained; and*

Show compliance with CWS R&O 07-20 at 5.10

*7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the comprehensive plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle pathway plan.*

Not applicable.

#### Proposed Bridge

The proposed bridge will require a Public Facilities Permit as follows.

Applicant proposes to retain the option of constructing the bridge and connecting street as a private facility. However, the Tigard Transportation Plan requires that this be a public street.

Lower cord of the bridge should be one higher than the floodplain elevation.

Show locations of bents in plan view.

#### Public Facility Improvement (PFI) Permit:

Any work within a public right-of-way in the City of Tigard requires a PFI permit from the Engineering Department. A PFI permit application is available at the Planning/Engineering counter in City Hall. For more extensive work such as street widening improvements, main utility line extensions or subdivision infrastructure, plans prepared by a registered professional engineer must be submitted for review and approval.

The Engineering Department fee structure for this permit is considered a cost recovery system. A deposit is collected with the application, and the City will track its costs throughout the life of the permit, and will either refund any remaining portion of the deposit, or invoice the Permittee in cases where City costs exceeds the deposit amount. **NOTE:** Engineering Staff time will also be tracked for any final design-related assistance provided to a Permittee or their engineer prior to submittal of a PFI permit application. This time will be considered part of the administration of the eventual PFI permit.

The Permittee will also be required to post a performance bond, or other such suitable security. Where professional engineered plans are required, the Permittee must execute a Developer/Engineer Agreement, which will obligate the design engineer to perform the primary inspection of the public improvement construction work. The PFI permit fee structure is as follows:

# CITY OF TIGARD

COMMUNITY DEVELOPMENT DEPARTMENT  
PLANNING DIVISION  
13125 SW HALL BOULEVARD  
TIGARD, OREGON 97223

PHONE: 503-639-4171 FAX: 503-624-3681 (Attn: Patty/Planning) EMAIL: [patty@tigard-or.gov](mailto:patty@tigard-or.gov)



## REQUEST FOR 500-FOOT PROPERTY OWNER MAILING LIST

Property owner information is valid for 3 months from the date of your request

INDICATE ALL PROJECT MAP & TAX LOT NUMBERS (i.e. 1S134AB, Tax Lot 00100) OR THE ADDRESSES FOR ALL PROJECT PARCELS BELOW:

2S 101 Tax Lot 1200

**PLEASE BE AWARE THAT ONLY 1 SET OF LABELS WILL BE PROVIDED AT THIS TIME FOR HOLDING YOUR NEIGHBORHOOD MEETING.** After submitting your land use application to the City, and the project planner has reviewed your application for completeness, you will be notified by means of an incompleteness letter to obtain your 2 final sets of labels. **IF YOU HAVE BEEN NOTIFIED BY PLANNING TO OBTAIN YOUR LABELS, PLEASE INDICATE THAT YOU NEED 2 SETS OF LABELS.**

The 2 final sets of labels need to be placed on envelopes (no self-adhesive envelopes please) with first class letter-rate postage on the envelopes in the form of postage stamps (no metered envelopes and no return address) and resubmitted to the City for the purpose of providing notice to property owners of the proposed land use application and the decision. The 2 sets of envelopes must be kept separate. The person listed below will be called to pick up and pay for the labels when they are ready.

NAME OF CONTACT PERSON: Rhys Konrad or Rachel Farrell PHONE: (503) 224-9560  
NAME OF COMPANY: Group Mackenzie FAX: (503) 228-1285  
EMAIL: rkonrad@grpmack.com  
rfarrell@grpmack.com

This request may be emailed, mailed, faxed, or hand delivered to the City of Tigard. Please allow a 2-day minimum for processing requests. Upon completion of your request, the contact person listed will be called to pick up their request that will be placed in "Will Call" by the company name (or by the contact person's last name if no company) at the Planning/Engineering Counter at the Permit Center.

The cost of processing your request must be paid at the time of pick up, as exact cost can not be pre-determined.

**PLEASE NOTE: FOR REASONS OF ACCURACY, ONLY ORIGINAL MAILING LABELS PROVIDED BY THE CITY VS. RE-TYPED MAILING LABELS WILL BE ACCEPTED.**

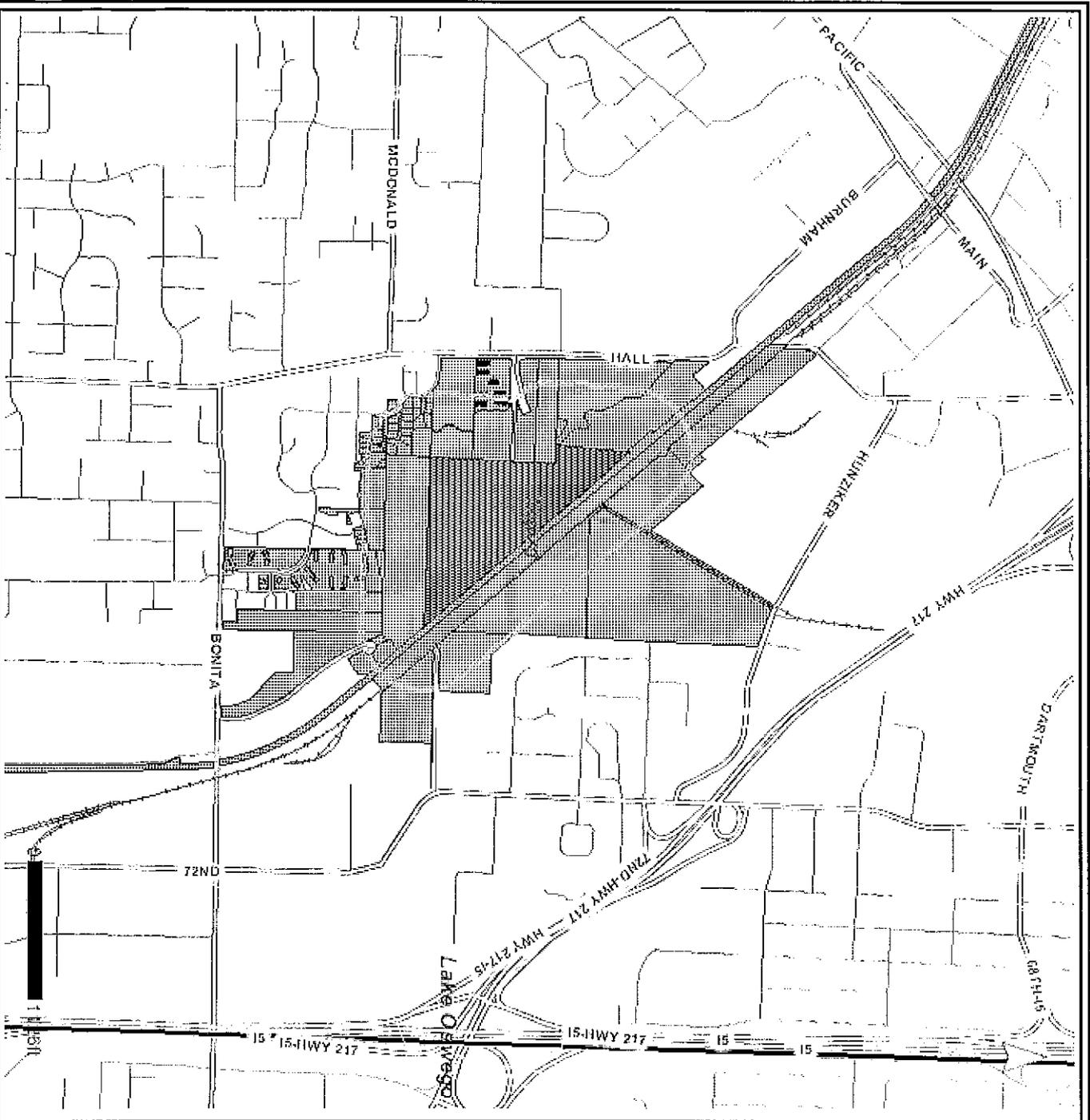
Cost Description:

\$11 to generate the mailing list, plus \$2 per sheet for printing the list onto labels (20 addresses per sheet). Then, multiply the cost to print one set of labels by the number of sets requested.

- EXAMPLE -		- COST FOR THIS REQUEST -	
4 sheets of labels x \$2/sheet = \$8.00 x 2 sets =	\$16.00	5 sheet(s) of labels x \$2/sheet = \$10 x 1 sets =	10.00
1 sheets of labels x \$2/sheet for interested parties x 2 sets =	\$ 4.00	2 sheet(s) of labels x \$2/sheet for interested parties = \$4 x 1 sets =	4.00
GENERATE LIST =	\$11.00	GENERATE LIST =	\$ 11.00
TOTAL =	\$31.00	TOTAL =	\$ 25.00

EAST  
SMITH

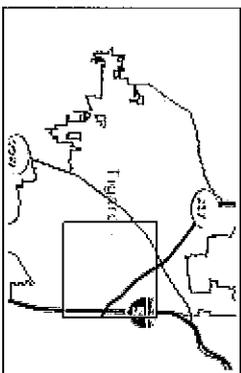
25.00



**VICINITY MAP**

2S10100, 01200

 Subject Site



Information on this map is for general location only and should be verified with the Development Services Division.

Scale 1:14,417 - 1 in = 1,201 ft

Map printed at 30-Mar-09 10:44 AM

DATA IS DERIVED FROM MULTIPLE SOURCES. THE CITY OF TIGARD MAKES NO WARRANTY, REPRESENTATION OR GUARANTEE AS TO THE ACCURACY, COMPLETENESS, TIMELINESS OR QUALITY OF ANY DATA OR INFORMATION PROVIDED HEREON, OR IN CONNECTION WITH THE INFORMATION PROVIDED HEREON, OR IN CONNECTION WITH THE INFORMATION PROVIDED HEREON, OR IN CONNECTION WITH THE INFORMATION PROVIDED HEREON.

**TIGARD MAPS**  
 City of Tigard  
 13125 SW Hall Blvd  
 Tigard, OR 97223  
 503.636.4171  
 www.tigard-or.gov



~~2S1010001500~~

~~2S102DD00200  
CITY OF TIGARD  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

2S112BB01800  
BECKMAN, FRANCES  
8255 SW COLONY CREEK CT  
TIGARD, OR 97223

~~2S102DD00100  
CITY OF TIGARD  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

2S102DD90552  
BERGMAN, BECKY R  
13682 SW HALL BLVD STE 5  
TIGARD, OR 97224

2S102DD90542  
CLARK, RODNEY K & PATRICIA A  
13682 SW HALL BLVD #4  
TIGARD, OR 97224

2S112BA06400  
BONITA COURT - 36 LLC  
6711 SW AMBER LN  
PORTLAND, OR 97225

2S112BB01200  
CLOUTIER, JEANNE  
8345 SW COLONY CREEK CT  
TIGARD, OR 97223

~~2S112BA90000  
BONITA FIRS VILLAGE CONDO  
ASSOCIATION OF UNIT OWNERS  
00000~~

2S112BB01400  
COCKREHAM, DENNIS C & MITZI A  
8325 SW COLONY CREEK CT  
TIGARD, OR 97224

~~2S112BA11900  
BONITA TOWNHOMES  
HOME OWNERS ASSOCIATION INC  
00000~~

2S102DD90361  
COLE, KATHRYN R TRUST  
BY COLE, KATHRYN R TR  
13702 SW HALL BLVD #6  
TIGARD, OR 97223

~~2S102DD05300  
BRIDGEPARK OWNERS OF  
LOTS 6-11  
00000~~

2S112BB15200  
COLONY CREEK ESTATES NO.6,  
OWNERS OF LOTS 122-125  
12454 SW EDGEWATER CT  
TIGARD, OR 97223

2S112BA90681  
BUSH, DONALD C & BETTY J  
7925 SW FANNO CREEK DR #6  
TIGARD, OR 97224

2S112BB01600  
CRIMI, MARTHA M  
8285 SW COLONY CREEK CT  
TIGARD, OR 97224

2S102DD90422  
CHAN, CHI HO  
13688 SW HALL BLVD #2  
TIGARD, OR 97223

2S102DD03200  
CROSS, MALCOLM  
8317 SW CHAR CT  
TIGARD, OR 97224

~~2S102DA00600  
CITY OF TIGARD  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

2S102DD04600  
DAVALA, STEVE C & LAURIE A  
8480 SW ARTHUR CT  
TIGARD, OR 97223

2S112BA90631  
DAVIDSON, MELBA J  
7925 SW FANNO CREEK #1  
TIGARD, OR 97224

~~2S1010001100  
FIELDS, FRED W  
1149 SW DAVENPORT  
PORTLAND, OR 97201~~

2S102DD03300  
DAVIS, NANCY C  
16869 SW 65TH AVE #113  
LAKE OSWEGO, OR 97035

~~2S101CA00100  
FIELDS, FRED W  
1149 SW DAVENPORT  
PORTLAND, OR 97201~~

2S112BB01700  
DIETMEYER, PHILIP E & ROBERTA L  
8275 SW COLONEY CREEK CT  
TIGARD, OR 97224

~~2S102DD03700  
FINLEY PARK, OWNERS OF  
LOTS 14-15 & 17-18  
, 00000~~

2S102DA00690  
EIKREM, A  
BY JOHN O HAYHURST  
7805 SW EDGEWATER EAST  
WILSONVILLE, OR 97070

2S112BA90661  
FURLER, JOHN A  
7925 SW FANNO CREEK DRIVE #4  
TIGARD, OR 97224

2S102DD04700  
EILERS, ANGELA J &  
JOHNS, MICHAEL J  
8432 SW ARTHUR CT  
PORTLAND, OR 97223

2S112BA05900  
GOODHEAD, DAVID & JAN M  
9846 SW PEPPERTREE LN  
TIGARD, OR 97224

2S102DD03100  
EMERY, JAMES R & KIMBERLEY A  
8345 SW DEEANN CT  
PORTLAND, OR 97224

2S112BA03100  
HIGGONS, LINDA H REVOC TRUST  
BY HIGGONS, LINDA H TR  
14080 SW 80TH CT  
TIGARD, OR 97224

2S102DD90411  
ENGEL, MARIE C  
13688 SW HALL BLVD STE 1  
TIGARD, OR 97224

2S112BA03200  
HIGGONS, LINDA H REVOCABLE TRUST  
BY HIGGONS, LINDA H TR  
14080 SW 80TH CT  
PORTLAND, OR 97224

2S102DD90432  
ESSENBERG, JAMES R  
13688 SW HALL BLVD #3  
TIGARD, OR 97223

2S112BB14900  
HUSTON, SHAWN M & ANGELA M  
14072 SW FANNO CREEK DR  
TIGARD, OR 97224

~~2S102DD90000  
FANNO POINTE CONDOS  
OWNERS OF ALL UNITS  
, 00000~~

2S102DD02800  
JIANG, WEN Y & LILIAN C  
8397 SW DEE ANN CT  
TIGARD, OR 97224

2S1010001200  
FIELDS, FRED W  
1149 SW DAVENPORT  
PORTLAND, OR 97201

2S102DD02700  
KING, ROBERT V AND  
PHILLIPS, PEGGY J  
13978 SW FANNO CREEK DR  
TIGARD, OR 97224

2S102DD90561  
KNOWLTON, SHELLEY  
13682 SW HALL BLVD STE #6  
TIGARD, OR 97224

2S112BA03000  
MARSH, STERLING E  
14090 SW 80TH COURT  
TIGARD, OR 97224

2S102DD01700  
LANDAR, RICHARD A & DARIA F  
13985 SW FANNO CR DR  
TIGARD, OR 97224

2S102DD90511  
MASON, RONALD C  
13682 SW HALL BLVD STE 1  
TIGARD, OR 97224

2S112BB14800  
LE, PHUOC Q &  
LUONG, MAY T  
14048 FANNO CREEK DR  
TIGARD, OR 97224

2S112BA90671  
MATTILA, ALLEN A  
PO BOX 19544  
PORTLAND, OR 97280

2S112BA03300  
LENKOWSKI, BRIAN T  
14060 SW 80TH CT  
TIGARD, OR 97224

2S101CC00100  
METRO  
ATTN: APRIL OLBRICH  
600 NE GRAND AVE  
PORTLAND, OR 97232

2S112BB14500  
LIVINGSTON, MANDE  
8302 SW CHAR CT  
PORTLAND, OR 97224

2S102DD90342  
MILBURN, JOHN &  
MILBURN, JOANNA M  
1715 E MEADOW WOOD ST  
MERIDIAN, ID 83646

2S102DD90522  
LUNDBERG, SCOTT &  
LUNDBERG, LAUREL  
13682 SW HALL BLVD #2  
TIGARD, OR 97224

2S102DD04900  
MILLER, BARBARA A & ROBERT D  
8391 SW ARTHUR CT  
TIGARD, OR 97223

2S102DD02600  
LUONG, KHANH &  
NGUYEN, CANH  
13942 SW FANNO CREEK DR  
TIGARD, OR 97224

2S112BB01300  
MILLIGAN, JENNY M  
8335 SW COLONY CREEK CT  
TIGARD, OR 97224

2S112BA90641  
MAASS, JANET M  
7925 SW FANNO CREEK DR #2  
TIGARD, OR 97224

2S102DD90311  
MILLS, BERTIE JOYCE  
13702 SW HALL BLVD STE 1  
TIGARD, OR 97224

2S112BA90731  
MALINSKI, MARY E  
12450 SW FISCHER RD #253  
TIGARD, OR 97224

2S112BB14400  
MODICA, KEVIN L  
8288 SW CHAR CT  
TIGARD, OR 97224

2S102DD04800  
MANSFIELD, JAMES C & LARA L  
8370 SW ARTHUR CT  
TIGARD, OR 97223

2S102DD05000  
MORRIS, HUGH G  
8449 SW ARTHUR CT  
TIGARD, OR 97223

2S102DD90322  
NAG, SAUMYA  
13702 SW HALL BLVD #2  
TIGARD, OR 97223

2S102DD90452  
PRICE, MARY A  
13688 SW HALL BLVD #5  
TIGARD, OR 97224

2S112BA90651  
NESS, KELLI J  
7925 SW FANNO CREEK DR #3  
TIGARD, OR 97224

2S102DD90442  
RYAN, MICHAEL R JR  
13688 SW HALL BLVD #4  
TIGARD, OR 97224

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NOLTE, G SCOTT  
8487 SW ARTHUR CT  
TIGARD, OR 97223

2S102DD03000  
SACHDEVA, NARINDER  
8361 SW DEEANN CT  
TIGARD, OR 97224

2S102DD90332  
OFFENSTEIN, HEATHER  
13702 SW HALL BLVD STE 3  
TIGARD, OR 97224

2S102DD03400  
SMALL, DEANNE I & RICHARD L  
8372 SW DEEANN CT  
TIGARD, OR 97224

2S102DD90461  
OLSON, GEORGE P &  
WELLS, SHARON K  
13688 SW HALL BLVD STE 6  
TIGARD, OR 97224

2S102DD90352  
SNELSON, MICHAEL D & BRIANNE L  
13702 SW HALL BLVD STE 5  
TIGARD, OR 97224

1S135CB00800  
OREGON, STATE OF  
DEPT OF TRANSPORTATION  
RIGHT OF WAY SECTION  
355 CAPITOL ST NE, RM 420  
SALEM, OR 97301

2S102DD00400  
SOLARES HOMES L L C  
BY NORRIS BEGGS & SIMPSON  
LOAN SVC DEPT  
121 SW MORRISON #200  
PORTLAND, OR 97204

2S102DD03500  
PAOLETTI, JAMES E & AMY J  
13984 SW FANNO CREEK DR  
TIGARD, OR 97224

2S112BB01500  
STAMPS, CHARLES A TRUST  
BY CHARLES A STAMPS TR  
8305 SW COLONY CREEK CT  
TIGARD, OR 97224

2S102DD02900  
PERRY, DAVID JOSEPH &  
HUGHMANICK, NANCY ANN  
8383 SW DEEANN CT  
TIGARD, OR 97224

2S102DD90532  
STARK, LYNNE L  
13682 SW HALL BLVD STE 5.3  
TIGARD, OR 97224

2S112BA90691  
PIATZ, CAROLYN R  
7925 SW FANNO CREEK DR #7  
TIGARD, OR 97224

2S101DC04500  
SUMMIT PROPERTIES INC  
5550 SW MACADAM BLVD #205  
PORTLAND, OR 97201

2S112BB14600  
PLOUSSARD, AMBER A & FRANCOIS J  
8334 SW CHAR CT  
TIGARD, OR 97224

2S101CB00400  
TCTPI LLC  
25977 SW CANYON CREEK RD #J  
WILSONVILLE, OR 97070

~~2S101CB00300  
TCT PLLC  
25977 SW CANYON CREEK RD #J  
WILSONVILLE, OR 97070~~

~~2S112BA05602  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

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TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

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TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

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TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

~~2S102DA00500  
TIGARD-TUALATIN SCHOOL  
DISTRICT #23J  
6960 SW SANDBURG ST  
TIGARD, OR 97223~~

~~2S101DC06500  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

~~2S112BA06000  
TRI-COUNTY INDUSTRIAL PARK INC  
8320 NE HIGHWAY 99  
VANCOUVER, WA 98665~~

~~2S102DD05400  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

~~2S101CA00200  
WALL STREET INDUSTRIAL LLC &  
A RICHARD VIAL EXEC CENTER LLC  
7000 SW VARNIS ST  
PORTLAND, OR 97223~~

~~2S102DD03800  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

~~2S101DC04000  
WALTON CWOR SOUTHRIDGE 12 LLC  
BY TTA/ePROPERTYTAX DEPT 325  
PO BOX 4900  
SCOTTSDALE, AZ 85261~~

~~2S101DC06400  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

~~2S112BA03400  
WAVERLY MEADOWS  
HOMEOWNERS ASSOCIATION  
, 00000~~

~~2S112BA06200  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

~~2S112BB14700  
WINKELS, SCOTT J &  
COLEMAN, CANDICE L  
8386 SW CHAR CT  
TIGARD, OR 97224~~

~~2S112BB12900  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

~~2S112BA06100  
TIGARD, CITY OF  
13125 SW HALL BLVD  
TIGARD, OR 97223~~

Nathan and Ann Murdock  
PO Box 231265  
Tigard, OR 97281

Mildren Design Group  
Attn: Gene Mildren  
7650 SW Beveland Street, Suite 120  
Tigard, OR 97223

Sue Rorman  
11250 SW 82<sup>nd</sup> Avenue  
Tigard, OR 97223

Susan Beilke  
11755 SW 114<sup>th</sup> Place  
Tigard, OR 97223

Naomi Gallucci  
11285 SW 78<sup>th</sup> Avenue  
Tigard, OR 97223

Dayle D. & Evelyn O. Beach  
11530 SW 72<sup>nd</sup> Avenue  
Tigard, OR 97223

Diane Baldwin  
3706 Kinsale Lane SE  
Olympia, WA 98501

Todd Harding and Blake Hering Jr.  
Norris Beggs & Simpson  
121 SW Morrison, Suite 200  
Portland, OR 97204

Brad Spring  
7555 SW Spruce Street  
Tigard, OR 97223

Alexander Craghead  
12205 SW Hall Boulevard  
Tigard, OR 97223-6210

Gretchen Buehner  
13249 SW 136<sup>th</sup> Place  
Tigard, OR 97224

John Frewing  
7110 SW Lola Lane  
Tigard, OR 97223

CPO 4B  
16200 SW Pacific Highway, Suite H242  
Tigard, OR 97224

CPO 4M  
Pat Whiting  
8122 SW Spruce  
Tigard, OR 97223

Josh Thomas  
10395 SW Bonanza  
Tigard, OR 97224

Susan Beilke  
11755 SW 114<sup>th</sup> Place  
Tigard, OR 97223

Gretchen Buehner  
13249 SW 136<sup>th</sup> Place  
Tigard, OR 97224

David Walsh  
10236 SW Stuart Court  
Tigard, OR 97223

Paul Owen  
10335 SW Highland Drive  
Tigard, OR 97224

Todd Harding and Blake Hering Jr.  
Norris Beggs & Simpson  
121 SW Morrison, Suite 200  
Portland, OR 97204

Tim Esau  
PO Box 230695  
Tigard, OR 97281

CPO 4B  
16200 SW Pacific Highway, Suite H242  
Tigard, OR 97224

Ross Sundberg  
16382 SW 104<sup>th</sup> Avenue  
Tigard, OR 97224

Brian Wegener  
9830 SW Kimberly Drive  
Tigard, OR 97224

Joseph Dyar  
10285 SW Highland Drive  
Tigard, OR 97224-4668

Rex Caffall  
13205 SW Village Glenn  
Tigard, OR 97223

John Frewing  
7110 SW Lola Lane  
Tigard, OR 97223

## NOTICE OF NEIGHBORHOOD MEETING

March 30, 2009

Re: Access extension of SW Wall Street to the Fields property.

Dear Interested Party:

Group Mackenzie is representing Fred Fields, owner of the property located to the east of the City Library and west of the railroad on Map 2S 101 tax lot 1200. We are planning to propose an extension of SW Wall Street in order to provide access to this property.

Prior to applying to the City of Tigard for the necessary land use approvals, we would like to discuss the proposal in more detail with the surrounding property owners and residents. You are invited to attend a meeting on:

**April 20, 2009**

Tigard Public Library, Community Room

13125 SW Hall Blvd

Tigard, OR 97223

**6:00 – 7:00 PM**

Please notice that this will be an informational meeting on preliminary plans. These plans may be altered prior to submittal of the application to the City.

We look forward to more specifically discussing the proposal with you. Please call me at 503-224-9560 if you have any questions.

Sincerely,

Rhys Konrad  
Land Use Planner  
Group Mackenzie  
1515 SE Water Ave. Suite 100  
Portland, OR 97214



## NEIGHBORHOOD MEETING INFORMATION

As part of the development review process for most land use applications, the City of Tigard requires that developers hold a neighborhood meeting to notify and discuss with property owners in the area, their proposed development. Below are some frequently asked questions about the neighborhood meeting process.

### WHAT IS THE PURPOSE OF THIS NEIGHBORHOOD MEETING?

The purpose of the meeting is to allow the prospective developer to share with you what they are planning to do. This is your opportunity to become informed of their proposed development and to let them know what issues or concerns you have in regard to their proposal.

### WHAT HAPPENS AFTER THE NEIGHBORHOOD MEETING?

After the neighborhood meeting, the prospective developer finalizes their submittal package (often taking into account citizen concerns) and submits an application to the City. Sometimes it takes a while before the developer's application is ready to submit, so there could be several months between the neighborhood meeting and the submittal of an application.

Once an application is submitted to the City, Staff reviews it for completeness. Once an application has been deemed complete, the formal application review begins. It takes approximately 6-8 weeks from the time the application is accepted for a decision to be made. Many types of applications require a public hearing at which citizens are given the opportunity to provide comments or concerns. Property owners within 500 feet will be notified after a complete application is submitted. They will be provided an opportunity to comment. Any appeals are decided based on the provisions of applicable laws and the development code.

### WHAT IF THE PROPOSAL PRESENTED AT THE NEIGHBORHOOD MEETING IS NOT WHAT IS ACTUALLY SUBMITTED?

Applicants are not required to submit exactly what was presented at the neighborhood meeting if it generally follows the type of development proposed. This provides for the opportunity to address the neighborhood issues and address other changes necessitated by the development or staff. If the project is significantly different, a new neighborhood meeting would be required as determined by staff.

### HOW DO I KNOW WHAT ISSUES ARE VALID?

A decision is reviewed based on compliance with the Tigard Development Code. *Review the city's development code to familiarize yourself with what is permitted and what may not be permitted.* A copy of the development code is available for viewing at the Tigard City Library, on the City's web site at [www.ci.tigard.or.us](http://www.ci.tigard.or.us), or a copy may be purchased at the Community Development Services counter. You may also contact city planning staff and ask what the standards are for a specific issue. Be prepared, however, that you may not LIKE all the standards, but at least you know what they are. If a development meets the code standards, it can proceed.

For your assistance, attached is a list compiled of helpful questions to ask that may assist you in determining your position on a particular proposal.



## QUESTIONS TO ASK OF TYPICAL NEIGHBORHOOD CONCERNS, TO MAKE SURE YOUR CONCERNS ARE CONSIDERED

The following is a list of questions intended to aid you in formulating your own questions for proposed development in your area. Feel free to ask more or alter the questions to address your own unique concerns and interests.

### PROCESS

- ▶ What applications are you (the developer) applying for? When do you expect to submit the application(s) so that neighbors can review it? What changes or additions are expected prior to submittal?
- ▶ Will the decision on the application be made by City Staff, Hearings Officer, Planning Commission or City Council? How long is the process? (timing)
- ▶ At what point in the process are citizens given notice and the opportunity to provide input?
- ▶ Has a pre-application conference been held with City of Tigard staff?
  - Have any preliminary requirements been addressed or have any critical issues been identified?
  - What city planner did you speak with regarding this project? (This person is generally the planner assigned to the land use case and the one to contact for additional information).

### STREETS

- ▶ Will there be a traffic study done? What are the preliminary traffic impacts anticipated as a result of the development and how do you propose to mitigate the impacts if necessary?
- ▶ What street improvements (including sidewalks) are proposed? What connections to existing streets are proposed?
- ▶ Are streets proposed to be public or private? What are the proposed street and sidewalk widths?
- ▶ What are the emergency access requirements and what is proposed to meet those requirements?

### ZONING AND DENSITY

- ▶ What is the current zoning? What uses are allowed under this zoning?
- ▶ Will there be a re-zone requested by the developer? If yes, to what zone?
- ▶ How many units are proposed for the development and what is the minimum and maximum number of units allowed in the zone?

### DRAINAGE AND WATER QUALITY

- ▶ What is your erosion control and drainage plan? What is the natural slope of the property? What are the grading plans?
- ▶ Is there a water quality facility planned within the development and where will it be located? Who will own and maintain the facility?

### TREES AND LANDSCAPING

- ▶ What are the tree removal plans and what is proposed to mitigate for trees removed?
- ▶ What are the landscaping plans? What buffering or fencing is required and/or proposed?

### ADDITIONAL INFORMATION

- ▶ How do I request more information or a follow-up meeting from/with the applicant?



SITE

Meeting Location

MCDONALD

EDGEWOOD

REGINA

O'WARRA

HALL

JOHN

MERLENE

DEANNA

CHAR

WABEL

CHERRY

WARNS

76TH

CRESTVIEW

76TH

75TH

TECHICENTER

# AFFIDAVIT OF MAILING/POSTING NEIGHBORHOOD MEETING NOTICE

**IMPORTANT NOTICE:** THE APPLICANT IS REQUIRED TO MAIL THE CITY OF TIGARD A COPY OF THE NEIGHBORHOOD MEETING NOTICE THAT PERTAINS TO THIS AFFIDAVIT AT THE SAME TIME PROPERTY OWNERS ARE MAILED NOTICE, TO THE ADDRESS BELOW:

City of Tigard Planning Division  
13125 SW Hall Boulevard  
Tigard, OR 97223-8189

IN ADDITION, THE APPLICANT SHALL SUBMIT THIS AFFIDAVIT & COPIES OF ALL NOTICES AT THE TIME OF APPLICATION.

## MAILING:

I, Rhys Konrad, being duly sworn, depose and say that on the 3<sup>rd</sup> day of April, 2009, I caused to have mailed to each of the persons on the attached list, a notice of a meeting to discuss a proposed development at (or near) 2510100 TAX LOT 1200 (FIELDS PPTY), a copy of which notice so mailed is attached hereto and made a part of hereof.

I further state that said notices were enclosed in envelopes plainly addressed to said persons and were deposited on the date indicated above in the United States Post Office located at 1515 SE WATER AVE, with postage prepaid thereon.

RLK

Signature (In the presence of a Notary Public)

## POSTING:

I, Rhys Konrad, do affirm that I am (represent) the party initiating interest in a proposed land use application for WALL STREET EXTENSION affecting the land located at (state the approximate location(s) IF no address(s) and all tax lot(s) currently registered) 2510100 #1200, and did on the 3<sup>rd</sup> day of April, 2009, personally post notice indicating that the site may be proposed for a sensitive lands review land use application, and the time, date and place of a neighborhood meeting to discuss the proposal.

The sign was posted at end of WALL STREET @ Library

(state location you posted notice on property)

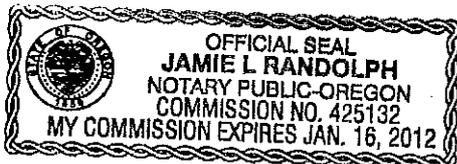
RLK

Signature (In the presence of a Notary Public)

(THIS SECTION FOR A STATE OF OREGON, NOTARY PUBLIC TO COMPLETE /NOTARIZE)

STATE OF Oregon )  
County of Multnomah ) ss.

Subscribed and sworn/affirmed before me on the 9<sup>th</sup> day of April, 2009.



[Signature]  
NOTARY PUBLIC OF OREGON  
My Commission Expires:

Jan. 16, 2012

GROUP

**MACKENZIE**

PORTLAND, OR | SEATTLE, WA | VANCOUVER, WA  
RiverEast Center | 1515 Water Avenue, Suite 100 | Portland, OR 97214  
P.O. Box 14310 | Portland, OR 97293  
T: 503.224.9560 | F: 503.228.1285 | www.groupmackenzie.com

# SIGN-IN SHEET

PROJECT NUMBER: 2070334.02

PROJECT NAME: Fields Property Comprehensive Plan and Sensitive Lands Application

**SUBJECT: Neighborhood Meeting April 20, 2009**

Name	Address	Phone/Email (Optional)
Peter Engel	17388 Hall UNIT 7	(503) 620 3993
Pamela Syler	13694 SW Hall Blvd #6	503 639 5112
JOHN FREEMING	7110 SW LOLA LN TIGARD 97223	503-245-5760
Lois Barrett	13676 SW Hall Bl. #6	503/639-8060
Sterling Marsh	14090 SW 80 <sup>th</sup> Ct	503 639 7739
Ron Mason	13682 SW HALL #1 TIGARD 97223	503 639-0402
She Bonassar	11755 SW 114 <sup>th</sup> PL TIGARD 97223	639-3519
Mike Snelson	13702 SW HALL Blvd #5 97223	503-866 5593

## MEETING MINUTES

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PROJECT NUMBER: 2070334.06                      ISSUE DATE: June 12, 2008  
PROJECT NAME: Fields Property – Comprehensive Plan, Zoning Map Amendment and Sensitive Lands Application

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RECORDED BY: Rhys Konrad, Planner  
TO: FILE  
PRESENT ON BEHALF OF THE APPLICANT: Fred Fields – Property Owner (Applicant)  
Tom Wright, Rhys Konrad – Group Mackenzie (Applicants Representative)

**SUBJECT: Neighborhood Meeting (June 2, 2008)**

The purpose of these meeting minutes is to summarize comments received from interested parties in attendance at the June 2, 2008 neighborhood meeting regarding the Fields property. Specifically, the applicant is requesting a proposed Comprehensive Plan, Zoning Map Amendment and Sensitive Lands Application for the Fields property located east of the City Library (ie. Map 2S 101 tax lot 1200).

The meeting was lead by Rhys Konrad and Tom Wright, and began by reading the City-prepared “Statement of Purpose” letter to attendees as required, followed by a brief description of the project as summarized below:

- Total Site Size: 24.73 acres
- Total area within 100-year flood plain and wetlands: Approximately 4.67 acres
- Comprehensive Plan Amendment from Light Industrial to Medium-High Density Residential
- Zoning Map Amendment from L-I to R-25
- Sensitive Lands Application to obtain access to the property by an extension of Wall Street (final design not yet complete)
- Site characteristics which limit the ability to provide industrial development (i.e., site shape, surrounding non-industrial zoning designations, lack of access and circulation, natural features)
- Site characteristics which support the residential designation (i.e., surrounding residential, lower vehicle and truck trips, ability to conform to natural features of site)
- Brief overview of alternative access locations and coordination with the City and School District
- Conclusion of next steps and City process

Mr. Fields provided additional supportive comments to the above.

The following items are a summary of comments received regarding the proposed project:

### COMPREHENSIVE PLAN AND ZONING MAP AMENDMENT ITEMS

1. There were questions regarding the potential number of housing units that would be allowed on the property if it were re-designated to residential. The applicant responded that Mr. Fields has received interest from potential residential developers, but no plans are available at this time.
2. There were questions regarding the eventual development type and design. The applicant responded similar to question #1.

3. There was a comment regarding the possibility of leaving the site as open space, or a park. The applicant responded that if the City or other organization was willing to purchase the property at a price comparable to a developer, then Mr. Fields would consider selling it for a park or open space.
4. There was a question of whether we had spoke with Metro regarding the property, and who the contact person was. The applicant indicated we can provide the Metro contact information.
5. Generally, there appeared to be some consensus by those attending the meeting that the property may be more desirable for residential development than industrial, due to surrounding uses, less traffic and other impacts.

### **SENSITIVE LANDS AND ACCESS ITEMS**

1. There were questions related to potential transportation impacts in the surrounding area and specifically the capacity of the Wall Street intersection. The applicant indicated that based on preliminary information the intersection has been designed to accommodate more traffic than would be generated by residential development. A traffic impact analysis will be submitted with the application.
2. There was concern of how long the construction process might be with the proposed Wall Street extension. The applicant indicated this is currently unknown and will depend on the type of construction (and seasonal restrictions).
3. There were questions regarding the appropriateness of the proposed Wall Street extension, and questions on alternative access locations surrounding the site. The applicant described the options that had been considered including the school district property and Milton Court.
4. There were concerns regarding potential impacts of Fanno Creek and other natural areas associated with the proposed crossing. The applicant responded by indicating the site included about 20 acres of developable land, and the City was supposed to provide access to the property via the Wall Street extension as part of the agreement to purchase the Fields property for the library. Other options for access are not available; therefore, the proposed crossing of Fanno Creek is the only remaining option.
5. There were questions on how long the bridge would be, and what it would look like and function. The applicant responded that the specific design of the bridge was not determined at this time, and that potentially the bridge could be designed to either public or private standards.
6. There was a comment regarding whether or not the extension of Wall Street would cross the railroad tracks as previously proposed. The applicant responded that the earlier proposal by the City was to cross the tracks which would connect Hall and Hunziker via Wall Street. The current proposal is only to extend Wall Street across Fanno Creek to serve the site, and not cross the railroad.

## PURCHASE AND SALE AGREEMENT

THIS AGREEMENT is entered into as of this 30 day of October, 2002, by and between FRED W. FIELDS ("Seller") and THE CITY OF TIGARD, an Oregon municipal corporation ("Purchaser").

### RECITALS

A. Seller is the owner of certain real property which is legally described in Exhibit 1 hereto (the "Property").

B. The City has determined that the Property is needed for public purposes, and has communicated to Seller that necessity and the intention of the City to exercise its power of eminent domain in regard to the Property unless the parties can agree on terms for acquisition of the Property by the City.

C. Purchaser wishes to acquire the Property owned by Seller, and, under threat of condemnation, Seller is willing to sell the Property to Purchaser under the terms and conditions of this Agreement.

### AGREEMENT

For valuable consideration, the parties covenant and agree as follows:

1. Purchase. Seller agrees to sell to Purchaser at Closing, and Purchaser agrees to purchase at Closing, the Property in accordance with the terms hereof.

2. Purchase Price. Upon Closing, Purchaser will pay Seller an aggregate purchase price of Two Million One Hundred Thousand Dollars (\$2,100,000.00) for the Property. The purchase price shall be payable all in cash or other immediately available funds at the Closing.

3. Title. Title to the Property at Closing will be free of encumbrances or defects other than the Permitted Exceptions (as defined in this paragraph 3) and will be so insurable at and as a condition of Closing, for Purchaser's benefit, as evidenced by a binding commitment from Escrow Agent to issue an owner's extended coverage policy of title insurance (the "Title Policy"). For the purposes of this Agreement, "Permitted Exceptions" will include (a) matters shown as exceptions 1 through 7 as shown on the Deed from Seller to Purchaser of even date herewith; (b) matters of record approved or deemed to have been approved by Purchaser, and (c) exceptions attributable to the acts or omissions of Purchaser or its agents, employees or contractors. Encumbrances to be discharged, if any, may be discharged through escrow out of purchase money at Closing.

4. Deed. Title to the Real Property shall be conveyed by special warranty deed (the "Deed") in the form attached to this Agreement as Exhibit 2, free of encumbrances or defects, except the Permitted Exceptions.

5. Seller's Representations and Warranties. Seller makes the following representations and warranties to Purchaser:

(a) Seller's Authority. Seller has the requisite power and authority to own and operate the Property and to consummate the transactions contemplated herein.

(b) Foreign Person. Seller is not a "foreign person" within the meaning of Section 1445(f) of the Internal Revenue Code.

(c) Creditors. No attachments, execution proceedings, assignments for the benefit of creditors, insolvency, bankruptcy, reorganization or other proceedings are pending or threatened against Seller, nor are any of such proceedings contemplated by Seller.

Seller's representations and warranties shall survive Closing for a period of twelve (12) months and shall terminate as of the end of such period except to the extent that Purchaser advises Seller in writing of an alleged breach thereof prior to such termination date, stating with specificity the nature of the alleged breach and providing Seller concurrently therewith with documentation thereof.

6. Purchaser's Representations and Warranties. Purchaser makes the following representations and warranties to Seller:

(a) Purchaser's Authority. Purchaser has the requisite power and authority to acquire the Property. The execution, delivery and performance of this Agreement by Purchaser have been duly and validly authorized by all necessary action and proceedings, and no further action or authorization is necessary on the part of Purchaser in order to consummate the transactions contemplated herein.

#2  
(b) No Conflict. Neither the execution nor delivery of this Agreement by Purchaser, nor performance of any of its obligations hereunder, nor consummation of the transactions contemplated hereby, will conflict with, result in a breach of, or constitute a default under, the terms and conditions of the organizational documents pursuant to which Purchaser was organized, or any agreement to which Purchaser is a party or by which it is bound, or any order of any court, regulatory body, administrative agency or governmental body having jurisdiction over Purchaser.

(c) Source of Funds. Purchaser has available to it adequate financial resources to enable it to purchase the Property at Closing without seeking recourse to any contingent funding source.

(d) Extension Road. Purchaser will consult and reasonably cooperate with Seller

regarding establishment of a road (the "Extension Road") from Hall Boulevard providing access to other real property owned by Seller (the "Adjacent Property") which lies generally eastward of the Property.

(e) Railroad Track Crossing. Purchaser will consult and reasonably cooperate with Seller and will establish discussions among Purchaser, Seller (or his representative), the owner/operator of that certain railway track(s) and right-of-way (the "Railway") bordering the Adjacent Property, and property owner(s) having property(ies) abutting the Railway and having rights that may be affected by the Extension Road, with the purpose of negotiating a crossing of said track and right-of-way for the Extension Road. In the event the Railway refuses to permit a crossing of said track and right-of-way, Purchaser will consult and reasonably cooperate with Seller with regard to the establishment of alternative roadway access from Hall Boulevard and from Hunziker Road to the Adjacent Property.

(f) Local Improvement District. Purchaser will consult and reasonably cooperate with Seller in the formation of a local improvement district to finance construction of the Extension Road, with such consultations to include: (i) the appropriate siting of the Extension Road, (ii) construction of the Extension Road across the Adjacent Property (and possibly across the Property), and (iii) the appropriate location of a Railway crossing for connection of the Extension Road to SW Hunziker Avenue. As part of such cooperation, Purchaser agrees to assume, and promptly pay as required, the costs of engineering work and construction management for the formation of the local improvement district and construction of the Extension Road, will discuss and reasonably cooperate with Seller regarding an equitable distribution of Extension Road costs through local improvement district assessment liabilities, and will discuss and reasonably cooperate with Seller regarding allocation of local improvement district assessment liabilities. The obligation of Purchaser to pay costs of engineering work and construction management for the Extension Road is a continuing obligation that shall survive the Closing.

The representations of Section 6, subsections (d), (e) and (f) will survive the Closing and will not merge into the Deed to be conveyed by Seller to Purchaser pursuant to this Agreement.

#### 7. Closing.

(a) Closing will occur in the offices of the Escrow Agent on a date mutually agreed to by Seller and Purchaser, but no later than October 31, 2002. The parties shall cooperate to permit the Closing to occur by means of an escrow and the faxing and couriering of documents so that Closing does not require the physical presence of the parties in the office of Escrow Agent.

(b) At Closing Seller will deposit in escrow the Deed, a FIRPTA affidavit and Seller's share of escrow fees, closing costs and prorations. At Closing Purchaser shall deposit the Purchase Price to be paid in cash or other immediately available funds, along with Purchaser's share of prorated items, fees and charges for all title upgrades and special endorsements in excess of that for an owner's extended policy of title insurance, if any, requested by it; one-half (1/2) of the escrow fee; and all other Closing costs, except those designated to be paid by Seller under terms of this paragraph. Seller shall pay the title insurance premium for an

owner's standard coverage policy of title insurance; the recording fee on the Deed, and one-half (1/2) of the escrow fee. Each party shall pay its own attorneys' fees.

#### 8. Prorations.

(a) Real and personal property taxes, assessments, rents, and operating expenses of the Property (other than Seller's insurance premiums) shall be prorated as of midnight of the day preceding Closing. Real and personal property taxes and assessments shall be prorated on the basis of the best information available as of Closing, including taxes based on the latest assessed valuation for the Property. If after Closing, real and personal property taxes or assessments are determined to be different from those apportioned at Closing, then the parties shall promptly adjust the prorated amount to actuals by payment from the party who paid too little or received too much of a credit at Closing.

(b) For purposes of calculating prorations, Seller shall be deemed to be in title to the Property, and therefore entitled to the income therefrom and responsible for the expenses thereof, through midnight of the day before the Closing Date. All prorations shall be made on the basis of the actual number of days of the year and month which have elapsed as of the Closing Date. The amount of prorations shall be adjusted in cash after the Closing, as and when complete and accurate information becomes available. Seller and Purchaser shall cooperate in making post Closing adjustments to prorations within thirty (30) days following Closing, if and to the extent possible.

9. "As-is" Sale; Limitation; Disclaimer Notice. Purchaser acknowledges that notwithstanding any prior or contemporaneous oral or written representations, statements, documents or understandings, this agreement constitutes the entire understanding of the parties with respect to the subject matter hereof and supersedes any such prior or contemporaneous oral or written representations, statements, documents or understandings. Purchaser further acknowledges that, except as set forth in paragraph 6 or the deed (i) neither seller, nor any principal, agent, attorney, employee, broker or other representative of seller has made any representations or warranties of any kind whatsoever regarding the property, either express or implied, and (ii) that Purchaser is not relying on any warranty, representation or covenant, express or implied, with respect to the property, except as set forth in paragraph 6 or the deed, and agrees that Purchaser is acquiring the property in wholly an "as-is" condition with all faults and waives all contrary rights and remedies available to it under state and federal law. In particular, but without limitation, except as set forth in paragraph 6 and in the deed, seller makes no representations or warranties with respect to the use and condition of the property, including without limitation the condition of the soils or groundwaters of the property and the presence or absence of hazardous materials on or under the property or its compliance with applicable statutes, laws, codes, ordinances, regulations or requirements relating to leasing, zoning, subdivision, planning, building, fire, safety, health or environmental matters or its compliance with covenants, conditions and restrictions (whether or not of record) or other local, municipal, regional, state or federal requirements, or other statutes, laws, codes, ordinances, regulations or requirements. Except for the representations and warranties contained in paragraph 6 and in the deed, Purchaser waives, relinquishes and releases any and all rights, claims and causes of action, including, but not limited to, all rights of contribution and indemnity, which Purchaser may have or may be entitled to assert against seller under or with respect to the property or the condition

thereof. Purchaser expressly understands and acknowledges that it is possible that unknown problems, conditions or claims may exist with respect to the property and that Purchaser explicitly took such into account in determining the purchase price for the property, and that a portion of such consideration, having been bargained for between the parties with the knowledge of the possibility of such unknown problems, conditions or claims, was given in exchange for a full accord, satisfaction and discharge of all such problems, conditions, losses and claims. Purchaser acknowledges that following closing seller shall have no liability or duty of any kind with respect to property, regardless of the basis for the claim, except for fraud or a breach of its paragraph 6 or deed representations and warranties.

Purchaser's Initials \_\_\_\_\_

10. **Disclosure.** If prior to Closing either party discovers a fact or circumstance which might render a representation or warranty by the other party inaccurate in any material respect, it shall advise the other party thereof in writing promptly upon such discovery. If Purchaser discovers or is so advised in writing of such a fact or circumstance involving a Seller representation or warranty, it shall have, as its sole and exclusive remedy, the option, exercisable within five (5) business days thereafter to either (a) elect to terminate this Agreement and receive a return of the Deposit, or (b) to waive such inaccuracy in writing, in which event it shall be deemed to have waived all claims and causes of action against Seller related thereto.

#### 11. Remedies.

(a) If Seller is not in default, and Purchaser fails or refuses to consummate its purchase of the property, Purchaser and Seller agree that it would be impractical and extremely difficult to estimate the damages that Seller may suffer. Therefore, Purchaser and Seller agree that a reasonable estimate of the total net detriment that Seller would suffer in the event that Purchaser defaults and fails to complete the purchase of the property is and shall be, and Seller's sole and exclusive remedy (whether at law or in equity), an amount equal to the deposit. This amount shall be the full, agreed and liquidated damages for any breach of this agreement by Purchaser. The payment of this amount as liquidated damages is not intended as a forfeiture or penalty, but is intended to constitute liquidated damages to Seller. Upon any default by Purchaser, this agreement shall be terminated and neither party shall have any further rights or obligations under it, except for the right of Seller to collect such liquidated damages from Purchaser.

(b) If Purchaser is not in default and Seller fails or refuses to consummate the sale of the property without legal excuse, Purchaser shall have the right to the return of its deposit together with accrued interest thereon as liquidated damages, or be entitled to available legal or equitable remedies including but not limited to specific performance; provided, however, in no event shall Seller be liable to Purchaser for special, punitive, consequential or incidental damages, including, but not limited to, lost profits.

By their initials below, Purchaser and Seller specifically acknowledge that they have read and specifically negotiated and agreed to forfeiture of the deposit and limitation of remedies as provided for in preceding paragraphs 12(a) and 12(b).

Purchaser's Initials \_\_\_\_\_

Seller's Initials FWF

12. Condemnation. If any portion of the Property becomes the subject of a condemnation proceeding prior to Closing, Purchaser shall have the right to terminate this Agreement if it so notifies Seller in writing not later than the first to occur of (a) ten (10) days after it is advised of the condemnation proceeding or (b) Closing. Seller shall notify Purchaser in writing of a condemnation affecting the Property within the earlier of (i) Closing or (ii) five (5) days of Seller's receipt of notice thereof. If Purchaser elects not to terminate this Agreement, then Seller will assign to Purchaser at Closing Seller's rights with respect to all condemnation proceeds related thereto.

13. Notices. All notices provided for herein may be telecopied (with machine verification of receipt), sent by Federal Express or other overnight courier service or delivered or mailed registered or certified mail, return receipt requested. If a notice is mailed, it shall be considered delivered upon receipt or refusal thereof. If a notice is sent via telecopy on a business day it shall be deemed received upon receipt of verification of transmission. If a notice sent via overnight courier, it shall be deemed received upon receipt or refusal thereof. The addresses to be used in connection with such correspondence and notices are the following, or such other address as a party shall from time to time direct:

To Seller: Fred W. Fields  
1149 SW Davenport  
Portland, Oregon 97201

To Purchaser: City of Tigard  
Attn: William A. Monahan, City Manager  
13125 SW Hall Boulevard  
Tigard, Oregon 97223

With Copy to: Dominic G. Colletta  
Ramis Crew Corrigan & Bachrach, LLP  
1727 NW Hoyt Street  
Portland, Oregon 97209

14. Transfer. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their heirs, successors and assigns; provided, however, Purchaser may not assign its rights hereunder without Seller's prior written consent, which consent may be withheld in Seller's sole discretion. No such assignment shall release Purchaser from primary liability under this Agreement. In the event of an assignment the term "Purchaser" as used herein shall include Purchaser's assignee. Any assignment in violation of this paragraph 15 will be void.

15. Confidentiality. Purchaser covenants that it will maintain the confidentiality of all information which it receives from Seller or its agents and all reports, studies and other documentation which it develops based thereon until Closing, except as otherwise required by applicable law or court rule or order if this transaction closes, and further covenants that, if this transaction does not close, it will destroy all such documents and all copies which Purchaser made thereof. Purchaser's provision of such information to employees and consultants during

the term hereof shall not be deemed to violate the foregoing covenant so long as the recipients agree to honor the confidentiality requirement.

16. Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon.

17. Brokers Fees. Each party shall pay any real estate brokers or agents fees arising out of agreements such party may have entered into in connection with the purchase and sale of the Property and shall indemnify, defend and hold the other party harmless with respect thereto. This indemnification obligation shall survive Closing.

18. Costs and Expenses. Except as otherwise provided herein, each party hereto will bear its own costs and expenses in connection with the negotiation, preparation and execution of this Agreement and other documentation related hereto and in the performance of its duties hereunder.

19. Miscellaneous.

(a) Headings. The headings in this Agreement are for convenience only and do not in any way limit or affect the terms and provisions hereof.

(b) Calculation of Time Periods. Unless otherwise specified, in computing any period of time described in this Agreement, the day of the act or event after which the designated period of time begins to run is not to be included and the last day of the period so computed is to be included, unless such last day is a Saturday, Sunday or legal holiday. The final day of any such period shall be deemed to end at 5:00 p.m., Pacific Time.

(c) Time of Essence. Time is of the essence of this Agreement.

(d) Gender. Wherever appropriate in this Agreement, the singular shall be deemed to refer to the plural and the plural to the singular, and pronouns of certain genders shall be deemed to include either or both of the other genders.

(e) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but which when taken together shall constitute one and same instrument.

(f) Exhibits. The Exhibits referred to herein and attached to this Agreement are incorporated herein as if set forth in full.

20. Attorneys' Fees. If any lawsuit or arbitration arises in connection with this Agreement, including without limitation, an action to rescind this Agreement, the substantially prevailing party therein shall be entitled to recover from the losing party the substantially prevailing party's costs and expenses, including reasonable attorneys' fees, incurred in connection therewith, in preparation therefore and on appeal therefrom, including those in any bankruptcy proceeding, which amounts shall be included in any judgment entered therein.

21. Unenforceability. If any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect the remainder of such provision or any other provisions hereof.

22. Amendment/Modifications. This Agreement may not be altered, amended, changed, waived, terminated or modified in any respect or particular unless the same shall be in writing and signed by or on behalf of the party to be charged therewith.

23. Waiver. A party may, at any time or times, at its election, waive any of the conditions to its obligations hereunder, but any such waiver shall be effective only if contained in a writing signed by such party. No waiver shall reduce the rights and remedies of such party by reason of any breach of any other party. No waiver by any party of any breach hereunder shall be deemed a waiver of any other or subsequent breach.

24. Facsimile Signatures. Each party (i) has agreed to permit the use, from time to time and where appropriate, of telecopied signatures in order to expedite the transaction contemplated by this Agreement, (ii) intends to be bound by its respective telecopied signature, (iii) is aware that the other will rely on the telecopied signature, and (iv) acknowledges such reliance and waives any defenses to the enforcement of the documents effecting the transaction contemplated by this Agreement based on the fact that a signature was sent by telecopy.

25. Delivery of Possession. Possession of the Property shall be delivered to Purchaser on the Closing Date subject to the Permitted Exceptions.

26. Entire Agreement. This Agreement constitutes the entire agreement among the parties with respect to the subject matter hereof and supercedes all prior agreements, oral or written, express or implied, and all negotiations or discussions of the parties, whether oral or written, and there are no warranties, representations or agreements among the parties in connection with the subject matter hereof except as set forth herein.

THE PROPERTY DESCRIBED IN THIS INSTRUMENT MAY NOT BE WITHIN A FIRE PROTECTION DISTRICT PROTECTING STRUCTURES. THE PROPERTY IS SUBJECT TO LAND USE LAWS AND REGULATIONS WHICH, IN FARM OR FOREST ZONES, MAY NOT AUTHORIZE CONSTRUCTION OR SITING OF A RESIDENCE AND WHICH LIMIT LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 IN ALL ZONES. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND EXISTENCE OF FIRE PROTECTION FOR STRUCTURES.

The City of Tigard, an Oregon  
municipal corporation

By: Fred W. Fields  
Fred W. Fields

By: \_\_\_\_\_

Its: \_\_\_\_\_

the Closing Date subject to the Permitted Exceptions.

26. Entire Agreement. This Agreement constitutes the entire agreement among the parties with respect to the subject matter hereof and supersedes all prior agreements, oral or written, express or implied, and all negotiations or discussions of the parties, whether oral or written, and there are no warranties, representations or agreements among the parties in connection with the subject matter hereof except as set forth herein.

THE PROPERTY DESCRIBED IN THIS INSTRUMENT MAY NOT BE WITHIN A FIRE PROTECTION DISTRICT PROTECTING STRUCTURES. THE PROPERTY IS SUBJECT TO LAND USE LAWS AND REGULATIONS WHICH, IN FARM OR FOREST ZONES, MAY NOT AUTHORIZE CONSTRUCTION OR SITING OF A RESIDENCE AND WHICH LIMIT LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 IN ALL ZONES. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND EXISTENCE OF FIRE PROTECTION FOR STRUCTURES.

The City of Tigard, an Oregon  
municipal corporation

By: \_\_\_\_\_  
Fred W. Fields

By: *[Handwritten Signature]*  
Its: City Manager

Rec'd. 2/3/06  
77.

Final Easement

Exhibit F

**AFTER RECORDING, RETURN TO:**

City of Tigard  
Attn: City Recorder  
13125 SW Hall Boulevard  
Tigard, OR 97223

**GRANT OF EASEMENT**

THIS GRANT OF EASEMENT ("Easement") is made and entered into the 19<sup>th</sup> day of January, 2006, between THE CITY OF TIGARD, an Oregon municipal corporation ("Grantor") and FRED W. FIELDS ("Grantee");

**WITNESSETH**

WHEREAS, Grantor is the record of owner of that certain real property in the City of Tigard, Washington County, State of Oregon more fully described in Exhibit "A", attached hereto and incorporated herein by reference (the "Grantor Property"); and

WHEREAS, Grantee is the record owner of that certain real property also located in the City of Tigard, Washington County, State of Oregon more fully described in Exhibit "B" attached hereto and incorporated herein by reference (the "Grantee Property"); and

WHEREAS, Grantee is desirous of obtaining an easement on, over across and under the Grantor Property for the construction, installation, repair and replacement of utilities and a roadway for ingress and egress to and from the Grantee Property to a public roadway, and Grantor is desirous of providing such an easement to Grantee;

NOW, THEREFORE, the parties hereto agree as follows:

1. Grant of Easement. Grantor conveys and grants to Grantee a permanent non-exclusive easement for the purposes of construction, maintenance, repair, reconstruction and replacement utilities and a roadway on, over, under and across that portion of the Grantor Parcel described in Exhibit "C" attached hereto and incorporated herein (the "Easement Area").

2. Grantor's Right To Convey And Exceptions. Grantor warrants that Grantor has the right to convey this Easement and quiet possession for the uses to be made of the Easement Property by Grantee as set forth in this Easement, subject to all prior easements and encumbrances of record.

3. Grantee's Rights. Grantee, and Grantee's agents, employees, and independent contractors, shall have the right to enter upon the Easement Area for the construction, installation, repair and replacement of utilities and a roadway for ingress and egress to and from the Grantee Property to Hall Boulevard.

4. Grantee's Notice Of Entry. Grantee recognizes that the Grantor Property is used by the general public for library and other purposes, and agrees to notify Grantor prior to commencement, and coordinate with Grantor, the timing and scheduling Grantee's construction, repair and replacement of improvements to be located in the Easement Area.

5. Maintenance. Grantee shall maintain and care for the Easement Area and all improvements thereon constructed or operated by Grantee at no cost to Grantor. Grantee shall also replace or restore to its original condition all portions of the Grantor Property which are damaged, disturbed or destroyed by reason of Grantee's, and Grantee's employees', contractors', agents' and invitees', negligence, actions or failures to act.

6. Agreement to Terminate Easement on Public Road Extension. Grantee acknowledges that the Easement Area is part of the alignment of an extension of that certain public roadway currently named Wall Street, and that Grantor may, at some future date, desire to extend Wall Street or its successor public roadway on, over, under and across the Easement Area. In the event the City shall intend to extend the said roadway, it shall give to Grantee written notice thereof. Within sixty (60) days of said notice, Grantee agrees to deliver to Grantor a quitclaim deed conveying to Grantor all Grantee's right, title and interest in the Grantor Property created by and set forth in this Easement. In consideration for delivery of said quitclaim deed, Grantor agrees that it shall at all times after the recording of said quitclaim deed, and during and after construction of said roadway extension, keep open a public access way to and from the Grantee property that is suitable for passage by motor vehicles, and shall relocate and reinstall at the Grantor's expense any utilities located in the Easement Area in a manner that will permit continuation of the use of such utilities without unreasonable interruption. Grantor's obligations pursuant to this Section 6 shall survive the termination of this Easement.

7. Easement in Lieu of Other Easement Rights. The Easement granted herein is in lieu of and supercedes the easement described in that certain License Agreement between Grantor and Grantee dated November 14, 2002, and amended September 13, 2005, by which Grantor agreed to provide Grantee with an easement across the southerly fifty feet (50') of the Grantor Property upon circumstances described in the License Agreement. Grantee acknowledges and agrees that the easement granted herein is in lieu of the easement described in the License Agreement and the grant of easement contained herein fully satisfies Grantor's obligation to grant an easement to Grantee as described in the License Agreement. Notwithstanding the foregoing, the license set forth in the License Agreement, as amended, is not terminated by the easement granted herein, but shall remain in effect until such time as Grantee shall have actual, physical access to the Grantee Property.

8. Indemnification. Grantee agrees to indemnify, hold harmless and defend Grantor from any loss, claim or liability to Grantor arising in any manner out of the use of the Easement Property by Grantee, its agents, employees, independent contractors, and other such parties. Grantee assumes all risk arising out of Grantee's use of the Easement Property and Grantor shall have no liability to Grantee or others using the Easement Property by or through Grantee.

9. Grantor's Warranty. Grantor, its heirs, successors and assigns, covenants that

Grantor has the right to convey this Easement to Grantee and to provide quiet possession thereof in Grantee for the purposes stated herein.

10. Time. TIME IS OF THE ESSENCE of this Easement.

11. Notice. All notices given pursuant to this Easement shall be in writing and shall be effective when personally delivered, or if mailed, notice shall be deemed effective 48 hours after mailing as registered or certified mail, postage prepaid, directed to the other party at the address below or such other address as the party may indicate by written notice to the other:

City of Tigard  
Attn: Agustin P. Duenas, P.E.  
City Engineer  
13125 SW Hall Boulevard  
Tigard, OR 97223

Fred W. Fields  
1149 SW Davenport Street  
Portland, Oregon 97201

12. Breach - Remedies - Equitable Relief. The parties acknowledge that the uses provided by this Easement are unique in that money damages alone for breach of this Easement are inadequate. Any party aggrieved by a breach of the provisions hereof may bring an action at law or a suit in equity to obtain relief, including specific performance, injunctive relief and any other available equitable remedy.

13. Legal Effect and Assignment. The provisions of this Grant of Easement shall be binding upon and inure to the benefit of the parties hereto, and their respective heirs, personal representatives, successors and assigns. The rights granted herein run with the land for the benefit of the Grantee Parcel and as a burden upon the Grantor Parcel.

14. Attorneys' Fees. In the event suit or action, including arbitration and any action pursuant to bankruptcy laws, is instituted to interpret or enforce the terms of this Easement, the prevailing party shall be entitled to recover from the other party such sums as the arbitrator or court may adjudge reasonable as attorneys' fees at arbitration or trial and on appeal and review.

15. Severability. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provisions contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no legal right to contract, the latter shall prevail; but the provision of this Easement which is affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

16. Modification or Amendments. No amendment, change or modification of this Easement shall be valid, unless in writing and signed by all the parties hereto.

17. Waiver. Failure of either party at any time to require performance of any provision of this Easement shall not limit the party's right to enforce the provision, nor shall any waiver of any breach of any provision be a waiver of any succeeding breach of the provision or a

waiver of the provision itself or any other provision.

18. Entire Agreement. This Easement constitutes the entire agreement between and among the parties, integrates all of the terms and conditions mentioned herein or incidental hereto, and supersedes all negotiations or previous agreements between the parties or their predecessors in interest with respect to all or any part of the subject matter hereof.

IN WITNESS WHEREOF, the parties have executed this Easement as of the day and year first above written.

**GRANTOR:**

**GRANTEE:**

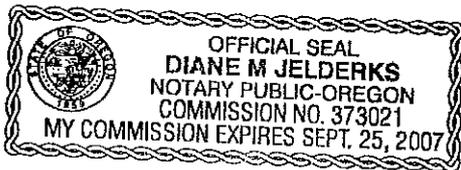
The City of Tigard, an Oregon  
municipal corporation

E. A. Newton for  
Crosser  
By: Craig Prosser  
Its: City Manager

Fred W. Fields  
Fred W. Fields

STATE OF OREGON, )  
County of Washington )

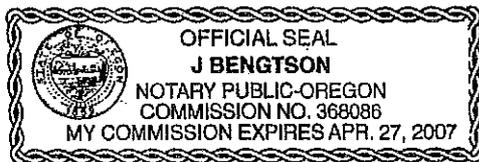
This instrument was acknowledged before me on this 19<sup>th</sup> day of January,  
2006, by Fred W. Fields.



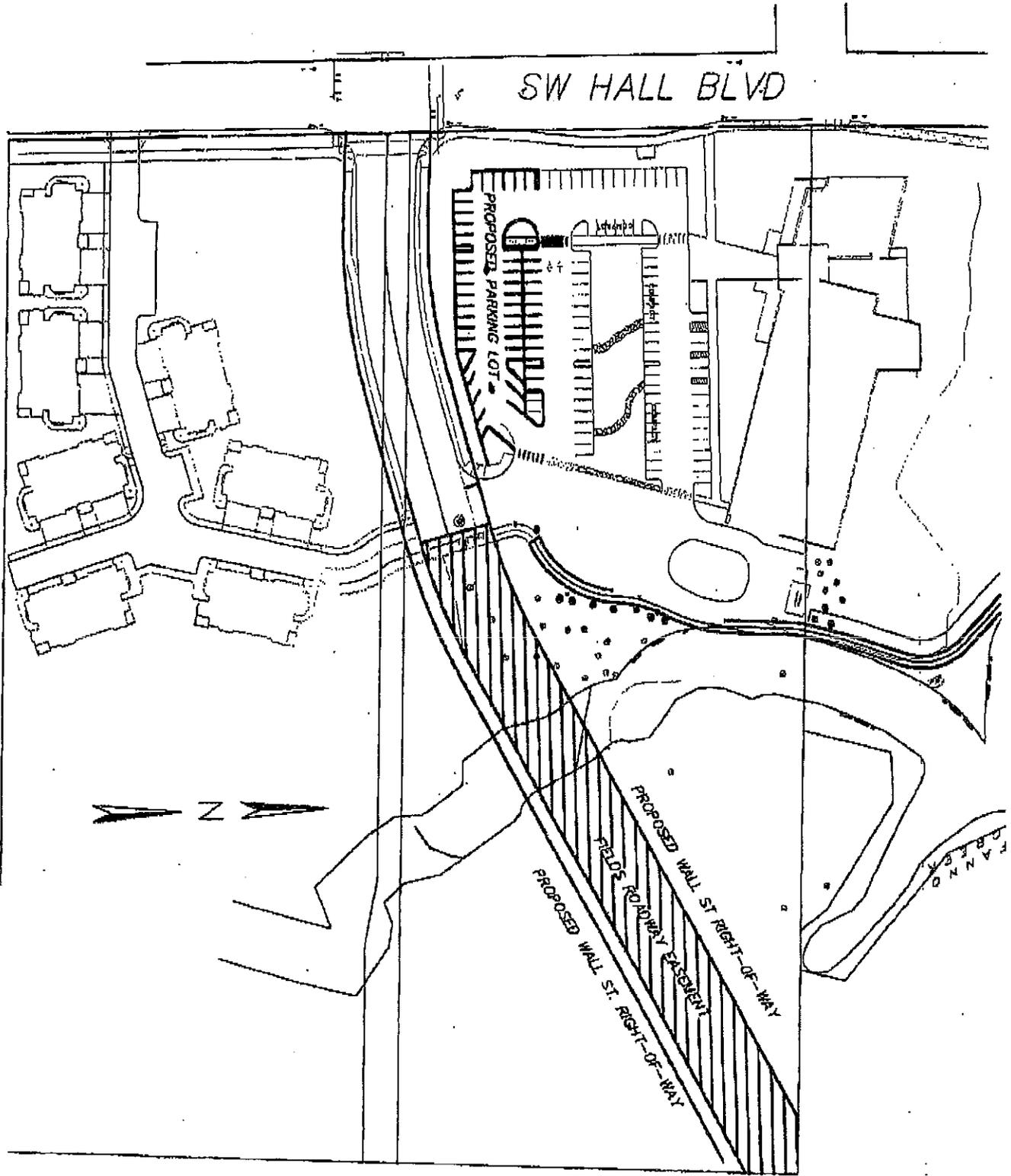
Diane M. Jelderks  
NOTARY PUBLIC for Oregon

State of Oregon )  
County of Washington )

This instrument was acknowledged before me on this 26 day of January,  
2006, by E.A. Newton, Assistant to the City Manager.



J. Bengtson  
NOTARY PUBLIC for Oregon



120 DAYS = N/A  
DATE OF FILING: 5/9/2006

RECEIVED

MAY 31 2006

CITY OF TIGARD

Washington County, Oregon

**GROUP MACKENZIE**  
**NOTICE OF FINAL ORDER BY THE TIGARD CITY COUNCIL**

2050  
Vannie  
yem  
Exhibit G



Case Numbers:	<u>COMPREHENSIVE PLAN AMENDMENT (CPA) 2004-00001</u> <u>SENSITIVE LANDS REVIEW (SLR) 2004-00003 &amp; 2006-00001</u> <u>TREE REMOVAL (TRE) 2006-00001 through 2006-00009</u>
Case Name:	<u>WALL STREET EXTENSION</u>
Names of Owners:	<u>N/A</u>
Name of Applicant:	<u>City of Tigard Attn: Vannie Nguyen</u>
Address of Applicant:	<u>13125 SW Hall Boulevard, Tigard, OR 97223</u>
Address of Property:	<u>SW Wall Street unimproved right-of-way, east of SW Hall Boulevard, south of the Tigard Public Library, and north of the Fanno Pointe Condominiums.</u>
Tax Map/Lot Nos.:	<u>Washington County Tax Assessor's Map 2S102DD, Tax Lots 200, 300 and 90000.</u>

A FINAL ORDER INCORPORATING THE FACTS, FINDINGS AND CONCLUSIONS APPROVING A REQUEST FOR A COMPREHENSIVE PLAN AMENDMENT, 2 SENSITIVE LANDS REVIEWS AND 9 TREE REMOVAL PERMITS (ORDINANCE NO. 06-05).

THE CITY OF TIGARD PLANNING COMMISSION AND CITY COUNCIL HAVE REVIEWED THE APPLICANT'S PLANS, NARRATIVE, MATERIALS, COMMENTS OF REVIEWING AGENCIES, THE PLANNING DIVISION'S STAFF REPORT AND RECOMMENDATIONS FOR THE APPLICATION DESCRIBED IN FURTHER DETAIL IN THE STAFF REPORT. THE PLANNING COMMISSION HELD A PUBLIC HEARING TO RECEIVE TESTIMONY ON APRIL 3, 2006 FOR THE PURPOSE OF MAKING A RECOMMENDATION TO THE CITY COUNCIL ON THE REQUEST. THE CITY COUNCIL ALSO HELD A PUBLIC HEARING TO RECEIVE TESTIMONY ON MAY 9, 2006 PRIOR TO MAKING A DECISION ON THE REQUEST. THIS DECISION HAS BEEN BASED ON THE FACTS, FINDINGS AND CONCLUSIONS CONTAINED WITHIN THIS FINAL ORDER.

Subject: ➤ As part of a capital improvement project, the applicant is requesting Sensitive Lands approval to build a 360-foot extension of SW Wall Street, east of Hall Blvd, between the Tigard Public Library and Fanno Pointe Condominiums. As part of this extension, the Pinebrook Creek wetlands designated as locally significant will be impacted and reconfigured. In order to carry out this project, a Comprehensive Plan Amendment is required. The effect of the amendment would be to remove Goal 5 protection from the wetlands impacted by this specific development proposal, but not to remove the requirements related to the CWS Stormwater Connection Permit. A Sensitive Lands Review is also required for impacts to wetlands and drainageways and the proposed reconfiguration of Pinebrook Creek, a tributary to Fanno Creek. A Tree Removal Permit is required for a number of trees to be removed in the sensitive land areas in order to accommodate the grading and construction of the roadway. The applicant has requested concurrent review of all these permit applications.

Phase I of the SW Wall Street extension is aimed at providing a joint access to both the Tigard Public Library and the Fanno Pointe Condos to satisfy obligations to the Oregon Department of Transportation (ODOT) which allowed temporary access to the condos and library from Hall Boulevard. This 360 foot improvement will terminate on the west side of Fanno Creek and west of its 100-year floodplain. Future extensions of SW Wall Street across Fanno Creek will require a separate review and approval by the City, State and Federal agencies.

ZONE: R-12: Medium-Density Residential District. **APPLICABLE REVIEW CRITERIA:** Community Development Code Chapters 18.380, 18.385, 18.390, 18.510, 18.775, 18.790, 18.795 and 18.810; Comprehensive Plan Policies 2, 3, 4, 7 and 8; and Statewide Planning Goals 1, 2, 5, 6, 11 & 12..

Action: ➤  Approval as Requested  Approval with Conditions  Denial

Notice: Notice was published in the newspaper, posted at City Hall and mailed to:  
 Affected Government Agencies  Interested Parties

Final Decision:

**THIS IS THE FINAL DECISION BY THE CITY AND BECOMES EFFECTIVE ON JUNE 8, 2006.**

The adopted findings of fact, decision and statement of conditions can be obtained from the City of Tigard Planning Division, Tigard City Hall, 13125 SW Hall Boulevard, Tigard, Oregon.

Appeal: A review of this decision may be obtained by filing a notice of intent to appeal with the Oregon Land Use Board of Appeals (LUBA) according to their procedures within 21 days.

Questions: If you have any questions, please call the City of Tigard Planning Division or the City Recorder at (503) 639-4171.

CITY OF TIGARD, OREGON  
TIGARD CITY COUNCIL  
ORDINANCE NO. 06-05

AN ORDINANCE APPROVING SENSITIVE LANDS REVIEW SLR2004-00003 AND SLR 2006-00001, TREE REMOVAL TRE2006-00001 THROUGH 2006-00009, AND COMPREHENSIVE PLAN AMENDMENT CPA2004-00001 TO REMOVE GOAL 5 PROTECTION FROM THE RESOURCES TO BE IMPACTED BY CONSTRUCTION OF SW WALL STREET AND TO ADD NEWLY CREATED AND RESTORED WETLAND AND RIPARIAN RESOURCES TO THE INVENTORY OF LOCALLY SIGNIFICANT SITES.

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WHEREAS, Section 18.775.070 of the City of Tigard Community Development Code requires a sensitive lands permit for development within drainageways and wetlands, and approval criteria are presented in Sections 18.775.070.D-18.775.070.E.

WHEREAS, Section 18.790.050 of the Community Development Code requires a tree removal permit for the removal of any tree which is located on or in a sensitive lands area, and approval criteria are presented in Sections 18.790.050.A.

WHEREAS, Section 18.775.090 of the Community Development Code establishes special provisions for development within Locally Significant wetland and riparian corridors to address the requirements of Statewide Planning Goal 5 and its safe harbor provisions; and

WHEREAS, the proposed construction of the 360 foot section of SW Wall Street, east of Hall Boulevard, will impact sensitive drainageways and wetlands, will require removal of trees within sensitive lands and will impact Goal 5 resources designated as Locally Significant; and

WHEREAS, pursuant to Section 18.775.130 of the Tigard Development Code, any owner of property affected by Goal 5 safe harbor protection of significant wetlands and/or vegetated areas may apply for a quasi-judicial Comprehensive Plan Amendment under Type IV procedure; and

WHEREAS, pursuant to Section 18.380.030 of the Tigard Development Code, the Tigard Planning Commission shall make a recommendation to the Tigard City Council on an application for a quasi-judicial comprehensive plan amendment; and

WHEREAS, pursuant to Section 18.390.060G of the Tigard Development Code, a Type IV decision shall be based on consideration of Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes; any federal or state statutes or regulations found applicable; any applicable METRO regulations; any applicable comprehensive plan policies; and, any applicable provisions of the City's implementing ordinances; and

WHEREAS, the Comprehensive Plan Amendment must be based on a specific development proposal and may be justified by either conducting an Environmental, Social, Economic and Energy (ESEE)

analysis or demonstrating the site no longer meets the applicable significance defined by the Goal 5 administrative rule; and

WHEREAS, the City of Tigard, acting as the applicant, has requested concurrent review of the sensitive lands permit, tree removal permit, and a quasi-judicial Comprehensive Plan Amendment for proposed construction of the 360 foot section of SW Wall Street; and

WHEREAS, the applicant has submitted a specific development proposal, and conducted an Environmental, Social, Economic and Energy (ESEE) analysis demonstrating justification for amending the Comprehensive Plan; and

WHEREAS, the effect of the Comprehensive Plan Amendment shall be to remove Goal 5 protection from the locally significant resources to be impacted by construction of SW Wall Street as shown in Exhibit "A" (Area 1); and

WHEREAS, the applicant has submitted plans for compensatory wetland, vegetated corridor and tree mitigation, and the newly created and restored wetland and riparian resources will be added to the inventory of locally significant sites as shown in Exhibit "A" (Area 2); and

WHEREAS, the Tigard Planning Commission held a public hearing on April 3, 2006, and recommended approval of CPA2004-00001, SLR2004-00003 and SLR 2006-00001, and TRE2006-00001 through 2006-00009 by motion with a unanimous vote in favor; and

WHEREAS, the Tigard City Council held a public hearing on May 9, 2006, to consider the request for sensitive lands permit, tree removal permit and a quasi-judicial Comprehensive Plan Amendment based on the specific development proposal for construction of SW Wall Street and testimony provided at the hearing and determined that the construction of SW Wall Street will not adversely affect the health, safety and welfare of the City and meets all applicable review criteria.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: Sensitive Lands Review SLR2004-00003 and SLR 2006-00001, Tree Removal TRE2006-00001 through 2006-00009, and Comprehensive Plan Amendment CPA2004-00001 for the construction of the 360 foot section of SW Wall Street are hereby approved by the City Council.

SECTION 2: The map of locally significant wetlands and riparian corridors created to address Goal 5 safe harbor provisions shall be amended to represent the removal of the significant resources impacted by construction of SW Wall Street as shown in Exhibit "A".

SECTION 3: Newly created and restored wetlands and riparian resources shall be added to the inventory of protected locally significant resources as shown in Exhibit "A".

SECTION 4: The Tigard City Council adopts the City of Tigard Staff Report dated April 3, 2006, the "Addendum to the Staff Report" dated April 25, 2006, and the letter prepared by Group Mackenzie, Inc. (dated April 17, 2006) in response to submitted public comments as findings in support of this decision; copies are attached hereto as Exhibit "B", Exhibit "C" and Exhibit "D" respectively and are incorporated herein by reference.

SECTION 5: The Tigard City Council adopts the conditions of approval as stated on page 2 of the City of Tigard Staff Report dated April 3, 2006; a copy is attached hereto as Exhibit "B" and incorporated herein by reference.

SECTION 6: This ordinance shall be effective 30 days after its passage by the Council, signature by the Mayor, and posting by the City Recorder.

PASSED: By majority vote of all Council members present after being read by number and title only, this 9<sup>th</sup> day of May, 2006.

Catherine Wheatley  
Catherine Wheatley, City Recorder

APPROVED: By Tigard City Council this 9<sup>th</sup> day of May, 2006.

C. Dirksen  
Craig Dirksen, Mayor

Approved as to form:

[Signature]  
City Attorney

5/19/06  
Date

Certified to be a true copy of the Original on file at City of Tigard City Hall.

By Catherine Wheatley 5/12/06  
City Recorder, City of Tigard Date



Agenda Item: 5.  
 Hearing Date: April 3, 2006 Time: 7:00 PM

**STAFF REPORT TO THE  
 PLANNING COMMISSION  
 FOR THE CITY OF TIGARD, OREGON**



120 DAYS = N/A

**SECTION I. APPLICATION SUMMARY**

**FILE NAME:** WALL STREET EXTENSION  
**CASE NOS:** Comprehensive Plan Amendment (CPA) CPA2004-00001  
 Sensitive Lands Review (SLR) SLR2004-00003  
 Sensitive Lands Review (SLR) SLR2006-00001  
 Tree Removal (TRE) TRE2006-00001 through 2006-00009

**APPLICANT:** City of Tigard  
 Capital Improvement Div.  
 Attn: Vannie Nguyen  
 13125 SW Hall Boulevard  
 Tigard, OR 97223

**APPLICANT'S REP:** Group Mackenzie  
 Attn: Geraldene Moyle, AICP  
 0690 SW Bancroft  
 Portland, OR 97239

**PROPOSAL:** As part of a capital improvement project, the applicant is requesting Sensitive Lands approval to build a 350-foot extension of SW Wall Street, east of Hall Blvd, between the Tigard Public Library and Fanno Pointe Condominiums. As part of this extension, the Pinebrook Creek wetlands designated as locally significant will be impacted and reconfigured. In order to carry out this project, a Comprehensive Plan Amendment is required. The effect of the amendment would be to remove Goal 5 protection from the wetlands impacted by this specific development proposal, but not to remove the requirements related to the CWS Stormwater Connection Permit. A Sensitive Lands Review is also required for impacts to wetlands and drainageways and the proposed reconfiguration of Pinebrook Creek, a tributary to Fanno Creek. A Tree Removal Permit is required for a number of trees to be removed in the sensitive land areas in order to accommodate the grading and construction of the roadway. The applicant has requested concurrent review of all these permit applications.

Phase I of the SW Wall Street extension is aimed at providing a joint access to both the Tigard Public Library and the Fanno Pointe Condos to satisfy obligations to the Oregon Department of Transportation (ODOT) which allowed temporary access to the condos and library from Hall Boulevard. This 350 foot improvement will terminate on the west side of Fanno Creek and west of its 100-year floodplain. Any future extensions of SW Wall Street across Fanno Creek would require a separate review and approval by the City, State and Federal agencies.

**LOCATION:** SW Wall Street unimproved right-of-way, east of SW Hall Boulevard, south of the Tigard Public Library, and north of the Fanno Pointe Condominiums; Washington County Tax Assessor's Map 2S102DD, Tax Lots 200, 300 and 90000.

**ZONING:** R-12: Medium-Density Residential District. The R-12 zoning district is designed to accommodate a full range of housing types at a minimum lot size of 3,050 square feet. A wide range of civic and institutional uses are also permitted conditionally.

COMP PLAN: Medium-Density Residential and Open Space.

**APPLICABLE REVIEW**

**CRITERIA:** Community Development Code (TDC) Chapters 18.380, 18.385, 18.390, 18.510, 18.725, 18.775, 18.790, 18.795 & 18.810. Comprehensive Plan policies 2, 3, 4, 7 & 8.

**SECTION II. STAFF RECOMMENDATION**

Staff recommends that the Planning Commission find that this request for Comprehensive Plan Amendment Sensitive Lands Permit and the Tree Removal Permit will not adversely affect the health, safety and welfare of the City and meets the necessary approval criteria. Staff recommends APPROVAL subject to the following recommended conditions of approval.

**THE FOLLOWING CONDITIONS OF APPROVAL SHALL BE SATISFIED PRIOR TO COMMENCEMENT OF ANY SITE WORK**

- The applicant shall finalize a maintenance agreement with the Fanno Pointe Condominium Owners Association for the maintenance to the mitigation site on the Fanno Pointe Condo property and submit the agreement prior to commencement of any site work.

**THE FOLLOWING CONDITIONS OF APPROVAL SHALL BE SATISFIED DURING THE PROJECT CONSTRUCTION**

- The applicant shall comply with the conditions made by the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers in carrying out the wetland mitigation plan. The project will additionally meet the erosion control and water quality conditions contained in the DSL and Corps of Engineers wetland permits and in the water quality certification issued by the Department of Environmental Quality as part of the Corps of Engineers permit. Submit the monitoring report to be prepared for the Oregon DSL and the US Army Corps to the City of Tigard upon completion of the project showing success meeting the permit conditions.
- The applicant shall comply with the conditions made by Clean Water Services in carrying out the vegetated corridor mitigation plan. Submit a monitoring report upon completion of the project showing success meeting the permit conditions.
- In carrying out the tree removal plan, any non-native trees shall be girdled and left as snags rather than removed to provide habitat in areas where there are no safety issues.

**SECTION III. BACKGROUND INFORMATION**

**Project History**

The construction of Wall Street has a long history, and to understand the need for this project, a number of considerations require explanation. First, the primary purpose of Phase one of the Wall Street extension is to provide access to the Tigard Library and the Fanno Pointe Condominiums. However, potential subsequent phases would extend SW Wall Street further eastward connecting Hall Boulevard to Hunziker Street as identified in the Transportation System Plan (TSP), a subdocument to the City's Comprehensive Plan. The TSP was adopted by resolution 02-33, and became effective on October 10, 2002. The TSP lays out the City's Transportation improvement needs over a 20-year planning period. In the document, existing and projected deficiencies are identified with corresponding improvement projects

and techniques to alleviate congestion and improve transportation efficiency. Figure 8-12 of the TSP, on page 8-23 identifies local street connectivity needs including the Wall Street connection between SW Hall and SW Hunziker Streets. The extension appears again on Figure 8-19, page 8-45, for the Street Improvement Plan. These improvements and connections are part of a comprehensive set of tools to alleviate and mitigate for growing congestion problems throughout the City. No single project identified in the TSP will alleviate the traffic issues the city faces.

The proposed road is classified as a collector which is described in the TSP as providing "both access and circulation within and between residential and commercial/industrial areas. Collectors differ from arterials in that they provide more of a citywide circulation function, do not require as extensive control of access (compared to arterials) and penetrate residential neighborhoods, distributing trips from the neighborhood and local street system." However, there is an inherent conflict in the Comprehensive Plan as policy 12.3.1 also identifies that development of industrial sites (the undeveloped land on the east side of Fanno Creek) shall not channel traffic through residential areas (the R-12 zoned Fanno Pointe and Library). This issue is not ripe for discussion as part of this proposal as the street will not be extended to the industrial land as part of phase 1, and no specific development is being proposed for the industrial land at this time.

In January of 2003, a private developer received approval to construct a 42 unit condominium project adjacent to Hall Boulevard known as Fanno Pointe Condominiums. During the review of that project, staff received comments from the Tualatin Riverkeepers who initially opposed the project, but following some site plan revisions had indicated their support. The staff report goes on to note: "The group also asked that the existing pond and drainage stream be revised. It is expected that those improvements will be made when the City of Tigard constructs the future Wall Street extension along the northern boundary of the subject site." The following discussion regarding the future Wall Street was included in the original report for the Fanno Pointe Condo's:

*Because the timing of the Library project will likely lag behind this project, the applicant will need an interim access onto Hall Boulevard to support the development. Their ultimate access will come from Wall Street, which will be constructed in part by the City. The City and the applicant have discussed the need for an interim access onto Hall Boulevard with ODOT, and ODOT has agreed to allow the access in the location shown on the applicant's plans...Therefore, the interim access onto Hall Boulevard may be able to be completely removed once the Wall Street access is constructed...*

#### Wall Street

*This roadway is classified as a three-lane collector street that will eventually connect between Hall Boulevard and Hunziker Street to the east. In order to connect to Hunziker Street, a crossing of the railroad ROW will be needed. That approval has not yet been obtained. However, the street can be extended from Hall Boulevard to a point where access can be provided to both the Library and Fanno Pointe. Access points for the two projects will align across from each other."*<sup>1</sup>

In April of 2003, the City received approval to construct the Tigard Public Library. A number of road improvements were required as part of that decision, including frontage improvements on Hall Boulevard, as well as completion of the first phase extension of Wall Street. An interim driveway was provided to allow access until such time that the Wall Street Phase 1 could be completed. The following discussion was included in the original report for the library:

#### SW Wall Street

*Wall Street is classified as a three-lane collector street with bike lanes. It is to provide an ultimate connection between Hall Boulevard and Hunziker Street to the east. A 70-foot ROW width is required for this street. The applicant plans to dedicate ROW for Wall Street as a part of this project. The applicant should only dedicate this ROW if the Wall Street LID project is approved in the proposed location.*

*A preliminary alignment study was conducted by the City to determine how and where this street would need*

<sup>1</sup> Case file number SDR2002-00012, p.24

*to cross Fanno Creek and the railroad ROW to the east. Four options were considered, with the location near the southern border of this site being the finalist. The other options that were considered resulted in more impact to Fanno Creek and the associated wetland areas adjacent to the creek.*

*If the City obtains approval to construct this roadway, the construction would be in phases, with the first phase simply providing a full-width improvement from Hall Boulevard a distance of approximately 475 feet to a point where access into the library site and the Fanno Pointe site can be achieved. This first phase can be constructed without impacts to Fanno Creek or the railroad. A separate effort to deal with the creek and railroad crossing will continue beyond the scope of the library project.*

*As was stated previously, the construction of Wall Street is proposed in two phases, with the first phase being a segment beginning from Hall Boulevard and funded partly by the City and partly from TIF funds, and the second phase being a LID. The Wall Street project is not part of the library project. The library project can be served alone by the driveway configuration shown on the plan. This configuration will accommodate the future construction of the first phase of Wall Street, should it be approved in the location desired by the City. Should the Wall Street project be delayed, the library project can move forward with the driveway plan as shown. This provision has also been discussed with ODOT.”<sup>2</sup>*

On March 23, 2004, the City submitted its proposal for sensitive lands review and a comprehensive plan amendment to construct Phase 1 and receive approval for the future construction of Phase 2 of the Wall Street extension. At that time, the applicant had not received approval from Clean Water Services, or the Army Corps of Engineers. Moreover, approval had not been obtained from Southern Pacific Railroad for an at-grade crossing either. The application remained on hold until these approvals could be obtained. In the interim staff held several meetings with the applicant to discuss this project on September 15, December 16 and 22, and again on January 12, 2005. As a result of those meetings, the applicant revised the application to eliminate seeking approval for Phase 2.

In the Fall of 2005, the original proposal for Phase 1 was further revised to minimize the impact to sensitive land areas and meet local planning requirements. As a result, the length of the proposed roadway was reduced from 425 feet to 350 feet in order to avoid development within the 100-year floodplain by shifting the library and condominium accessways to the west. The redesign includes a retaining wall along the eastern edge of the condominium access to minimize the amount of wetland impact. The total wetland impact area for Phase 1 was reduced from 0.25 acre to 0.11 acre.

#### **Vicinity Information**

The area of impact is east of SW Hall Boulevard, and directly between the Tigard Public Library and the Fanno Pointe Condominiums west of Fanno Creek. The zoning in this area is R-12 Medium Density Residential. Parcels on the opposite side of Fanno Creek are designated as Light Industrial. To the west of the project is R-4.5, low density residential zoning.

#### **Proposal Description**

Normally, a comprehensive plan amendment would be heard separately, with development permit applications following final outcome of the comprehensive plan amendment. However, in the case of an amendment to remove Goal 5 protection, the development code requires it to be “based on a specific development proposal”. This detail is necessary to determine the extent of the proposed impacts, and to what degree the impacts have been or could be further minimized. For this proposal, at the request of the applicant, the subsequent permit activities are to be heard concurrently with the comprehensive plan amendment. This will give decisionmakers a better idea of the full extent of the proposal and gives the applicant better assurance of feasibly completing the project after issues surrounding the comprehensive plan amendment are decided. This consolidated request adds complexity to the application that will be addressed

<sup>2</sup> Case file number CUP2003-00001, p.29

fully in the subsequent analysis.

Phase 1 of the Wall Street extension will provide a 350 foot section of roadway. The right-of-way (ROW) is 72 feet wide with 3-lanes meeting the standards for designated Collector streets and additional widths of up to 20 feet outside the ROW to accommodate 8-foot-wide public utility easements and cut and fill slopes.. This first phase encompasses the intersection with SW Hall Boulevard to driveways serving the Tigard Library on the north, and the Fanno Pointe Condos on the south. Future phases of Wall Street are planned to continue across Fanno Creek and the railroad tracks to an ultimate connection with SW Hunziker Avenue, to provide additional east-west connectivity for the eastern area of Tigard between from Hall Blvd. to 72<sup>nd</sup> Avenue between Hunziker Street and Bonita Road or north-south connections from Hunziker Street to Bonita Road between Hall Boulevard and 72<sup>nd</sup> Avenue. However, this application is only for the 350-foot extension to serve the Tigard Library and the Fanno Pointe Condos.

#### Locally Significant Wetland

This first phase encroaches into wetlands and vegetated corridor that are shown on the "Wetland and Streams Corridor Map" as "Locally Significant". An area of approximately 0.11 acres (4,792 s.f.) will be impacted by filling slopes and road construction. The criteria for these wetlands generally prohibit any permanent impacts, with few exceptions. To remove this protection from these wetlands, they must be removed from the inventory by a comprehensive plan amendment, a Type IV procedure. Impacts to the wetland will be mitigated with stream channel and wetland creation (0.08 acres), wetland enhancement (0.29 acres) and wetland restoration (0.20 acre). The stream channel and adjacent wetlands will be reconstructed slightly south of their existing location .

#### Drainageway

The wetlands are associated with Pinebrook Creek, a tributary to Fanno Creek that originates to the southwest along SW McDonald Street, ultimately crossing Hall Boulevard where it is currently culverted twice in culverts not designated for fish passage and meanders through the Fanno Pointe site. According to the Biological Assessment prepared by Fishman Environmental Services, Pinebrook Creek "appears to consist of two to three narrow (approximately 6 inch) shallow meandering channels without a visible main stream channel" and is impassible at its confluence with Fanno Creek. Approximately 270 linear feet of this channel will be replaced by a reconstructed channel, approximately 550 feet in length, which will also remove two existing culverts that do not allow fish passage (totaling approximately 170 feet in length). The area of vegetated corridor impacted by the proposed improvements totals 18,429 sf (0.42 acres). The proposed vegetated corridor impacts are summarized in the file (Attachment 11, Figure 1). The relocated Pinebrook Creek will be connected to an historic channel which will flow to the confluence with Fanno Creek. Only one culvert, under the driveway serving Fanno Pointe, will be required. This new culvert will meet ODF&W fish passage requirements providing fish passage for cutthroat trout and juvenile steelhead during high stream flows of Fanno Creek. The current confluence does not allow fish passage since there is presently an approximate eight foot drop in elevation from the downstream edge of the East Pond to Fanno Creek.

#### Floodplain

The proposed road improvement is not located within the 100-year floodplain. The watermain extension included in the roadway does not extend into the 100-year floodplain and its elevation is above the floodplain to preclude floodwater from infiltrating into the water system. Portions of the stream restoration and plantings will be located within the floodplain. However per Section 18.775.020 C2, stream and wetland restoration and enhancement programs performed under the direction of the City are exempt from the sensitive lands provisions.

applicable implementing ordinance;

Staff will address the applicable development code standards under their respective chapters, later in this report.

**3. Evidence of change in the neighborhood or community or a mistake or inconsistency in the comprehensive plan or zoning map as it relates to the property.**

The proposed encroachments will in fact impact the vegetated corridor and wetland resources identified as significant on the "Wetlands & Stream Corridor" map, thus the applicant has applied for a comprehensive plan amendment as per TDC 18.775.130. The proposed change is evidenced by the development of the Fanno Pointe Condos in 2003, completion of the Tigard Public Library in 2004 and ODOT requirements to consolidate the access ways into these two sites. In addition, the Tigard Transportation System Plan completed in 2002 includes the SW Wall Street connection between SW Hall Blvd and SW Hunziker Street as part of its Street Improvement Plan.

**Chapter 18.385. Miscellaneous Permits:**

Chapter 18.385 includes criteria for miscellaneous permits including Tree Removal Permits and Sensitive Lands Reviews. The criteria found in this chapter are repeated in the respective subsequent chapters of the development code, 18.775 and 18.790.

This application is requesting a Sensitive Lands Permit and a Tree Removal Permit. Staff will address these criteria under their respective chapters, later in this report.

**Chapter 18.390. Decision Making Procedures:**

Chapter 18.390.020 describes the four types of decision-making procedures. Type I procedures apply to ministerial permits and actions containing clear and objective approval criteria and are decided by the Director. Type II procedures apply to quasi-judicial permits and actions that contain some discretionary criteria and are also decided by the Director but include provisions for public notice and opportunities for appeals. Type III procedures apply to quasi-judicial permits and actions that contain predominantly discretionary approval criteria. Type III-PC actions are decided by the Planning Commission with appeals to the City Council. Type III-HO actions are decided by the Hearings Officer with appeals to City Council. In cases where both the Hearings Officer and Planning Commission are involved, the Planning Commission has preferential jurisdiction, per Tigard Development Code (TDC) Section 18.390.080(D)(2)(a). Type IV procedures apply to legislative matters which involve the creation, revision, or large-scale implementation of public policy. Type IV matters are considered initially by the Planning Commission with final decisions made by the City Council.

This application includes all four types of decision-making reviews. Pursuant to 18.390.080.D.2, whenever an applicant requests more than one approval and more than one approval authority is required to decide the applications, the proceedings can be consolidated so that one approval authority shall decide all applications in one proceeding and the hearings shall be held by the approval authority having original jurisdiction over one of the applications under Section 18.390.100C in the following order of preference: the Council, the Commission, the Hearings Officer, or the Director. Therefore, this application will follow the procedures for Type IV reviews, with a recommendation being forwarded from the Planning Commission to City Council, who shall make the final decision on all applications contained herein. In addition, the notice shall identify each action to be taken; the decision on a plan map amendment shall precede the decision on other actions; and the separate actions shall be taken on each application.

**Chapter 18.390.050 B2e states that applications shall include an impact study to quantify the effect of the development on public facilities and services:**

The permit application includes an impact study (Attachment 8) that addresses the impacts on the transportation system, the drainage system, the parks system, the water system, the sewer system, and the

noise impacts of the development.

Chapter 18.390.060G states that for legislative map and text amendments (Comprehensive Plan and Development Code) the recommendation by the Commission and the decision by the Council shall be based on consideration of the following factors:

- ♦ The Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes Chapter 197;
- ♦ Any federal or state statutes or regulations found applicable;
- ♦ Any applicable Metro regulations;
- ♦ Any applicable Comprehensive Plan policies; and
- ♦ Any applicable provisions of the City's implementing ordinances.

This report addresses the applicable standards listed above in the review section covering the proposed comprehensive plan amendment as it applies to applicable Statewide Planning Goals, Federal or state regulations, Metro regulations, City's Comprehensive Plan policies and provisions of the City's Development Code.

#### Chapter 18.510. Residential Zoning Districts:

Chapter 18.510 lists the permissible uses and development standards for residential zones.

The R-12 zoning district is designed to accommodate a full range of housing types at a minimum lot size of 3,050 square feet. No residential uses are proposed as part of this application. The development standards contained in this chapter refer primarily to development occurring on parcels or lots (i.e. lot size, lot width, lot coverage, setbacks). The height limit is universally applied, but the proposal does not approach 35 feet in height. Refer to the profile shown on Sheet L1 in Section 4 of the applicant's submittal. The proposal for a collector street does not conflict with the R-12 zone standards.

#### Chapter 18.725. Environmental Performance Standards

**18.725.020. General Provisions: A: Compliance with applicable state and federal regulations.**

This project shall comply with applicable state and federal regulations related to erosion control and water quality as conditioned by the wetlands permits issued by the Oregon DSL and the US Army Corps of Engineers. Violations of other state and federal regulations pertaining to noise, odor and discharge of matter would be addressed by nuisance enforcement.

#### Chapter 18.775. Sensitive Lands Permits:

Chapter 18.755 contains regulations to restrict development within sensitive land areas.

This proposal involves placing limited fill, road improvements and utilities within a wetland area and natural drainageway. As such, a sensitive lands review is required for each types of resource. As described previously, since this is a consolidated proceeding with a Comprehensive Plan Amendment, the highest review authority shall make the final decision on all the included requests. Therefore, the application is being processed as a Type IV procedure.

#### **18.775.030 Administrative Provisions**

**A1. Interagency Coordination.** The necessary permits for all "development" shall include a CWS Service Provider Letter.

An amended service provider letter was issued by CWS (Attachment 11) which specifies conditions and requirements necessary for the applicant to comply with CWS standards.

**B1. Alteration or Relocation of Water Course.** The Director shall notify communities adjacent to the affected area and the State Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;

**B2.** The Director shall require that maintenance is provided within the altered or relocated portion of a watercourse so that the flood-carrying capacity is not diminished.

Maintenance shall be assured by the fact that most of the impact area is within public right of way, and the remainder will be in a dedicated greenway tract. According to the Wetland Mitigation Plan, the City of Tigard will be responsible for maintenance of the mitigation site during the 5-year monitoring period. Maintenance recommendations for corrective action will be included in the annual wetland monitoring reports, and these actions will be implemented as needed. The Plan goes on to explain that long-term protection of the mitigation site will be ensured by placing deed restrictions over the mitigation site properties owned by the City of Tigard and the Fanno Pointe Condominium Owners Association. According to conditions of the CWS Service Provider Letter (as stated in Attachment 11), maintenance and monitoring, as well as, performance assurances for the vegetated corridor shall comply with CWS standards.

Condition: The applicant shall finalize a maintenance agreement with the Fanno Pointe Condominium Owners Association for the maintenance to the mitigation site on the Fanno Pointe Condo property and submit the agreement prior to commencement of any site work.

#### **18.775.040 General Provisions for Floodplain Areas.**

**This Section requires permit review for floodplain areas to determine whether building sites will minimize the potential for flood damage.**

The proposed roadway improvements will not be located within the 100-year floodplain. The watermain extension included in the roadway does not extend into the 100-year floodplain and its elevation is above the floodplain to preclude floodwater from infiltrating into the water system. Portions of the stream restoration and plantings will be located within the floodplain. However per Section 18.775.020 C2, stream and wetland restoration and enhancement programs performed under the direction of the City are exempt from the sensitive lands provisions.

#### **18.775.050 General Provisions for Wetlands**

**A. Code compliance requirements.** Wetland regulations apply to those areas classified as significant on the City of Tigard "Wetland and Streams Corridors Map", and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, per "Table 3.1 Vegetated Corridor Widths" and "Appendix C" Natural Resource Assessments of the CWS "Design and Construction Standards". Wetland locations may include but are not limited to those areas identified as wetlands in "Wetland Inventory and Assessment for the City of Tigard, Oregon," Fishman Environmental Services, 1994.

The location of the proposed roadway improvement is identified as having two locally significant wetlands (E-18, a manmade pond along Pinebrook Creek, and E-19, associated wetlands). The extent of the vegetated corridors as determined by CWS are shown in the applicant's Attachment 11. The proposal is therefore subject to sensitive lands review for wetlands.

#### **B. Delineation of wetland boundaries.**

Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineation will be done by qualified professionals at the applicant's expense.

Three wetland delineations were conducted by different consultants. A wetland delineation was prepared for the Tigard Library site including the Wall Street extension by Kurahashi & Associates in June 2002. Another delineation report for the proposed Wall Street right of way extending east across the railroad tracks was prepared by Pacific Habitat Services in 2003. A wetland delineation report for the adjacent was prepared for Fanno Pointe Condos by Rhea Environmental Consultants in August 2002. The

consolidated delineations are shown in the existing conditions drawing as part of the DSL and Army Corps permit application (Attachment 5 – Sheet 2a and 2b).

The extent of the vegetated corridors as determined by CWS are shown in the applicant's Attachment 11. The applicant has submitted a report by Fishman Environmental Services (included in the DSL/Army Corps Permit, attachment 5) and maps from a survey performed by DeHaas and Associates, attachment 11. This criterion is satisfied.

#### **18.775.070 Sensitive Lands Permits**

Approval criteria for various kinds of sensitive areas are presented in Sections 18.775.070B-18.775.070E.

#### **18.775.070A. Permits Required**

A sensitive lands permit is required since the applicant is proposing improvements within sensitive lands areas, including drainageways and wetlands.

#### **18.775.070B. Within the 100-year floodplain**

While the roadway improvements are not located within the floodplain, portions of the stream restoration and plantings will be located within the floodplain. However per Section 18.775.020 C2, stream and wetland restoration and enhancement programs performed under the direction of the City are exempt from the sensitive lands provisions.

#### **18.775.070D. Within drainageways.**

The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit within drainageways based upon findings that all of the following criteria have been satisfied:

1. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than that required for the use;

The applicant has conducted an alternatives analysis for the project that demonstrates that the proposed impacts are the minimum practicable for the project goal (Attachment 6). In addition to selecting the most feasible and least impacting road alignment, impacts are further reduced by removing much of the planter strip along the south side of the road to maintain as great a distance as possible from the resource. Phase 1 of the project was recently redesigned to reduce the impacts on sensitive lands to minimize disturbances to the greatest extent possible given the project requirements. The length of the proposed roadway was reduced from 425 feet to 350 feet, thus reducing the vegetated corridor impacts for Phase 1 from 24,274 sf to 18,429 sf (0.42 acres). The proposed vegetated corridor impacts are summarized in the file (Attachment 11, Figure 1). The redesigned Phase 1 also includes a retaining wall along the eastern edge of the Fanno Pointe Condos access to minimize the amount of vegetated corridor and wetland impact. A vegetated corridor mitigation plan has been approved by Clean Water Services as part of the issued Service Provider Letter. This criteria is satisfied.

2. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property;

The applicant has submitted an erosion control plan (refer to Attachment 4D) with final construction documents which includes erosion control features and notes that the erosion control measures shall comply with Erosion Prevention and Sediment Control Planning and Design Manual developed by Clean Water Services (CWS) and Field Manual for Erosion & Sediment Control prepared by ODOT. The erosion plan will address temporary and immediate effects of the construction process. The standards noted above will be adhered to during the project, or CWS may issue a stop work order until any noted problems are corrected. In addition, a planting vegetative plan meeting CWS standards (Attachment 11) will be implemented for the long term protection from soil migration.

Condition: The project will additionally meet the erosion control and water quality conditions contained in the DSL and Corps of Engineers wetland permits and in the water quality certification issued by the Department of Environmental Quality as part of the Corps of Engineers permit. Erosion control

measures shall comply with Erosion Prevention and Sediment Control Planning and Design Manual developed by Clean Water Services and the Field Manual for Erosion & Sediment Control prepared by ODOT.

**3. The water flow capacity of the drainageway is not decreased;**

Approximately 550 linear feet of new stream channel will be reconstructed to mitigate for the appropriate 270 linear feet of Pinebrook Creek to be impacted. As part of the Library project (and Hall Blvd. widening), basin hydrology and culver hydraulics were investigated to set the parameters for continuing stream relocation. Currently, the stream is twice culverted (24" pipe) for a length of 170 feet and not designed for fish passage. The reconfigured stream will be culverted once (57" X 38" pipe-arch for a distance of 65 feet) at the same design capacity as the Hall Blvd culvert (to carry 25-yr flows) and will meet fish passage requirements. Waterflow calculations for the Pinebrook culvert at the Fanno Pointe access were made using the Hall Boulevard flows to determine the runoff contributing to the culvert. The water surface profile plan created using the HEC-RAS river modeling program (Attachment 14 – memo from DeHass and Associates dated Dec. 2, 2005) shows the hydraulic grade line for both 2 year fish passage and 25 year storm flows would be accommodated by a 36" culvert. Given the increased capacity of removing the two smaller culverts and adding a larger (57" X 38") culvert, the application demonstrates that the water flow capacity will no be decreased by proposed improvements. This criterion has been satisfied

**4. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in accordance with Chapter 18.745, Landscaping and Screening;**

The applicant has provided an erosion control and vegetated corridor mitigation/planting plan that addresses such measures as approved by CWS and the City of Tigard Engineering. The Phase 1 vegetated corridor replacement area is located both west and east of Fanno Creek and totals 18,829 sf. Plant quantities for this area include 482 trees and 2,411 shrubs. Disturbed areas will be planted upon completion of the construction phase. This criterion has been satisfied.

**5. The drainageway will be replaced by a public facility of adequate size to accommodate maximum flow in accordance with the adopted 1981 Master Drainage Plan;**

The new culvert and remaining open channel of the reconfigured Pinebrook Creek have been designed to carry 25-year flows along with provisions for intermittent flooding into adjacent wetlands. As stated in 18.775.070 D3, the stream which is currently twice culverted (24" pipe) for a length of 170 feet will be culverted once (57"X38" pipe-arch) at a distance of 65 feet and will meet fish passage requirements. The Library project included a 30-foot wide by 100-foot long stormwater treatment swale that was constructed to accommodate the additional Wall Street impervious surface runoff, maintaining the same characteristics and capacity. Water quality calculation for the Library Project with Wall Street including swale dimensions and design parameters are included in the file (Attachment 13, Stormwater Report, Appendix D).

**6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained;**

The applicant has shown approvals from Clean Water Services (#4203), U.S. Army Corps of Engineers (Corps #200300137), and the Oregon Division of State Lands (DSL #31719-RF) approvals for both phases of this project. This criterion has been met.

**7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the Comprehensive Plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian bicycle pathway plan.**

The property is owned by the City and has been dedicated as greenway. This project will connect the recently constructed segment of the Fanno Creek Trail on the library site with the existing segment of trail along the east side of the Fanno Pointe Condos. The conditions related to trail construction satisfy the requirements of this criterion.

**18.775.070E. Within wetlands.**

The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:

**1. The proposed land form alteration or development is neither on wetland in an area designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map nor is within the vegetative corridor established per "Table 3.1 Vegetative Corridor Widths: and "Appendix C: Natural Resources Assessments" of the CWS "Design and Construction Standards," for such a wetland;**

The proposed encroachments will in fact impact the vegetated corridor and wetland resources identified as significant on the "Wetlands & Stream Corridor" map, thus the applicant has applied for a comprehensive plan amendment as provided for in TDC 18.775.130. In doing so, these criteria will not apply to those impact areas. The remainder of the wetlands and vegetative corridor that are beyond the project impact area will not be subject to landform alteration. Due to the proposed encroachments and proximity of construction activities to the significant wetlands and vegetated corridor, construction boundaries shall be clearly defined in order to minimize disturbance of these areas.

**2. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;**

The applicant has conducted an alternatives analysis for the project that demonstrates that the proposed impacts are the minimum practicable for the project goal (Attachment 6). In addition to selecting the most feasible and least impacting road alignment, impacts are further reduced by removing much of the planter strip along the south side of the road to maintain as great a distance as possible from the resource. As stated previously, the length of the proposed roadway improvement was 425 feet to 350 feet in order to avoid development within the 100-year floodplain. In addition, a retaining wall along the eastern edge of the condominium access was added to reduce the amount of wetland impact to the minimum. The total wetland impact area for Phase 1 was reduced from 0.25 acre to 0.11 acre. A wetland mitigation plan has been approved by the U.S. Army Corps of Engineers and the Oregon Department of State Lands.

**3. Any encroachment or change in on-site or off-site drainage which would adversely impact wetland characteristics have been mitigated;**

The applicant has provided a delineation of the wetland and a compensatory wetland mitigation plan, and has gained approval of a mitigation plan from U.S. Army Corps of Engineers and the Oregon Department of State Lands. The design of the reconfigured Pinebrook Creek will maintain wetland hydrology, and additionally stormwater treated by the water quality facility on the library site will be discharged into the wetland area to maintain its hydrologic characteristics and ensure that wetlands are not adversely effected by development.

Condition: The applicant shall carry out the wetland/vegetated corridor mitigation plan as approved with conditions by the Oregon Department of State Lands (DSL), U.S. Army Corps of Engineers and Clean Water Services.

**4. Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in accordance with Chapter 18.745, Landscaping and Screening;**

The applicant has provided an erosion control and wetland mitigation/planting plan that addresses such measures as approved by CWS and the City of Tigard Engineering Department. Phase 1 mitigation will consist of wetland creation (0.08 acres), wetland enhancement (0.29 acres) and wetland restoration (0.20 acres). A detailed plantings plan meeting CWS standards are contained in the file (Attachment 11). Disturbed areas will be planted upon completion of the construction phase. This criterion has been satisfied.

**5. All other sensitive lands requirements of this chapter have been met;**

All remaining sensitive lands requirements of the Sensitive Lands chapter can be achieved as indicated in

the proceeding analysis. This criterion has been satisfied.

6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained;

The applicant has shown approvals from Clean Water Services (#4203), U.S. Army Corps of Engineers (Corps #200300137), and the Oregon Division of State Lands (DSL #31719-RF) approvals for both phases of this project. This criterion has been met.

7. The provisions of Chapter 18.790, Tree Removal, shall be met;

An arborist report is included in the file (Attachment 9) Tree Removal provisions are addressed later under Chapter 18.790 in this report.

8. Physical Limitations and Natural Hazards, Floodplains and Wetlands, Natural Areas, and Parks, Recreation and Open Space policies of the Comprehensive Plan have been satisfied.

These policies will be addressed later in this report under Comprehensive Plan Policies. Physical Limitations and Natural Hazards and Wetlands are addressed under Policy 3.1, Floodplains are addressed under Policy 3.2, Natural Areas are addressed under Policy 3.4, and Parks, Recreation and Open Space are addressed under Policy 3.5.

**18.775.090. Special Provisions for Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and South Fork of Ash Creek.**

A. In order to address the requirements of Statewide Planning Goal 5 and the safe harbor provisions of Goal 5 administrative rule pertaining to wetlands, all wetlands classified as significant on the City of Tigard "Wetlands and Streams Corridors Map" are protected. No land form alternations or developments are allowed within or partially within a significant wetland, except as allowed/approved pursuant to Section 18.775.130.

The proposed roadway improvements for Phase 1 will impact 0.11 acres of wetlands designated as significant on the "Wetlands and Streams Corridor Map". The applicant has applied for a Comprehensive Plan Amendment under a Type IV procedure to remove Goal 5 protections from this area. The amendment criteria are addressed later in this report.

B. In order to address the requirements of Statewide Planning Goal 5 and the safe harbor provisions of Goal 5 administrative rule pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top bank is established for the Tualatin River, Fanno Creek, Ball Creek, and South Fork of Ash Creek.

~~The proposed roadway improvements for Phase 1 will impact 0.42 acres of vegetated corridor~~ designated as significant on the "Wetlands and Streams Corridor Map". The applicant has applied for a Comprehensive Plan Amendment under a Type IV procedure to remove Goal 5 protections from this area. The amendment criteria are addressed later in this report.

**18.775.130. Plan Amendment Option**

Any owner of property affected by the Goal 5 safeharbor (1) protection of significant wetlands and/or (2) vegetated areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek may apply for a quasi-judicial comprehensive plan amendment under Type IV procedure. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove Goal 5 protection from the property, but not to remove the requirements related to the CWS Stormwater Connection Permit, which must be addressed separately through an Alternatives Analysis, as described in Section 3.02.5 of the CWS Design and Construction Standards. The applicant shall demonstrate that such an amendment is justified by either preparing an Environmental, Social, Economic and Energy (ESEE)

consequences analysis prepared in accordance with OAR 660-23-040 or by determining that the resource is “insignificant”:

The applicant has submitted an ESEE analysis that adheres to the requirements of OAR 660-23-040. This analysis is contained in Attachment 7 of the file.

**1. The analysis shall consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and the comparison with other comparable sites within the Tigard Planning Area;**

The ESEE analysis was developed to address Phase 1 of the proposed Wall Street project. The applicant’s analysis uses the tabular format that has been utilized by the Tualatin Basin Partners for Natural Places (the Goal 5 alliance of local governments in Washington County) which contains three scenarios; Allow, Limit, and Prohibit. The ESEE analysis follows an alternatives analysis (attachment 6) that compares other comparable sites in the planning area. The final alignment was recommended by project biologists to both minimize impacts and allow for mitigation opportunities. Once the preferred option was determined, the ESEE analysis (attachment 7) examines more thoroughly the impacts of allowing the conflicting use, identified as Alternative 2a (Connect Wall Street to Hall Boulevard at the south side of the Tigard Library Site); limit the conflicting use identified as Alternative 9 (Connect Wall Street to Hall Boulevard at the same location as the preferred alternative and shift the remaining roadway northerly to minimize impacts to Pinebrook Creek); and prohibiting the conflicting use (no build alternative).

**2. The ESEE analysis must demonstrate to the satisfaction of the Tigard City Council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;**

The summary of conclusions from the ESEE analysis argues that a strict “prohibit” decision would result in strong economic, social and energy consequences. In addition to the improved (and safer) access to the Tigard Public Library and Fanno Pointe Condos, the extension of Wall Street is identified in the Tigard Transportation System Plan for its importance to the City’s overall infrastructure. “Economic consequences including the continued degradation of the transportation system and the levels of service at nearby intersections. Undesirable social consequences stem from gridlock during peak hours. The energy consequences are most obvious when traffic is at a stand still and burn fuel while idling. In addition, increased energy costs to car operators, commercial and industrial traffic is a dual consequence. Both economic and energy costs result.”

The applicant did not identify as a positive consequence of the “limit” alternative that it may result in increased property values (for adjacent landowners) due to the increased ability to gain enhancement or restoration through mitigation, increased access to the Fanno Creek Trail, and safer vehicle access to the sites. However, the analysis identifies positive social consequences of the “limit” alternative which include reduction of potential loss of passive recreational and educational opportunities, scenic benefits, change to area character and improved road safety.

**FINDINGS:** Staff finds that the application presents sufficient evidence justifying the requested comprehensive plan amendment and reconfiguration of the natural resource. The alternatives analysis identifies nine feasible road alignment options and a final proposed alignment recommended by project biologists to both minimize impacts and allow for mitigation opportunities (refer to Attachment 6). As stated earlier, Phase 1 of the Wall Street extension was recently redesigned to reduce the impacts on sensitive lands to minimize disturbances to the greatest extent possible given the project requirements.

The Biological Assessment prepared by Fishman Environmental Services asserts that extensive modifications have been made to the historic conditions of Pinebrook Creek in the project area (from the culvert under Hall Blvd. to its confluence with Fanno Creek). Negative impacts to downstream hydrology and water quality has resulted from past development, straightening and shortening of the stream channel causing bank erosion and channel alterations to Pinebrook Creek between Hall Blvd. and Fanno Creek. The Biological Assessment prepared by Fishman Environmental Services found that the associated man-made ponds adversely affect the downstream water quality of Fanno Creek and the Pinebrook Creek is currently impassable at its confluence with Fanno Creek.

This assessment found that "long term benefits of the project include improvement of fish and wildlife habitat through restoration and enhancement of the altered lower Pinebrook Creek stream channel and associate wetlands, removal of invasive and noxious species, and reconnection of Pinebrook Creek with Fanno Creek to provide fish passage." Although the assessment concedes that the removal of the on-line ponds may result in minor decreases to wildlife habitat value for some species, reconfiguring them into wetland habitat will provide a long-term net benefit to water quality and fish habitat. The report concludes that completion of the proposed mitigation activities (including the reconfiguration of Pinebrook Creek and wetlands) will create the capability for proper functioning at the site, and will likely result in an increase in the total area of properly functioning habitat available.

**3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning area that can meet the specific needs of the proposed use;**

To understand this issue fully, one must consider the requirements of the Transportation System Plan (connect SW Hall to SW Hunziker for east west connectivity, refer to the DKS Memo on Linkages between Hall, Hunziker and Dartmouth, Attachment 17), ODOT requirements on access spacing and the need for consolidating access on the State Highway, and the design constraints for providing adequate stacking length for left turn movements both into the library site, and onto SW Hall Boulevard (attachment 12).

As part of granting approval for the Fanno Pointe Condos and Tigard Library, ODOT required that once necessary approvals had been obtained, and the street constructed, both projects would take access from Wall Street and not Hall Boulevard. The temporary driveway to the library would be removed as part of the construction process of building Wall Street, and the temporary access to the condo project would be closed off.

To handle the traffic needs for these two projects, the applicant submitted a study analyzing the amount of turning lane stacking distance needed. Staff asked that the applicant specifically to look at the limited impacts of these two traffic generators, instead of the total demand for a fully connected street, to assess ways to minimize the initial impacts to the resource area. According to the traffic memo provided in Attachment 12, a 100 foot long westbound left-turn lane should be provided along Wall Street with a 100-165 foot transition zone east of the turn lane. The redesigned improvements will provide 300-feet to accommodate this left-turn lane and a left-turn refuge for eastbound access to the Library and a transition between the two left-turn lanes.

Considering the competing goals of resource protection and the need for permanent joint access into the library and Fanno Pointe Condos (as well as ultimately possibility of an east-west connection between SW Hall and SW Hunziker) it is clear why the use cannot be located on sites identified in the buildable land inventory. First, there is no land designated as buildable between the library and condominium properties.

that could accommodate the joint accessway. Second, to have any connection between SW Hall and SW Hunziker south of City Hall, a crossing of Fanno Creek is inevitable. As stated above, the applicant examined 9 alternative alignments to minimize the impact to habitat, the floodplain, and wetlands. There are no other sites within the planning area that could accommodate the specific needs of the proposed use.

4. The ESEE analysis shall be prepared by a team consisting of a wildlife biologist or wetlands ecologist and a land use planner or land use attorney, all of whom are qualified in their respective fields and experienced in the preparation of Goal 5 ESEE analysis;

According to the applicant's narrative, the analysis was performed by a team from Fishman Environmental Services (FES) consisting of Stacy Benjamin (a wetland ecologist and wetland/environmental assessment project manager with a M.S. in Ecology and Evolution), and Dan Stark (a land use planner that is certified by the American Institute of Certified Planners). [FES completed the original City of Tigard Local Wetlands Inventory that resulted in the Sensitive Lands Overlay Zone, and FES staff has completed at least 20 Goal 5 projects in the State of Oregon since the early 1990's, many of which included ESEE elements.]

5. If the application is approved, then the ESEE analysis shall be incorporated by reference into the Tigard Comprehensive Plan, and the "Tigard Wetland and Stream Corridor Map" shall be amended to remove the site from the inventory.

The applicant has submitted mapping materials including updated natural resource site locations based upon site-specific delineations of natural resources and professional land surveying. These materials may be used to update the City's sensitive lands overlay and be submitted to Metro to update regional GIS layers.

FINDINGS: Based on the analysis above, staff finds that the applicant has satisfied the applicable review criteria contained in Chapter 18.775 of the Tigard Development Code.

#### 18.790 Tree Removal

##### 18790.030 Tree Plan Requirement.

A. Tree plan required. A tree plan for the planting, removal and protection of trees prepared by a certified arborist shall be provided for any lot, parcel or combination of lots or parcels for which a development application for a subdivision, partition, site development review, planned development review or conditional use is filed.

B. The tree plan shall include the following: the location, size and species of all existing trees designated as significant; a program to save existing trees or mitigate tree removal over 12" in caliper; trees which are proposed to be removed, and; protection program defining standards and methods used by the applicant to protect the trees.

A plan for tree planting, removal and protection is not required since the applicant has filed for a comprehensive plan amendment and not a subdivision, partition, site development review, planned development or conditional use. However, the applicant has submitted a Tree Plan (Attachment 9c) prepared by Steven Goetz, a registered consulting arborist with the Pacific Resources Group, that identifies the location, size and species of existing trees; a program to save or mitigate for the trees, and protection standards and methods. The application includes an Arborist Report (on Phase 1 and 2 of the project) a tree assessment, a tree removal plan, a wetland mitigation/planting plan, an upland buffer planting plan and planting tables. This plan identifies 44 trees greater than 6" diameter. The applicant is

requesting removal of 9 trees greater than 12 inches in caliper size. As described previously, some of these trees are in sensitive lands areas and require permits to remove. The following table provides a summary:

Trees 6" or greater proposed for removal: Total = 19 trees (over 12" = 9 trees)

#3 (10" hawthorn)	#15 (26" locust)
#4 (12" hawthorn)	#21-25 (hawthorn cluster 5@12")
#6 (8", 6", 6" olive)	#27 (12" alder)
#8 (31" cedar)	#34 (8" ash)
#9 (32" cedar)	#35-36 (8", 12" ash)
#10 (10" locust)	#37 (18" ash)
#11 (10" locust)	#38 (15" ash)
#12 (9" locust)	#46 (10" locust)
#13 (6", 11" locust)	#47 (10" locust)
#14 (10" locust)	

Trees 6" or greater identified as Dead or Hazard: Total = 10 trees

#5 hazard, no permit required)	#31 (hazard, no permit required)
#7 (hazard, no permit required)	#33 (hazard, no permit required)
#17 (hazard, no permit required)	#39-40 (hazard, no permit required)
#20 (hazard, no permit required)	#50 (hazard, no permit required)
#26 (hazard, no permit required)	#53 (hazard, no permit required)

Trees 6" or greater proposed to be saved: Total = 15 trees (over 12" = 9 trees)

#18 (10" cedar)	#44 (19" birch)
#19 (14" fir)	#45 (10" locust)
#28 (12" crabapple)	#48 (16", 11", 11", 10", 10" willow)
#29 (15" willow)	#49 (14" alder)
#30 (20" ash)	#51 (10" willow)
#32 (12" ash)	#52 (9", 7", 6", 6", 5", 4" willow)
#41 (8", 6" hawthorn)	#54 (24" alder)
#42 (9", 8", 3", 3", 3" hawthorn)	

Total #of trees: 44

Total # of trees over 12" proposed for removal: 9

Total # of trees over 12" to be saved: 9

% of trees >12" retained: 50%

Total caliper inches removed: 182"

Required mitigation: 91"

B2c. Retention of 50% to 75% of existing trees over 12 inches in caliper requires that 50 percent of the trees to be removed be mitigated.

For the purposes of calculating the amount of required mitigation, the total number of trees that are greater than 12 inches diameter is 18. Nine of these trees (50%) are proposed for removal. The total number of caliper inches represented by this removal is 182 caliper inches. The amount of mitigation required is based on 50 percent of the total caliper inches removed, which equals 91 caliper inches.

The applicant's planting plan proposes mitigation that significantly exceeds the minimum requirement. The plan calls for replanting 336 caliper inches versus the 91 caliper inches required to be mitigated. This criterion is satisfied.

**18.790.050 Removal permit required.** Tree removal permits shall be required only for the removal of any tree which is located on or in a sensitive land area as defined by Chapter 18.775. The permit for removal of a tree shall be processed as a Type I procedure, as governed by Section 18.390.030, using the following approval criteria:

The Arborist Report indicates that 12 of the trees proposed for removal are within the sensitive land area and thus requires a tree removal permit. Of these trees, four are identified as hazardous, two are non-native species and 4 are 12" or less in diameter.

1. Removal of the tree must not have a measurable negative impact on erosion, soil stability, flow of surface waters or water quality as evidenced by an erosion control plan which precludes:

a. Deposits of mud, dirt, sediment or similar material exceeding 1/2 cubic foot in volume on public or private streets, adjacent property, or into the storm and surface water system, either by direct deposit, dropping, discharge or as a result of the action of erosion;

b. Evidence of concentrated flows of water over bare soils; turbid or sediment-laden flows; or evidence of on-site erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on site using the techniques of Chapter 5 of the Washington County Unified Sewerage Agency Environmental Protection and Erosion Control rules.

The applicant has submitted an erosion control plan (refer to Attachment 4D) with final construction documents which includes erosion control features and notes that the erosion control measures shall comply with Erosion Prevention and Sediment Control Planning and Design Manual developed by Clean Water Services and Field Manual for Erosion & Sediment Control prepared by ODOT. The erosion plan will address temporary and immediate effects of the construction process. The standards noted above will be adhered to during the project, or CWS may issue a stop work order until any noted problems are corrected. In addition, a planting vegetative plan meeting CWS standards (Attachment 11) will be implemented for the long term protection from soil migration.

2. Within stream or wetland corridors, as defined as 50 feet from the boundary of the stream or wetland, tree removal must maintain no less than a 75% canopy cover or no less than the existing canopy cover if the existing canopy cover is less than 75%.

The applicant is proposing to remove 9 viable trees, totaling 182 caliper inches, from the sensitive lands area to accommodate the roadway, and grading necessary to reconfigure Pinebrook Creek. To compensate for these removals, the area will be enhanced by replanting 104 big leaf maples, 108 Douglas firs, 29 Oregon white oaks, and 1,207 shrubs. The letter from Fishman Environmental Services (Attachment 9e in the file) states that current canopy cover in the area is 40% and that plantings within the stream and wetland corridor will result in a canopy cover greater than 40% within the a few years after plant establishment. The total 10-year canopy cover estimated for these plantings is 86,322 sf and the planting area of proposed mitigation is 24,142 sf. In addition to the trees that will repopulate the area, a variety of shrubs will be planted to provide a dense foliage cover around the stream to provide the benefits of shade which in turn will help regulate thermal pollution into Fanno Creek.

**FINDING:** Based on the analysis above, staff finds that the applicant has satisfied the applicable review criteria contained in Chapter 18.790 of the Tigard Development Code.

**Chapter 18.795. Vision Clearance:**

**18.795.040 B. Obstructions prohibited.** A clear vision area shall contain no vehicle, hedge, planting, fence, wall structure or temporary or permanent obstruction (except for an occasional

utility pole or tree), exceeding three feet in height, measured from the top of the curb, or where no curb exists, from the street center line grade, except that trees exceeding this height may be located in this area, provided all branches below eight feet are removed.

Based on the present development and the proposed improvements, there are no current or proposed obstructions within the vision clearance area.

**18.795.040 A. Arterial streets.** On all designated arterial streets the visual clearance area shall not be less than 35 feet on each side of the intersection.

SW Hall Boulevard is designated as an arterial, therefore the more stringent standards will apply to both streets. The road extension plan (Attachment 4C) shows 35-foot clear view triangles to provide visual clearance at both corners of the intersection of Wall Street and Hall Blvd.

**FINDING:** Based on the analysis above, staff finds that the applicant has satisfied the applicable review criteria contained in Chapter 18.795 of the Tigard Development Code.

#### **Chapter 18.810. Street and Utility Improvements:**

The relevant portions of this chapter for this project are limited primarily to the required street width. Section 18.810.030.

##### **18.810.030. Streets**

###### **A. Improvements**

The purpose of Phase 1 of the Wall Street extension is to provide access to the Tigard Library and the Fanno Pointe Condominiums. The extension of Wall Street is identified in the Transportation System Plan (TSP), a subdocument to the City's Comprehensive Plan. Subsequent phases are intended to extend SW Wall Street from Hall Blvd, east to the existing Wall Street east of the railroad.

###### **B. Creation of Rights-of-way**

The right of way will be created through a deed of dedication with the construction of the proposed roadway extension.

###### **E. Minimum rights-of-way and street widths**

This provision specifies that for 3 lane collector streets with bike lanes in residential areas, a minimum 70 foot wide section is required. The applicant is proposing a 72 foot wide right of way to accommodate an additional 2 feet for a wider center turn lane. In one section on the south side of the road, the applicant is proposing to construct a curb tight sidewalk to lessen the degree of impact on the vegetative buffer. This is allowable through 18.810.070 which provides "A planter strip separation of at least five feet between the curb and the sidewalk shall be required in the design of streets, except where the following conditions exist...there are significant natural features (large trees, water features, etc) that would be destroyed if the sidewalk were located as required." In this case, additional impacts to the sensitive lands would result from providing this planter strip area. By constructing the sidewalk without the planter strip, this area can be "transferred" to the opposite side of the sidewalk and planted with materials that will be consistent with a vegetative corridor.

###### **F. Future street plan and extension of streets**

Subsequent phases of the extension of Wall Street beyond the 350-feet proposed with this project intend to extend the street across Fanno Creek to connect with Wall Street east of the railroad as identified in the Tigard Transportation System Plan.

###### **H. Street alignments and connections**

Phase 1 of the Wall Street extension is intended to provide access to the Tigard Library and Fanno Pointe Condominiums.

###### **N. Grades and curves**

According to the Plan and Profile map (Attachment 4) showing the proposed street improvements, grades

for Phase 1 of the Wall Street extension will not exceed 7%, below the standard of 12% for collector streets.

**Q. Access to arterials and collectors**

The project will moving access to the Tigard Library and Fanno Pointe Condominiums off of Hall Blvd, which is an arterial and onto Wall Street which is a collector without through traffic.

**AC. Traffic Study**

This application includes a traffic study of impacts for this proposed Wall Street extension.

The standards for street improvements are met.

**18.810.050. Easements**

The applicant has indicated that easements for the utilities and roadway improvements will be provided as necessary.

**18.810.070. Sidewalks**

Improvements proposed for this project include 6-foot wide sidewalks on both sides of the street. Due to significant natural features along the south side of the roadway, much of the planter strip was removed from the south side of the street.

**18.810.080. Public Use Areas**

This Wall Street extension will provide access to the Tigard Public Library and connect the north and south segments of the Fanno Creek Trail.

**18.810.100. Storm Drainage**

The Library project included a 30-foot wide by 100-foot long stormwater treatment swale that was constructed to accommodate the additional Wall Street impervious surface runoff, maintaining the same characteristics and capacity. Water quality calculation for the Library Project with Wall Street including swale dimensions and design parameters are included in the file (Attachment 13, Stormwater Report, Appendix D).

**18.810.110. Bikeways and Pedestrian Pathways**

The project includes 6-foot wide bike lanes on both sides of Wall Street as required for collector streets. Also, the segments of the Fanno Creek Trail located north and south of the site will be connected providing bicycle and pedestrian access to this pathway.

**FINDING:** Based on the analysis above, staff finds that the applicant has satisfied the applicable review criteria contained in Chapter 18.810 of the Tigard Development Code.

**City Comprehensive Plan Policies**

A review of the comprehensive plan identified the following relevant policies for this application:

**Policy 2 – Citizen Involvement**

**2.1.1 The City shall maintain an ongoing citizen involvement program and shall ensure that citizens will be provided an opportunity to be involved in all phases of the planning process.**

This policy has been met by complying with the Tigard Development Code notice requirements set forth in Section 18.390. Notice was mailed to all property owners within 500 feet of the project site and notice was additionally published in the Tigard Times prior to the hearing, including a property owners of record. After the Planning Commission public hearing, additional notice will be published prior to the City Council hearing. The date of the Council hearing was included in the original notice to property owners.

Two public hearings are held (one before the Planning Commission and the second before the City Council) at which an opportunity for public input is provided.

**2.1.3 The City shall ensure that information on land use planning issues is available in an understandable form for all interested citizens.**

Notice is provided in an understandable form, and contact information is provided for citizens if they have additional questions.

### **Policy 3 – Natural Features and Open Space**

#### **3.1 Physical Limitations and Natural Hazards and Wetlands**

The City shall not allow development in areas having the following development limitations except where it can be shown that established and proven engineering techniques related to a specific site plan will make the area suitable for the proposed development. (Note: This policy does not apply to lands designated as significant wetlands on the floodplain and wetlands map.):

- a. Areas meeting the definition of wetlands under chapter 18.26 of the Community Development Code;
- b. Areas having a severe soil erosion potential;
- c. Areas subject to slumping, earth slides or movement;
- d. Areas having slopes in excess of 25%; or
- e. Areas having severe weak foundation soils.

The area impacted by the proposed improvements include part of the vegetative corridor along Pinebrook Creek and wetlands. A field study was conducted on four test pits (in 100 foot intervals) along the Wall Street alignment and findings were summarized in the submitted Geotechnical Report (Attachment 10). Soils encountered in the study were interpreted as topsoil, alluvium, organic debris associated with swampy conditions, and micaceous silt and sand. The report provides design recommendations for site preparation, excavation, and the placement and compaction of all structural fill. Based on this report, there is no indication that the area has severe soil erosion potential, earth slumping, steep slopes, or weak foundation soils. The applicant has submitted final engineered drawings and a final geotechnical review (based on an evaluation of subsurface conditions on the site) which includes the design parameters for pavement structures (based on the number of equivalent 18-kip single axle loads), pavement sections and pavement materials for the proposed roadway. (Attachment 10). The applicant has presented required approvals for impacts to sensitive lands from Clean Water Services (#4203), U.S. Army Corps of Engineers (Corps #200300137), and the Oregon Division of State Lands (DSL #31719-RF) approvals for both phases of this project. The application has been reviewed through the sensitive lands procedures which address erosion control issues. The report covers the original proposed 425-foot Wall Street extension, which was recently shortened to 350-feet to avoid the floodplain.

#### **3.2 Floodplains**

**3.2.1 The City shall prohibit any land form alterations or developments in the 100-Year Floodplain which would result in any rise in elevation of the 100-Year Floodplain.**

The proposed roadway and watermain extension will not be located within the 100-year floodplain. Although portions of the stream restoration and plantings will be located within the floodplain, these restoration and enhancement activities to be performed under the direction of the City are exempt from the sensitive lands provisions per Section 18.775.020 C2.

Nevertheless, the application does include a hydraulic analysis (Attachment 14) prepared by DeHass and Associates, Inc. with a memo for Phase 1 of the Wall Street extension which certifies that the proposed improvements will "cause no-rise in Fanno Creek during a 100-year flood event."

**3.2.4 The City shall prohibit development within areas designated as significant wetlands on the floodplain and wetlands map. No development shall occur on property adjacent to areas designated as significant wetlands on the floodplain and wetlands map within twenty five (25) feet of the designated wetlands area. Development on property adjacent to significant wetlands shall be allowed under the planned development section of the code.**

As discussed in this application report, the Development Code provides a mechanism for removing the resources from the wetland map, through a Comprehensive Plan Amendment Type IV ESEE analysis. By successfully removing these resources from the inventory, this policy would not apply.

**3.2.3 Where land form alterations and development are allowed within the 100-year floodplain\* outside the zero-foot rise floodway\*, the City Shall Require:**

**b. Engineered drawings and/or documentation showing that there will be no detrimental upstream or downstream effects in the floodplain\* area, and that the criteria set forth in the sensitive lands section of the code have been met (See FIS September 1981);**

The Biological Assessment prepared by Fishman Environmental Services states that the project is not expected to increase erosion or flooding upstream or downstream of the project, due to the use of the water quality treatment facility (or bioswale) and energy dissipating rock pads to prevent erosion at the point of discharge.

**3.2.5 The City shall require the consideration of dedication of all undeveloped land within the 100-year floodplain plus sufficient open land for greenway purposes specifically identified for recreation within the plan.**

The property already belongs to the City and/or has been dedicated as greenway. This project will connect the recently constructed segment of the Fanno Creek Trail on the library site with the existing segment of trail along the east side of the Fanno Pointe Condos.

### **3.4 Natural Areas**

**3.4.1 The City shall designate, in accordance with Goal 5, the following as areas of significant environmental concern.**

- a. Significant wetlands;**
- b. Areas having educational research value, such as geologically and scientifically significant lands; and**
- c. Areas valued for their fragile character as habitats for plants, animals or aquatic life, or having endangered plant or animal species, or specific natural features, valued for the need to protect natural areas.**

These areas have been designated and are identified as being within sensitive land areas, primarily wetland and drainageways. The alternatives analysis states that the proposed alignment would impact the Pinebrook Creek riparian corridor and wetlands. Pinebrook Creek provides habitat for a variety of animals that are strictly aquatic, aquatic during one life stage, or highly dependent on the stream for life requisites. The pond has non-native mosquito fish, a variety of typical aquatic invertebrates, vascular aquatic plants and large amounts of algae (in summer). These impacts would reduce available habitat for aquatic invertebrates, frogs, water fowl, wading birds, and possibly turtles. The presence of a completed road

would introduce human activities that would have a disturbance effect on wildlife, resulting in reduced presence or activity of some wildlife species. The project proposes an upland buffer will be maintained adjacent to the wetland mitigation site and educational signs will be posted to request that the public avoid disturbing the area in order to increase the wildlife habitat function.

The Biological Assessment prepared by Fishman Environmental Services, includes a table (Table 1) summarizing the federally listed threatened and endangered species, candidate species, and species of concern potentially occurring in the Wall Street project area. Based on lists from the US Fish and Wildlife Service and the Oregon Natural Heritage Program. In 2003, Fishman staff visited the project site on four occasions to delineate wetlands, assess potential impacts, potential enhancement and mitigation areas, existing fish habitat conditions, and tour the site. In 2000, the Northwestern Pond Turtle, a federal Species of Concern (SOC) and a state critical (SC) species, was observed in the vicinity of the project site. The Biological Assessment indicates the project site contains "patches of suitable turtle habitat", however, it goes on to state that turtles have not been documented on site and were not observed during their field visits of the project site. This Assessment states that project design will include turtle conservation measure, will be part of the proposed project, such as creating a turtle barrier (of fencing or dense shrubbery) along the new road. The assessment also indicates that the proposed wetland and vegetated corridor mitigation will improve access and winter cover for turtles.

The recent redesign of Phase 1 will reduce the impacts on sensitive lands to minimize disturbances to the greatest extent possible given the project requirements. The length of the proposed roadway was reduced from 425 feet to 350 feet, thus reducing the vegetated corridor impacts for Phase 1 from 24,274 sf to 18,429 sf (0.42 acres). The proposed vegetated corridor impacts are summarized in the file (Attachment 11, Figure 1). The redesigned Phase 1 also includes a retaining wall along the eastern edge of the Fanno Pointe Condos access to minimize the amount of vegetated corridor and wetland impact. Currently, the stream is twice culverted (24" pipe) for a length of 170 feet and not designed for fish passage. The reconfigured stream will be culverted once (57"X38" pipe-arch for a distance of 65 feet) at the same design capacity as the Hall Blvd culvert (to carry 25-yr flows) and will meet fish passage requirements. The realigned stream will remove the two long culverts, and will follow the historic channel.

In general, the report concluded that the "potential for direct adverse effects resulting in significant or direct mortality of a listed species is minimal with this project. Any direct effects would likely be transitory and within the ability of both juveniles and adults to bypass or temporarily leave the proposed action area."

**FINDINGS:** Given the conclusions of the biological assessment and the fact that Phase 1 has been redesigned to minimize the impacts to significant wetland and riparian resources, staff finds that applicant has addressed the potential adverse effects to areas of significant environmental concern.

#### **3.4.2 The City shall:**

**a. Protect fish and wildlife habitat along stream corridors by managing the riparian habitat and controlling erosion, and by requiring that areas of standing trees and natural vegetation along natural drainage courses and waterways be maintained to the maximum extent possible;**

This policy is addressed through the sensitive lands chapter of the development code.

**d. Address Goal 5 rule Requirements pertaining to the preservation of wetlands once adequate information on the location, quality, and quantity of wetland sites is obtained. This Goal 5 review will include determining which wetland sites are ecologically and scientifically significant.**

Citizens will participate in making policy recommendations for the protection and preservation of those wetland areas designated as significant. The City shall complete its Goal 5 review of wetland areas before the City's next periodic review, but no later than December 23, 1996.

The inventory of wetland areas designated as significant within the City of Tigard was completed by Fishman Environmental Services in December of 1994.

### 3.5 Parks, Recreation and Open Space

3.5.3 The City has designated the 100-year floodplain of Fanno Creek, its tributaries, and the Tualatin River as Greenway, Which will be the backbone of the open space system. Where landfill and/or development are allowed within or adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area for greenway adjoining and within the floodplain.

The property already belongs to the City and/or has been dedicated as greenway. This project will connect the recently constructed segment of the Fanno Creek Trail on the library site with the existing segment of trail along the east side of the Fanno Pointe Condos.

3.5.4 The City shall provide an interconnected pedestrian/bikepath throughout the City.

This project will connect the recently constructed segment of the Fanno Creek Trail on the library site with the existing segment of trail along the east side of the Fanno Pointe Condos.

### Policy 4 – Air, Water, and Land Resources

4.2.1 All development within the Tigard Urban Planning Area shall comply with applicable Federal, State and Regional water quality standards, including those contained in the Clean Water Services' Design and Construction Manual. (Rev. Ord. 02-15)

Compliance with these standards is assured through obtaining permits from the appropriate regulating agencies. Such approvals have been obtained from Clean Water Services, Division of State Lands, and the US Army Corps of Engineers.

### Policy 7 – Public Facilities

7.1.1 The City shall:

- a. Prepare and implement a capital improvements program in conjunction with Washington County and the applicable service districts;
- b. Work with the service districts to provide a coordinated system for providing services;
- c. Provide urban services in accordance with the Comprehensive Plan to the extent of the City's financial resources;
- d. Use the capital improvements program as a means for providing for orderly growth and the efficient use of land;

These policies serve as the basis for the need for the Transportation System Plan (TSP), a subdocument to the City's Comprehensive Plan adopted by resolution 02-33 (effective on October 10, 2002). The TSP lays out the City's Transportation improvement needs over a 20-year planning period and directs where growth or capital projects shall occur, and allows adjacent jurisdictions to coordinate their infrastructure. The extension of SW Wall Street is identified in TSP.

### 7.2 Storm drainage and wastewater management

**7.2.1 The City shall require as a pre-condition to development that:**

**a. a site development study be submitted for development in areas subject to poor drainage, ground instability or flooding which shows that the development is safe and will not create adverse off-site impacts:**

The applicant has submitted detail development plans and has delineated the flood plain. The applicant's engineer has submitted a certification stating that there will be no rise in the base flood elevation, and as discussed previously, the construction will be designed to resist damage.

**b. Natural drainage ways be maintained unless submitted studies show that alternative drainage solutions can solve on-site drainage problems and will ensure no adverse off-site impacts;**

The applicant is proposing to realign Pinebrook Creek. While generally discouraged, the present alignment is the result of prior landforming activities that redirected the creek to a more northerly alignment. Currently, the stream is twice culverted (24" pipe) for a length of 170 feet and not designed for fish passage. The reconfigured stream will be culverted once (57"X38" pipe-arch for a distance of 65 feet) at the same design capacity as the Hall Blvd culvert (to carry 25-yr flows) and will meet fish passage requirements. The realigned stream will remove the two long culverts, and will follow the historic channel.

**c. All drainage can be handled on-site or there is an alternative solution which will not increase the off-site impact;**

A stormwater report prepared to evaluate the water treatment facility on the library site considers the drainage from the 1<sup>st</sup> Phase of the Wall Street extension. Drainage will be conveyed to a stormwater treatment facility and discharged into Fanno Creek.

**e. Erosion control techniques be included as a part of the site development plan.**

The applicant has submitted an erosion control plan (refer to Attachment 4D) with final construction documents which includes erosion control features.

## **Policy 8 – Transportation**

**8.1.1 Plan, design and construct transportation facilities in a manner which enhances the livability of Tigard by:**

**a. Proper location and design of transportation facilities.**

This Wall Street extension will provide access to the Tigard Public Library and connect the north and south segments of the Fanno Creek Trail. The facilities have been designed and reviewed by the City's Capital Improvement Division within the Engineering Department.

**b. Encouraging pedestrian accessibility by providing safe, secure and desirable pedestrian routes.**

The project includes 6-foot wide bike lanes on both sides of Wall Street as required for collector streets. Also, the segments of the Fanno Creek Trail located north and south of the site will be connected providing bicycle and pedestrian access to this pathway.

**c. Addressing issues of excessive speeding and through traffic on local residential streets through a neighborhood traffic program. The program should address corrective measures for existing problems and assure that development incorporates traffic calming.**

Not applicable to this application. Wall Street is classified in the Transportation System Plan (TSP) as a collector which is described as providing “both access and circulation within and between residential and commercial/industrial areas.” Phase 1 of the Wall Street extension will terminate west the Fanno Creek and is primarily intended to provide access to the Tigard Library and the Fanno Pointe Condominiums.

**8.1.2 Provide a balanced transportation system, incorporating all modes of transportation (including motor vehicle, bicycle, pedestrian, transit and other modes)**

The proposed roadway improvements will be consistent with the requirements for a “collector” as described in the TSP. Bicycle lanes, as well as motor vehicle and pedestrians are accommodated in the design.

**8.1.3 Strive to achieve a safe transportation system by the development of street standards, access management policies and speed controls when constructing streets and by making street maintenance a priority and through a comprehensive program of engineering, education and enforcement.**

These standards are achieved through the requirements in Chapter 18.810 of the development code.

**FINDING:** Based on the analysis above, staff finds that the proposed project has addressed the relevant policies contained in the Tigard Comprehensive Plan.

**METRO Framework Plan**

**Metro Functional Plan Title 3 – Water Quality, Flood Management, and Fish/Wildlife Habitat Conservation – protect beneficial uses and functional values of water quality and flood management resources by limiting uses in these areas. Establish buffer zones around resource areas to protect from new development.**

As stated earlier in the review of applicable Development Code criteria, the Code allows for flexibility for developments when they are adjacent to natural resource areas. This is in addition to the City’s, Clean Water Services, state and federal standards protecting natural resource areas. The Clean Water Services standards are intended to comply with Metro’s Title 3. The proposed development, therefore, does not conflict with Title 3 requirements.

**Metro Functional Plan Title 6 – Regional Accessibility (Regional Transportation Plan) – The RTP provides a regional plan for transportation improvements and requires City’s plans to be consistent. The RTP also provides plans for Transit, TDM and pedestrian mobility. The RTP replaces Metro Functional Plan Title 6.**

The City has adopted the Transportation System Plan which implements and adheres to the requirements of the Regional Transportation Plan.

**Metro Functional Plan Title 13 – Nature in Neighborhoods – conserve, protect, and restore a continuous ecologically viable streamside corridor system, from the streams’ headwaters to their confluence with other streams and rivers, and with their floodplains in a manner that is integrated with upland wildlife habitat and with the surrounding urban landscape; and control and prevent water pollution for the protection of the public health and safety, and to maintain and improve water quality throughout the region.**

Title 13 is part of the regional approach to implement Statewide Planning Goal 5. As part of the proposed project, wetlands, vegetated corridor and habitat were inventoried and delineated. An Environmental, Social, Economic and Energy (ESEE) analysis was conducted using the methodology compliant with the methods used by Metro and the Tualatin Basin Partners for Natural Places. Protections are in place via the development code restrictions. The applicant is proposing to amend the wetland inventory to remove the protection to the wetlands, and relocate the waterway. This is being done as a Comprehensive Plan Amendment per TDC Section 18.775.130 to remove the Goal 5 protections from the property. The review process also requires compensatory mitigation and reestablishment of the wetland area. Once the new wetland has been established, this will be added back into the inventory of protected sites. A thorough review by local (CWS), state (DSL), and federal (USACE) agencies has been conducted, and approvals have been issued from all three (Attachments 5 and 11).

As stated earlier in this report, the Biological Assessment prepared by Fishman Environmental Services found that completion of the proposed mitigation activities (including the reconfiguration of Pinebrook Creek and wetlands) will create the capability for proper functioning at the site, and will likely result in an increase in the total area of properly functioning habitat available.

**FINDING:** Based on the analysis above, staff finds that the proposed project has addressed the relevant policies contained in the Tigard Comprehensive Plan

### Statewide Planning Goals

#### *Statewide Planning Goal 1 – Citizen Involvement:*

This goal outlines the citizen involvement requirement for adoption of Comprehensive Plans and changes to the Comprehensive Plan and implementing documents.

This goal has been met by complying with the Tigard Development Code notice requirements set forth in Section 18.390. A notice was mailed to all property owners within 500 feet of the project site and the notice was additionally published in the Tigard Times prior to the hearing. After the Planning Commission public hearing, additional notice will be published prior to the City Council hearing. Two public hearings are held (one before the Planning Commission and the second before the City Council) at which an opportunity for public input is provided.

#### *Statewide Planning Goal 2 – Land Use Planning:*

This goal outlines the land use planning process and policy framework. The Comprehensive Plan was acknowledged by DLCD as being consistent with the statewide planning goals.

The Development Code implements the Comprehensive Plan. The Development Code establishes a process and policies to review changes to the Goal 5 Safe-harbor Rules consistent with Goals 2 and 5. The applicant's plan provides analysis and policies, with which to evaluate a request for amending the Code consistent with Goal 2. As discussed within this report, the proposed amendments comply with the Development Code and Comprehensive Plan criteria.

#### *Statewide Planning Goal 5 – Natural Resources*

Requires the inventory and protection of natural resources, open spaces, historic areas and sites suitable for removal and processing of mineral and aggregate resources.

This goal is met because the resources have been inventoried and delineated. Protections are in place via the development code restrictions. The applicant is proposing to amend the wetland inventory to remove

the protection to the wetlands, and relocate the waterway. This is being done as a Comprehensive Plan Amendment to remove the Goal 5 protections from the property through preparation of an Environmental, Social, Economic and Energy (ESEE) analysis. The review process also requires compensatory mitigation and reestablishment of the wetland area. Once the new wetland has been established, this will be added back into the inventory of protected sites. A thorough review by local (CWS), state (DSL), and federal (USACE) agencies has been conducted, and approvals have been issued from all three (Attachments 5 and 11).

***Statewide Planning Goal 6 – Air, Water and Land Resource Quality,***

This goal is intended to regulate all waste and process discharges into the air, water, or lands of the state. Waste and Process Discharges refers to solid waste, thermal, noise, atmospheric or water pollutants, contaminants, or products therefrom.

The proposal includes a long term erosion control component through its replanting plan, and temporary impacts to soils will be controlled during the construction process. Pollution control manholes and water quality swales will be incorporated into the project to reduce point source contaminants. The combination of these efforts will ensure that this goal is met.

***Statewide Planning Goal 11 – Public Facilities and Services***

This goal is intended to plan and develop a timely, orderly and efficient arrangement of public facilities to serve as a framework for urban and rural development.

The temporary accessways to the Tigard Public Library and Fanno Pointe Condos has been determined unsafe by not meeting ODOT spacing standards. The proposed Wall Street extension will enhance safety and access to the Tigard Public Library and connect the north and south segments of the Fanno Creek Trail.

***Statewide Planning Goal 12 - Transportation:***

This goal is intended to provide and encourage a safe, convenient and economic transportation system. This Goal is implemented by Oregon Administrative Rule 660-12, which is also known as the Transportation Planning Rule (TPR).

Chapter 18.810 of the development code was recently amended to ensure consistency with both the Transportation Planning Rule, and the adopted Transportation System Plan (TSP). The applicant's proposal is the first of two phases to complete a connection to SW Hunziker from SW Hall Boulevard, which is identified in the TSP. The city is obligated to pursue improvements identified in the TSP as part of its comprehensive traffic management program. Although, the primary purpose of this project is to consolidate the accessways into the Tigard Public Library and the Fanno Pointe Condominiums off of Hall Blvd., the applicant's request is also in part to implement the objective of the TSP. Since other obstacles exist that are outside the applicant's control (namely the inability to receive approval for an at grade crossing) which prevent full connection at this time, only the first phase is being proposed. This first phase also implements the principles of the TSP by consolidating accesses along the state highway arterial (SW Hall Boulevard).

**FINDING:** Based on the analysis above, staff finds that the proposed amendments do not violate applicable Statewide Planning Goals.

## State or Federal Regulations

### *Oregon Revised Statutes, ODOT Authority to Regulate Highways*

Oregon Revised Statutes Chapter 374 addresses ODOT's authority to control access to state highways. The requirement that access be consolidated for the Library and Fanno Pointe complies with these statutes generally.

Oregon Revised Statutes Chapter 196 addresses general wetland requirements within the state. These statutes are administered by Division of State Lands.

### *Federal Clean Water Act, section 404*

The clean water act is responsible for regulating impacts to wetlands and other navigable waters of the United States. The agency primarily responsible for implementing these federal statutes is the Army Corps of Engineers. The Corps has reviewed the proposal and issued an approval for wetland fill (Attachment 5).

## SECTION VII. OTHER STAFF COMMENTS

The City of Tigard Police Department Crime Prevention Officer has reviewed the proposal and has no objection to it. The Development Review Engineer and Public Works Project Engineer received copies of the proposal for review and submitted no comments or objections.

The City of Tigard Arborist has reviewed the proposal and has filed the following comments. Due to the fact that this area is so close to Fanno Creek and a substantial amount of land will be enhanced with native plants, I strongly recommend that any non-native trees be girdled and left standing (if safe to do so). The resulting snags will provide habitat, especially the invasive hawthorns.

**Response:** A condition will be set for the tree removal plan that any non-native trees shall be girdled and left as snags rather than removed to provide habitat in areas where there are no safety issues.

## SECTION VIII. AGENCY COMMENTS

The US Army Corps of Engineers has reviewed the proposal as part of the wetlands permit process and submitted conditions of approval (Corps #200300137) which are included with the application.

Metro – Land use and Planning was given the opportunity to review this proposal and submitted no comments or objections.

Oregon Department of State Lands has reviewed the proposal as part of the wetlands permit process and submitted conditions of approval (DSL #31719-RF) which are included with this application.

Oregon Department of Fish and Wildlife, Department of Land Conservation and Development, Department of Environmental Quality and Department of Transportation were given the opportunity to review this proposal and submitted no comments or objections.

Clean Water Services has reviewed the proposal as part of the vegetated corridor permit process and submitted conditions of approval (#4203) which are included with this application.

Washington County Department of Land Use & Transportation has reviewed the proposal and has no objection to it.

Comcast Cable Corp, Portland General Electric and NW Natural Gas Company were given the opportunity to review this proposal and submitted no comments or objections.

PREPARED BY: Denver Igarta  
Associate Planner

DATE

REVIEWED BY: Richard Bewersdorff  
Planning Manager

DATE

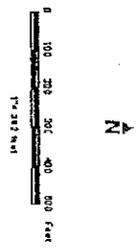
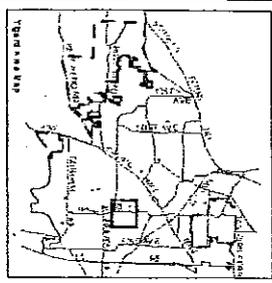


07-0115-00

**VICINITY MAP**

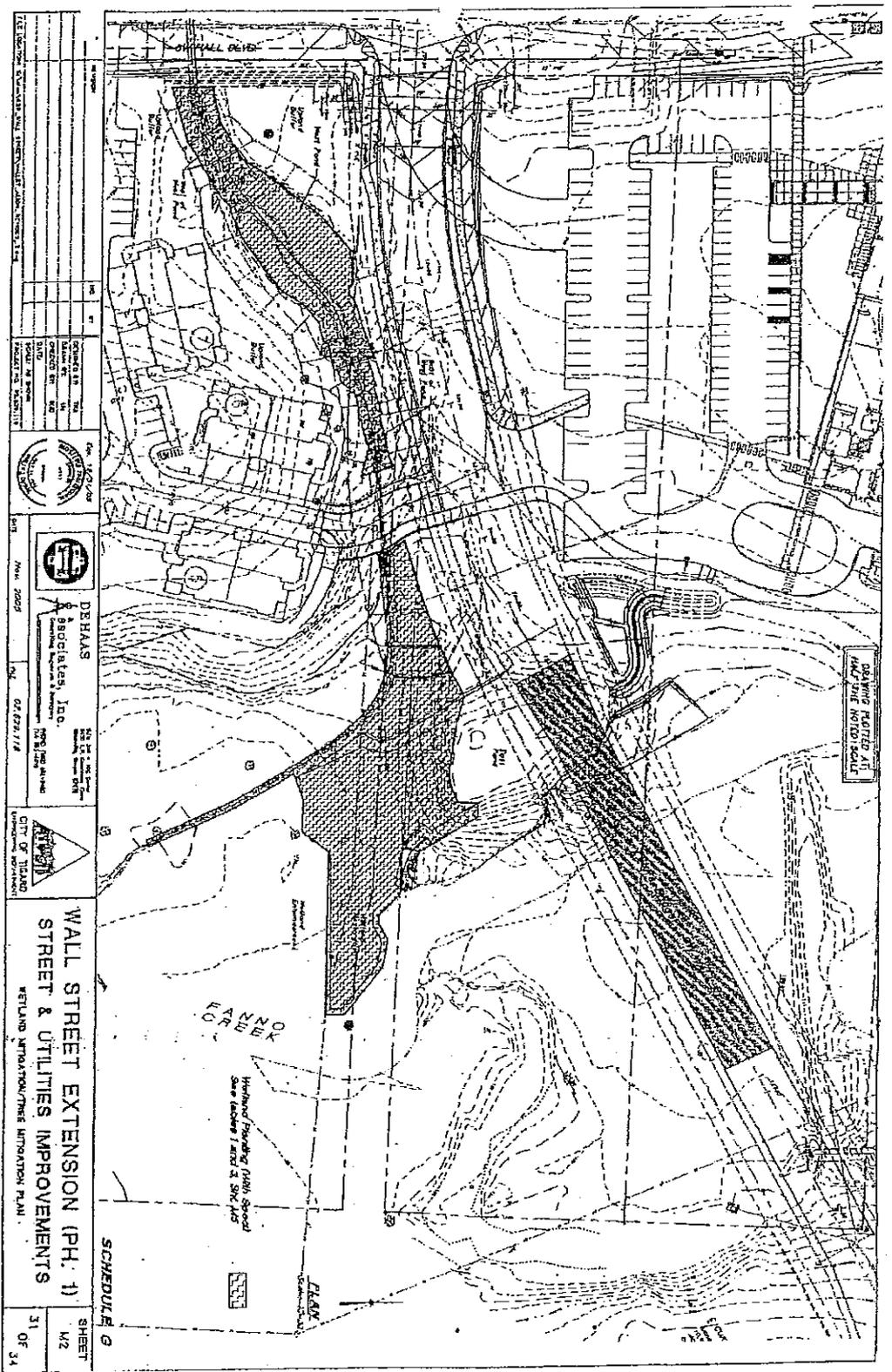
REGULATING INFORMATION SYSTEM

- CPA2004-00001
- SLR2004-00003
- SLR2006-00001
- TRE2006-00001-9
- WALL STREET EXTENSION
- WALL STREET EXTENSION



Information on this map is for general location only and should be verified with the Development Services Division, 15126 SW 40th Blvd, Tigard, OR 97123, (503)335-4111. Prepared by: City of Tigard

Plan date: Jan 20, 2006. City of Tigard





## MEMORANDUM

TO: Honorable Mayor and City Council

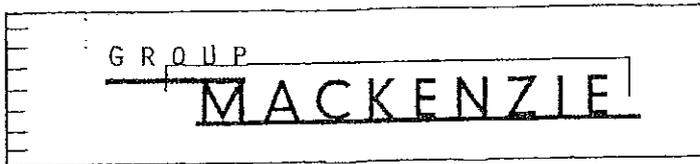
FROM: Denver Igarta

RE: Addendum to the Staff Report on SW Wall Street

DATE: April 25, 2006

After the staff report on the SW Wall Street extension was finalized and disseminated to members of the Planning Commission, the following factual errors were revealed.

1. Based on the application materials, the staff report indicates that the project proposes to extend SW Wall Street by 350 feet to the east of SW Hall Boulevard. Prior to the Planning Commission hearing, the applicant's representative alerted staff that the length of the proposed roadway was misstated in the project summary of their application. SW Wall Street will actually extend 360 feet to the east of SW Hall Boulevard. The maps, technical materials and impact calculations submitted in the application were not effected by the error in the project summary. This mistake was addressed and clarification was made during the public hearing before the Planning Commission on April 3, 2006.
2. In multiple places within the staff report (pages 5, 11, 23, & 25), the two existing Pinebrook Creek culverts planned for removal are classified as 24 inch pipe for a length of 170 feet. In actuality, the culverts include a 12 inch pipe for a length of 140 feet and an 18 inch pipe for a length of 10 feet.
3. The staff report addresses Metro' Regional Accessibility Policy, formerly Title 6 of the Urban Growth Management Functional Plan. This Policy was superceded by Metro's Regional Transportation Plan (RTP) when it was adopted in 2000. All of the requirements of Title 6 have been incorporated into Chapter 6 of the RTP.



April 17, 2006

City of Tigard  
Attention: Denver Igarta  
13125 SW Hall Blvd  
Tigard, OR 97223-8199

Re: Wall St  
Project Number 2050046

Dear Denver:

It is the project team's understanding that four letters have been submitted to date regarding the Wall Street Extension project (CPA 2004-0001 / SLR 2004-00003/SLR 2006-00001/TRE 2006-00001 - 00009). These letters are from The Biodiversity Project of Tigard, John Frewing, Leander Clifford, and Pamela Sigler. The letters identify similar areas of concern. As such, the following addresses the letters by grouping similar areas of concern and providing a response to each.

**Land Use Application Process:** Per the application narrative and the staff report, this application includes a Comprehensive Plan Amendment to remove Goal 5 protection from the wetlands impacted by the roadway improvements. A Sensitive Lands Review is required for impacts to the wetlands and drainageways and the proposed reconfiguration of the Pinebrook Creek and to approve the mitigation proposed for these impacts. Tree Removal permits are required for the removal of trees within the Sensitive Land Area. The Comprehensive Plan Amendment is a Type III-PC process, per Section 18.380.030 of the Code. As all of the applications have been submitted concurrently, the applications are elevated to the Type I process. No Conditional Uses are requested with this application.

Authorization from all property owners was obtained, and confirmed, as part of the submittal process. Federal Insurance Administration notification will occur after the appropriate City approvals have been obtained.

**Wall St Phase Clarification:** The land use applications define Phase I of Wall Street as the extension from Hall Blvd to 360 ft to the east. As no other portion of Wall Street exists at this time, the Phase I title is appropriate. However, in regards to the City's Capital Improvement Program, and the planned construction, the City's engineering department titled the signal improvements previously completed as Phase I. As such, with the construction documents for this Wall St extension, it may be titled Phase Ib and/or Phase II. Regardless, only 360 ft of Wall St is proposed at this time.

**Sensitive Lands :**

- 18.385.040: This application includes a Comprehensive Plan Amendment to remove the Sensitive Lands designation from the wetlands and other sensitive lands within the road

0690 SW Bancroft St | PO Box 69039 | Portland, OR 97239-0039  
Tel: 503.224.9560 Web: www.gpmack.com Fax: 503.228.1265

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Locations:  
Portland, Oregon  
Seattle, Washington  
Vancouver, Washington

City of Tigard  
Wall St  
Project Number 2050046  
April 17, 2006  
Page 2

alignment. With the approval of this application, the Wetland and Stream Corridor map will be modified.

- 18.775.020C.2: Section 775.020 concerns the applicability of uses requiring a Sensitive Lands Permit. The roadway is not located within the floodplain; however the proposal includes placing limited fill, road improvements, and utilities within a wetland area and a natural drainageway. In addition, wetland mitigation, including creation and enhancement is located within the floodplain. Per subsection 020C.2, stream restoration and plantings are permitted within the floodplain. Regardless, a Sensitive Lands Permit has been requested and no exemptions have been claimed.
- 18.775.070B.7 – This section requires the consideration of dedication of open land area within and adjacent to the floodplain that includes portions at a suitable elevation for pedestrian and bicycle pathways. Per the application and staff report, the project includes a segment of the Fanno Creek Trail and the dedication of greenway.

**100-year Floodplain:** Construction of the proposed Phase 1 of the Wall Street extension does not involve grading in the 100-year floodplain for the proposed roadway. Excavation is proposed in the 100-year floodplain to conduct the wetland mitigation activities. These activities will not result in the placement of fill in the floodplain or any rise in the elevation of the 100-year flood. The comment regarding “modify existing channel as per field engineering” refers to the fact that an SWCA biologist will be present in the field during the excavation of the new stream channel to connect Pinebrook Creek to Fanno Creek in order to minimize impacts to existing natural resources in the mitigation area.

**Wetland Assessment:** Wetland delineations for the Wall Street extension project area were conducted by several consultants in 2002 and 2003. These wetland delineations were submitted to the Oregon Department of State Lands (DSL) for review and approval, and DSL issued concurrence letters for the wetland delineations within the project area. The calculation of proposed wetland impacts was based upon the DSL-approved wetland delineation maps. The photos taken by Ms. Beilke showing ponding south of the East Pond are located outside the footprint of the Phase I road extension and show the vicinity of the proposed wetland mitigation area and associated Clean Water Services vegetated corridor. No loss of wetland is proposed in these areas.

Permit modifications have been received from the Corps and DSL for the currently proposed 360-foot length of Phase 1 of the Wall Street extension. The modified Corps permit was issued on March 8, 2006, and the modified DSL permit was issued on February 8, 2006.

**Clean Water Services:** The project design was revised to meet Clean Water Services standards, and the project has been approved by Clean Water Services (CWS File No. 4203). The Wall Street extension project as designed is not listed as an approved use by CWS, such as a road that crosses a vegetated corridor from one side to the other, as Ms. Beilke states. Therefore, the project was required to complete Clean Water Services’ Tier 2 alternatives analysis review process which requires that the applicant demonstrate the project has been

City of Tigard  
Wall St  
Project Number 2050046  
April 17, 2006  
Page 3

designed to minimize vegetated corridor impacts and that the project will result in a public benefit resulting from the encroachment into the vegetated corridor.

The Wall Street extension project design was revised to include a retaining wall along the downstream edge of the Fanno Pointe access Mr. Frewing states. This revision included a retaining wall, which keeps the road construction out of the 100 year flood plain and minimizes vegetated corridor impacts by utilizing a retaining wall along the downstream edge of the Fanno Pointe access as Mr. Frewing states. In addition, a curb-tight sidewalk design was utilized to eliminate the planting strip on the south side of Wall Street from Station 11+25 to Station 14+75, where the proposed roadway is in close proximity to the West Pond and the proposed location for the reconfigured Pinebrook Creek. The curb tight sidewalk design resulted in a decrease in proposed vegetated corridor impact of 1,472 square feet.

**Pinebrook Creek Vegetated Corridor Encroachment:** Clean Water Services allows encroachments into the vegetated corridor for up to 20% of the frontage length by 20% of the vegetated corridor width under their vegetated corridor averaging process. Since the proposed Wall Street extension encroaches further than the vegetated corridor averaging process allows, the applicant was required to complete Clean Water Services' Tier 2 alternatives analysis review process. The project has been approved by Clean Water Services (CWS File No. 4203).

**Pinebrook Creek Culvert** – The upstream contribution used in hydraulic calculations for sizing the Pinebrook culvert was based upon full build-out per the Comprehensive Plan and Zoning designations. Accordingly, the flow calculations are not upset by development that has occurred since 2003.

**Endangered Species** – The red-legged frog and great blue heron are not federally listed under the Endangered Species Act. The red-legged frog is categorized as a federal Species of Concern. Neither the red-legged frog or the great blue heron are provided with protection under the Endangered Species Act. It is possible that bald eagle may fly over the project site due to the site's proximity to the Tualatin River; however, Fanno Creek and Pinebrook Creek in the project area are not large enough water resources to provide habitat for the bald eagle. The bald eagle is a threatened species, not an endangered species.

**Tree Removal** – Trees proposed for removal include the minimum amount necessary. It should be noted that while all the trees proposed for removal are listed in the application, a Tree Removal permit is only required for the nine trees within the Sensitive Land Area. In addition, as mitigation for the trees removed, the project include the planting of 336 caliper inches of trees, which is 369% of the required mitigation of 91 inches.

Removal of the 2 deodora cedars is necessary to conduct the wetland mitigation activities including relocating Pinebrook Creek and creating stream-associated wetlands. The wetland buffer adjacent to the relocated Pinebrook Creek and wetlands will be planted with hundreds of native trees and shrubs as part of the mitigation plan.

City of Tigard  
Wall St  
Project Number 2050046  
April 17, 2006  
Page 4

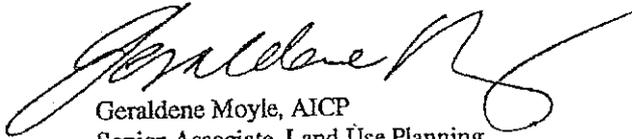
**Impact Study** – The impact study and ESEE analysis considered nine alternative alignments for Wall Street and evaluated the elements required by the City code. See Exhibit 6 and 7.

**Traffic Analysis and Impacts** – The DKS traffic study was reviewed and found acceptable by the City of Tigard Engineering Department.

**Fire Truck Access** – As shown on the plans, fire truck access to the Library and to the Fanno Pointe Condominiums will be via Wall St; direct access from Hall Blvd to either development will be removed. The Wall Street fire access has been reviewed by the City's Fire Marshall and has been found to meet access standards and be acceptable to the City.

The above information addresses the items raised in the letters. If you have any questions or concerns, or need additional information, please call me at 503-224-9560.

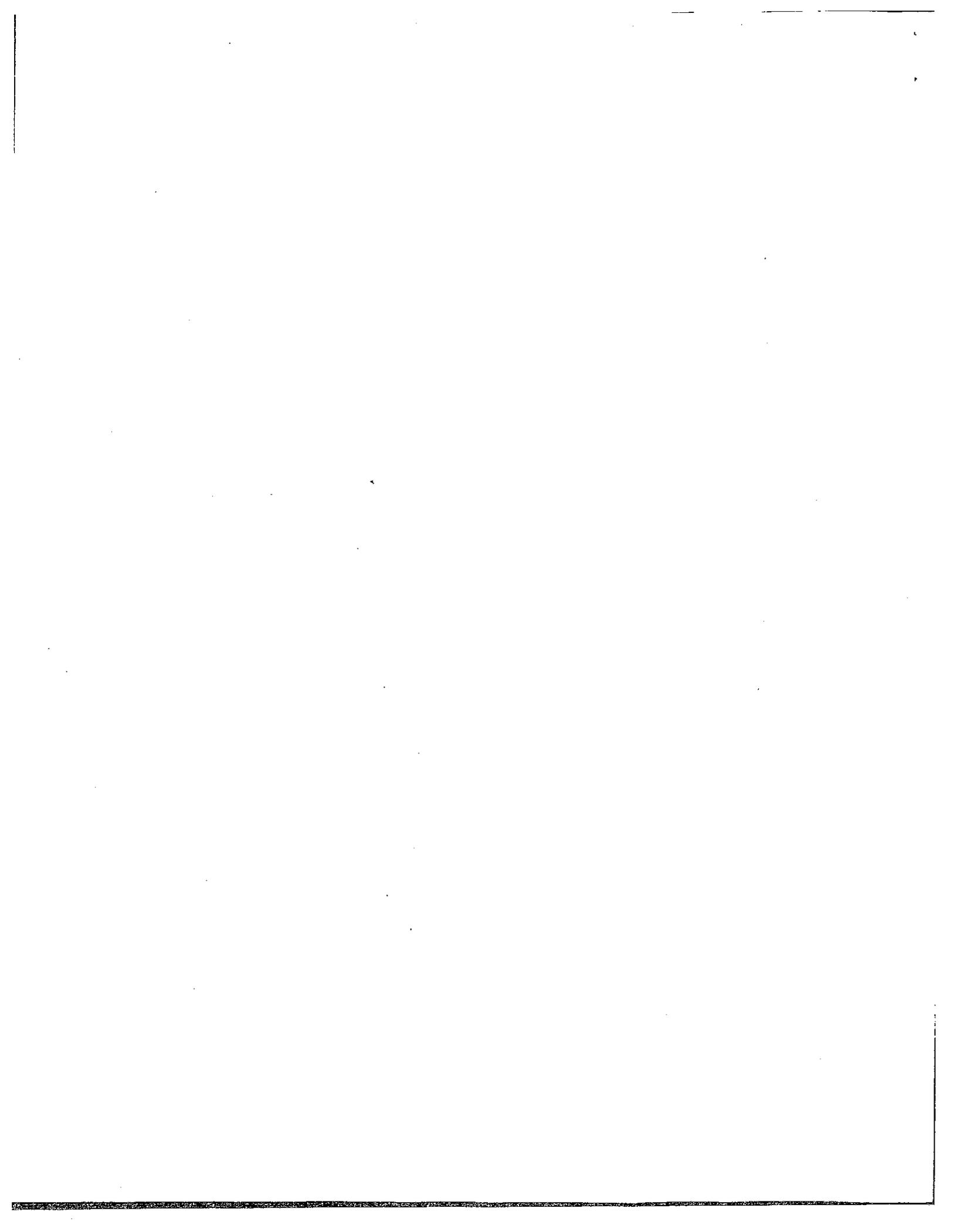
Sincerely,



Geraldene Moyle, AICP  
Senior Associate, Land Use Planning

/wp

c: Vannie Ngyuen – City of Tigard  
Marline DeHaas – DeHaas Engineering  
Stacy Benjamin – SWCA



IMPORTANT NOTICE

2050046  
New

Exhibit H

DEAR APPLICANT:

YOUR RENEWED PERMIT MAY CONTAIN SOME UPDATED PERMIT CONDITIONS.  
PLEASE READ YOUR PERMIT CONDITIONS CAREFULLY.

IF YOU HAVE ANY QUESTIONS, PLEASE CALL THE FIELD OPERATIONS  
SECTION AT 503-378-3805.

Department of State Lands  
775 Summer Street NE, Suite 100  
Salem, OR 97301-1279  
☎ 503-378-3805

Permit No.:	<u>31719-RF Renewal</u>
Permit Type:	<u>Removal-Fill</u>
Waterway:	<u>Wetland / Pinebrook Cr.</u>
County:	<u>Washington</u>
Expiration Date:	<u>January 27, 2008</u>
Corps No.:	<u>2003-00137</u>

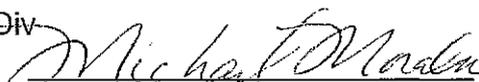
**CITY OF TIGARD**

**IS AUTHORIZED IN ACCORDANCE WITH ORS 196.800 TO 196.990 TO PERFORM THE OPERATIONS DESCRIBED IN THE ATTACHED COPY OF THE APPLICATION, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:**

1. This permit does not authorize trespass on the lands of others. The permit holder shall obtain all necessary access permits or rights-of-way before entering lands owned by another.
2. This permit does not authorize any work that is not in compliance with local zoning or other local, state, or federal regulation pertaining to the operations authorized by this permit. The permit holder is responsible for obtaining the necessary approvals and permits before proceeding under this permit.
3. All work done under this permit must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
4. Violations of the terms and conditions of this permit are subject to administrative and/or legal action which may result in revocation of the permit or damages. The permit holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this permit.
5. A copy of the permit shall be available at the work site whenever operations authorized by the permit are being conducted.
6. Employees of the Department of State Lands and all duly authorized representatives of the Director shall be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this permit.
7. Any permit holder who objects to the conditions of this permit may request a hearing from the Director, in writing, within twenty-one (21) calendar days of the date this permit was issued.
8. In issuing this permit, the Department of State Lands makes no representation regarding the quality or adequacy of the permitted project design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the permit application, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapters 196, 390 and related administrative rules.
9. Permittee shall defend and hold harmless the State of Oregon, and its officers, agents, and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.

**NOTICE:** If removal is from state-owned submerged and submersible land, the applicant must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 - 274.940. This permit does not relieve the permittee of an obligation to secure appropriate leases from the Department of State Lands, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact the Department of State Lands, 503-378-3805.

Michael Morales, W Region Manager  
Wetlands & Waterways Conservation Div  
Oregon Department of State Lands

  
\_\_\_\_\_  
Authorized Signature

January 9, 2007  
\_\_\_\_\_  
Date Issued

## ATTACHMENT A

Permittee: City of Tigard

Special Conditions for Removal/Fill Permit No. 31719-RF.

**PLEASE READ AND BECOME FAMILIAR WITH CONDITIONS OF YOUR PERMIT.** This project may be site inspected by the Department of State Lands as part of our monitoring program. The Department has the right to stop or modify the project at any time if you are not in compliance with these conditions. A copy of this permit shall be available at the work site whenever authorized operations are being conducted.

1. This permit authorizes the placement of up to 2949 cubic yards of gravel and native soil in T2S, R1W, Sections 1 and 2, Tax Lots 2S101 800, 1100, 1200, 1201, 1202, and 2S102DD 100, 200, 300, 9000 in Pinebrook Creek and wetlands, Tigard, Washington County, as outlined in the attached permit application, map and drawings, received April 2, 2004 **and as modified in correspondence and revised application dated November 28, 2005.**
2. This permit also authorizes removal and fill activities necessary to complete the required compensatory mitigation.
3. In stream fill or removal activities in the permit area shall be conducted between July 1 and September 30, unless otherwise coordinated with ODFW and approved in writing by ODSL.
4. Prior to any site grading, the surveyed boundaries of the wetland mitigation area and the avoided wetlands shall be surrounded by bright orange construction fencing at all times during construction of the project. There shall be no heavy equipment in this area except during mitigation construction.
5. No removal of vegetation or heavy equipment operating or traversing shall occur outside the designated construction footprint.
6. If any archaeological resources and/or artifacts are uncovered during excavation, all construction activity shall immediately cease. The State Historic Preservation Office shall be contacted (phone: 503-378-4168).
7. During trenching or excavation, the top layer of soil shall be separated from the rest of the excavated material and put back on top when the trench or pit is back-filled. If the native underlying soils are not used as bedding material, and a coarser, non-native soil or other material is used, preventative measures such as clay or concrete plugs shall be used so that underground hydraulic piping does not occur and dewater the site and adjacent wetlands.

8. All temporarily disturbed areas shall be returned to original ground contours at project completion.
9. **TURBIDITY/EROSION CONTROLS.** The authorized work shall not cause turbidity of affected waters to exceed 10% over natural background turbidity 100 feet downstream of the fill point. For projects proposed in areas with no discernible gradient break (gradient of 2% or less), monitoring shall take place at 4 hour intervals and the turbidity standard may be exceeded for a maximum of one monitoring intervals per 24 hour work period provided all practicable control measures have been implemented. This turbidity standard exceedance intervals applies only to coastal lowlands and floodplains, valley bottoms and other low-lying and/or relatively flat land.

For projects in all other areas, the turbidity standard can be exceeded for a maximum of 2 hours (limited duration) provided all practicable erosion control measures have been implemented. These projects may also be subject to additional reporting requirements.

Turbidity shall be monitored during active in-water work periods. Monitoring points shall be at an undisturbed site (representative background) 100 feet upstream from the turbidity causing activity (i.e., fill or discharge point), 100 feet downstream from the fill point, and at the point of fill. A turbidimeter is recommended, however, visual gauging is acceptable. Turbidity that is visible over background is considered an exceedance of the standard.

Practicable erosion control measures which shall be implemented, as appropriate, include but are not limited to the following:

- a) All exposed soils shall be stabilized during and after construction in order to prevent erosion and sedimentation.
- b) Waste materials and spoils shall be placed in an upland location and shall be suitably stabilized to prevent erosion.
- c) Place fill in the water using methods that avoid disturbance to the maximum practicable extent (e.g. placing fill with a machine rather than end-dumping from a truck).
- d) Prevent all construction materials and debris from entering waterway;
- e) Use filter bags, sediment fences, sediment traps or catch basins, silt curtains, leave strips or berms, Jersey barriers, sand bags, or other measures sufficient to prevent movement of soil;
- f) Use impervious materials to cover stockpiles when unattended or during rain event;
- g) Erosion control measures shall be inspected and maintained daily to ensure their continued effectiveness;
- h) Use a gravel staging area and construction access;

- i) Fence off planted areas to protect from disturbance and/or erosion; and
- j) Flag or fence off wetlands adjacent to the construction area.

Erosion control measures shall be maintained as necessary to ensure their continued effectiveness, until soils become stabilized. All erosion control structures shall be removed when project is complete and soils are stabilized and vegetated.

10. HAZARDOUS, TOXIC AND WASTE MATERIALS. Petroleum products, chemicals, fresh cement, sandblasted material, and chipped paint or other deleterious waste materials shall not be allowed to enter waters of the state. No wood treated with leach able preservatives shall be placed in the waterway. Machinery refueling is to occur off-site or in a confined designated area to prevent spillage into waters of the state. Project-related spills into water of the state or onto land with a potential to enter waters of the state shall be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.
11. Culverts shall meet Oregon Department of Fish and Wildlife requirements for fish passage.
12. Issuance of this permit is contingent upon acquisition of the required permits and approvals from the City of Tigard.
13. When listed species are present, the authorization holder must comply with the Federal Endangered Species Act. If previously unknown listed species are encountered during the project, the authorization holder shall contact the appropriate agency as soon as possible.
14. The permit holder shall notify the Department in writing of any operating conditions imposed by other required permits that would be inconsistent with the approved plan of operation. The Department will review these requirements and, if appropriate to ensure compliance with state regulations, require modification of the approved work plan and/or revise the conditions of this permit.
15. The permittee is responsible for carrying-out the terms and conditions of this permit unless the permit is transferred to another party as approved by the Department.
16. The Department of State Lands retains the authority to temporarily halt or modify the project in case of unforeseen damage to natural resources.

## MITIGATION

17. On-site compensatory mitigation for the unavoidable loss of **0.30** acres, being **0.25** acres of palustrine emergent and palustrine scrub/shrub (riverine impounding), 0.04 acres of palustrine open water (riverine impounding), and 0.01 acres of palustrine emergent (riverine impounding) wetlands, shall consist of wetland mitigation of a total of **0.08** acres creation of palustrine emergent (riverine impounding), **0.29** acres enhancement palustrine forested and palustrine scrub/shrub (riverine impounding) and 0.09 acres enhancement palustrine emergent (riverine impounding), and **0.20** acres of restoration of palustrine forested and palustrine scrub/ shrub (riverine impounding).
18. Mitigation shall be completed prior to or concurrent with the completion of the wetland fill project.
19. The mitigation site shall be constructed in accordance with the mitigation plan included with the **revised** permit application received **November 28, 2005**.

## MONITORING

20. The permittee shall monitor the mitigation site to determine success for a minimum period of 5 years. The annual monitoring report is due by November 30 of each year and shall include the following information:
  - Permit number
  - Permittee's name
  - Project name
  - Impact and mitigation site location map(s)
  - A brief narrative that describes maintenance activities and recommendations to meet success criteria.
  - Documentation that the success criteria listed in condition(s) is being met.
  - Photos from fixed photo points.
  - Other information necessary or required to document compliance with mitigation plan.
21. The monitoring period will start when the permittee has demonstrated that hydrology has been established and initial plantings have been accomplished. Failure to submit a monitoring report at the above date may result in an extension of the monitoring period, and/or enforcement action.

22. Hydrology will be monitored during the early growing season then annually for the first two years, and determined adequate for the proposed mitigation plant community. If hydrology is determined to be inadequate, adjustments in grading will be done to improve hydrology.
23. An as-built survey shall be provided to the Department of State Lands within 60 days of mitigation site grading.

### **SUCCESS CRITERIA**

**To be deemed successful, the mitigation areas including buffers shall meet the following success criteria.**

24. A minimum of **0.57** acres of wetlands, being **0.08** acres of creation, **0.29** acres of enhancement, and of **0.20** acres of restoration, shall meet the hydrology criteria specified in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual.
25. There shall be 80% survival of planted trees and shrubs for the duration of the monitoring period.
26. There shall be 30% cover of planted and native recruits of herbaceous species after the first year of planting, 60% after the third year, and 80% after the fifth year.
27. There shall be no more than **20%** cover of non-native species. (Reed canary grass, purple loosestrife, blackberry, etc).
28. The Department retains the authority to extend the mitigation-monitoring period and require corrective action in the event the success criteria are not accomplished for two consecutive years within the monitoring period.
29. The mitigation site shall be protected in perpetuity by recording deed restrictions approved by the Department. There shall be no wetland impacts until the approved Deed Restrictions are recorded with Washington County and a copy has been sent to the Department.

Renewed: January 9, 2007

**Fishman**  
Environmental Services

A DIVISION OF  
**SWCA**  
ENVIRONMENTAL CONSULTANTS

Portland Office  
434 NW Sixth Avenue, Suite 304  
Portland, Oregon 97209  
Tel 503.224.0333 Fax 503.224.1851  
www.swca.com

*GEM*

*2051046  
ref.*

RECEIVED  
NOV 28 2005  
GROUP MACKENZIE

November 23, 2005

Louise Bos  
Washington County Resource Coordinator  
Oregon Department of State Lands  
775 Summer Street NE, Suite 100  
Salem, Oregon 97301-1279

Kathryn Harris  
Washington County Permit Evaluator  
U.S. Army Corps of Engineers  
P.O. Box 2946  
Portland, Oregon 97208-2946

SUBJECT: City of Tigard Wall Street Project; DSL #31719-RF; Corps #200300137  
Request for Modified Wetland Permit

Dear Louise & Kathryn,

Please find enclosed a revised wetland permit application for the City of Tigard's proposed Wall Street project. The DSL and Corps wetland permits are valid until January 27, 2007 and September 30, 2007, respectively. Construction of Phase 1 of the project is anticipated to begin in 2006. Phase 1 of the project was recently redesigned to meet the local planning requirements of the City of Tigard. The redesign of Phase 1 involves reducing the length of roadway from 425 feet to 360 feet and shifting the library access and Fanno Pointe Condominiums access to the west to avoid development within the 100-year floodplain. The length of Phase 2 has been correspondingly increased by 65 feet at its western extent. The overall length of the proposed project is unchanged from the previously permitted design. The redesigned Phase 1 includes a retaining wall along the eastern edge of the Fanno Pointe Condominiums access to minimize the amount of wetland impact. Previously permitted wetland impacts were 0.25 acre for Phase 1 and 0.09 acre for Phase 2, for a total project impact of 0.34 acre. As a result of the redesign of Phase 1, proposed wetland impacts for Phase 1 are 0.11 acre and for Phase 2 are 0.19 acre. The total proposed wetland impact for the project has been reduced to 0.30 acre. Revised project drawings are included with the revised permit application. Due to the redesign of Phase 1 of the project, the wetland mitigation area has been revised slightly, and a revised wetland mitigation plan is enclosed.

Please give me a call at your earliest convenience to discuss the project.

Sincerely,

*Stacy Benjamin*

Stacy N. Benjamin  
Senior Wetland Ecologist

c: Vannie Nguyen, City of Tigard  
Marlin DeHaas, DeHaas & Associates  
Geraldene Moyle, Group Mackenzie



# Joint



US Army Corps  
Of Engineers  
Portland District

# Permit Application Form

THIS APPLICATION WILL MEET THE REQUIREMENTS OF BOTH AGENCIES

AGENCIES WILL ASSIGN NUMBERS

Corps Action ID Number

Oregon Division of State Lands No.

### SEND ONE SIGNED COPY OF YOUR APPLICATION TO EACH AGENCY

District Engineer  
ATTN: CENWP-CO-GP  
PO Box 2946  
Portland, OR 97208-2946  
503-808-4373

State of Oregon  
Division of State Lands  
775 Summer Street NE  
Salem, OR 97301-1279  
503-378-3805

① Applicant Name and Address: Vannie Nguyen, P.E. Engineering Manger, City of Tigard, 13125 SW Hall Blvd., Tigard, Oregon 97223  
Business Phone # (503) 639-4171  
Home Phone #  
FAX # (503) 624-0752

Co-Applicant: Stacy Benjamin, SWCA Environmental Consultants, 434 NW 6th Avenue, Suite 304, Portland, Oregon 97209  
Authorized Agent:  Authorized Agent  
Contractor:  Contractor  
Business Phone # (503) 224-0333  
Home Phone #  
FAX # (503) 224-1851

Property Owner (if different than applicant): See Attachment A  
Business Phone #  
Home Phone #  
FAX #

### PROJECT LOCATION

Street, Road or other descriptive location		Legal Description			
Proposed Wall Street extension extends northeast from SW Hall Boulevard to SW Hunziker Street		Quarter	Section	Township	Range
			1 & 2	2S	1W
In or Near (City or Town)	County	Tax Map #	Tax Lot #		
Tigard	Washington	2S101	800, 1100, 1200, 1201, 1202		
		2S102DD	100, 200, 300, 90000		
Waterway	River Mile	Latitude	Longitude		
Pinebrook Creek & wetlands		45° 25' 17" N	122° 45' 51" W (at Hall Blvd.)		
At approximately river mile 3 of Fanno Creek		45° 25' 39" N	122° 45' 23" W (at Hunziker St.)		

Is consent to enter property granted by the Corps and the Division of State Lands?  Yes  No

### PROPOSED PROJECT INFORMATION

Activity Type:  Fill  Excavation (removal)  In-Water Structure  Maintain/Repair an Existing Structure

Brief Description: Construction of the Wall Street extension to connect SW Hall Blvd. with SW Hunziker Street

Fill will involve \_\_\_\_\_ cubic yards annually and/or \_\_\_\_\_ cubic yards for the total project  
1,647 (Phase 1) + 1,302 (Phase 2) = 2,949 cubic yards in wetlands or below the ordinary high water or high tide line.

Fill will be  Riprap  Rock  Gravel  Sand  Silt  Clay  Organics  Other native soil, asphalt, concrete

Fill Impact Area is 0.11 (Phase 1) + 0.19 (Phase 2) = 0.30 Acres; \_\_\_\_\_ length; \_\_\_\_\_ width; \_\_\_\_\_ depth

Removal will involve \_\_\_\_\_ cubic yards annually and/or \_\_\_\_\_ cubic yards for the total project.  
299 (to construct wetland mitigation) cubic yards in wetlands or below the ordinary high water or high tide line.

Removal will be  Riprap  Rock  Gravel  Sand  Silt  Clay  Organics  Other native soil

Removal Impact Area is 0.28 (to construct wetland mitigation) Acres; \_\_\_\_\_ length \_\_\_\_\_ width; \_\_\_\_\_ depth

the disposal area: Upland?  Yes  No Wetland / Waterway?  Yes  No

Are you aware of any Endangered Species on the project site?  Yes  No If yes, please explain in the project

Are you aware of any Cultural Resources on the project site?  Yes  No description (on page 2, block 4)

Is the project site near a Wild and Scenic River  Yes  No See Attachment B, page 5

④

**PROPOSED PROJECT PURPOSE & DESCRIPTION****Project Purpose and Need:**

See Attachment B

**Project Description:**

See Attachment B

How many project drawing sheets are included with this application? 13**NOTE:** A complete application must include drawings and a location map submitted on separate 8½ X 11 sheets.Will any material, construction debris, runoff, etc. enter a wetland or waterway? ● Yes ○ No (see Attachment B)  
If yes, describe the type of discharge (above) and show the discharge location on the site plan.Estimated Start Date\*: Spring 2006 (Phase 1) Estimated Completion Date: Fall 2006 (Phase 1)

\* A construction schedule has not been determined for Phase 2.

⑤

**PROJECT IMPACTS AND ALTERNATIVES****Describe alternative sites and project designs that were considered to avoid impacts to the waterway or wetland.**

The applicant is requesting a modified wetland permit. Wetland impacts have been reduced below the previously permitted amount of impact. Phase 1 of the project was recently redesigned to meet the local planning requirements of the City of Tigard. The redesign of Phase 1 involves reducing the length of roadway from 425 feet to 360 feet and shifting the library access and Fanno Pointe Condominiums access to the west to avoid development within the 100-year floodplain. The length of Phase 2 has been correspondingly increased by 65 feet at its western extent. The overall length of the proposed project is unchanged from the previously permitted design. The redesigned Phase 1 includes a retaining wall along the eastern edge of the Fanno Pointe Condominiums access to minimize the amount of wetland impact. Previously permitted wetland impacts were 0.25 acre for Phase 1 and 0.09 acre for Phase 2, for a total project impact of 0.34 acre. As a result of the redesign of Phase 1, proposed wetland impacts for Phase 1 are 0.11 acre and for Phase 2 are 0.19 acre. The total proposed wetland impact for the project has been reduced to 0.30 acre.

**Describe what measures you will use (before and after construction) to minimize impacts to the waterway or wetland.**

A grading and erosion control plan will be developed prior to the start of construction to minimize sedimentation into Pinebrook and Fanno Creeks and associated wetlands in order to protect downstream water quality during project construction. The erosion control plan will meet Clean Water Services Design and Construction Standards and will include the placement of silt fencing at down gradient locations adjacent to the disturbance area and at additional intervals as needed in areas of grading and silt sacks at storm drains in the project site. Bare surfaces, not being actively worked, will be seeded, mulched or paved as quickly as possible. Erosion and sediment control measures will be maintained for the duration of construction and until vegetation cover is established.

**NOTE:** If necessary, use additional Sheets.

⑥

**ADDITIONAL INFORMATION****Adjoining Property Owners and Their Address and Phone Numbers**

Submitted with previous wetland permit application

Has the proposed activity or any related activity received the attention of the Corps of Engineers or the State of Oregon in the past, e.g., wetland delineation, violation, permit, lease request, etc.? ● Yes ○ No

If yes, what identification number(s) were assigned by the respective agencies:

Corps # 200300137State of Oregon # 31719-RF

**City/County Planning Department Affidavit** (to be completed by local planning official)

- This project is not regulated by the local comprehensive plan and zoning ordinance.
- This project has been reviewed and is consistent with the local comprehensive plan and zoning ordinance.
- This project has been reviewed and is **not** consistent with the local comprehensive plan and zone ordinance.
- Consistency of this project with the local planning ordinance cannot be determined until the following local approval(s) have been obtained:

- Conditional Use Approval
- Plan Amendment
- Other TYPE III HEARINGS OFFICER REVIEW
- Development Permit
- Zone Change

RECEIVED  
DEC 17 2003  
FISHWAY

This application  has  has not been made for local approvals checked above.

*Richard Sewercliff*                      *Plg Mgr.*                      *Tigard*                      *12-10-03*  
 Signature of local planning official                      Title                      City                      Date

**COASTAL ZONE CERTIFICATION**

The proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement which will be forwarded to the Oregon Department of Land Conservation and Development for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact the department at 1175 Court Street NE, Salem, Oregon 97310 or call 503-373-0050.

**CERTIFICATION STATEMENT**

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Not applicable                      \_\_\_\_\_  
 Applicant Name                      Title

\_\_\_\_\_  
 Applicant Signature                      Date

**SIGNATURE FOR JOINT APPLICATION**

This application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirement of obtaining the permits requested before commencing the project. I understand that payment of the required state permit fee does not guarantee permit issuance.

George Neuyen, P.E.                      Engineering Manager, City of Tigard  
 Applicant Name                      Title

*Vannichguym*                      *Dec 10, 2003*  
 Applicant Signature                      Date

I certify that I may act as the duly authorized agent of the applicant.

Stacy Benjamin                      Wetland Ecologist, Fishman Environmental Services, LLC  
 Authorized Agent Name                      Title

*Stacy Benjamin*                      *Dec. 10, 2003*  
 Authorized Agent Signature                      Date

**SUPPLEMENTAL WETLAND IMPACT INFORMATION\***  
(For Wetland Fills Only)

**Site Conditions of impact area**

Impact area is    Ocean        Estuary        River        Lake        Stream        Freshwater Wetlands

**Note:** Estuarian Resource Replacement is required by state law for projects involving intertidal or tidal marsh alterations. A separate Wetlands Resource Compensation Plan may be appended to the application.

**Has a wetland delineation been completed for this site?**    Yes        No

Three separate wetland delineations were conducted by different consultants in the proposed Wall Street project and mitigation areas. A wetland delineation report was prepared for the Tigard library site by Kurahashi & Associates in June 2002 (DSL WD# 2002-0324; DSL concurrence letter dated October 8, 2002). The study area for the library delineation included the proposed library site as well as the Wall Street right-of-way extending from Hall Boulevard to the west side of Fanno Creek. A wetland delineation report for the proposed Wall Street right-of-way extending from the west side of Fanno Creek to the east side of the railroad tracks was prepared by Pacific Habitat Services in September 2003 (DSL WD# 2003-0599; DSL concurrence letter dated March 15, 2004). A wetland delineation report for the adjacent Fanno Pointe Condominiums site to the south, where a portion of the Wall Street right-of-way is located and where partial wetland mitigation is proposed to occur, was prepared by Rhea Environmental Consultants in August 2002 (DSL WD # 2003-0024; DSL concurrence letter dated June 2, 2003). All delineated streams and wetlands are shown on the existing conditions drawings (Sheets 2a and 2b) included with this application.

**Describe the existing physical and biological character of the wetland/waterway site by area and type of resource. (use separate sheets and photos, if necessary).**

Fanno Creek, Pinebrook Creek (tributary to Fanno Creek), associated wetlands, and two man-made on-line ponds are located in the project area. The stream banks along Fanno Creek are approximately 8 feet high, steeply sloped, and covered with dense Himalayan blackberry in much of the project site. The riparian corridor along Fanno Creek contains Oregon ash, red alder, ornamental hawthorn, Himalayan blackberry, rose, Pacific ninebark and willow. Hydrology and water quality of Fanno Creek have been adversely affected in this reach due to past development, straightening and shortening of the stream channel resulting in scour and stream bank erosion, and alteration of the confluences of Pinebrook Creek and Red Rock Creek with Fanno Creek due to sewer construction and construction of on-line ponds. Pinebrook Creek has also been extensively modified from its historic condition, and wetlands associated with Pinebrook Creek are dominated by invasive and noxious species including reed canarygrass, bittersweet nightshade, Himalayan blackberry and purple loosestrife. Existing site conditions are described in more detail in Attachment C.

**Resource Replacement Mitigation**

Describe measures to be taken to replace unavoidably impacted wetland resources.

Proposed stream and wetland mitigation to compensate for 0.30 acre of proposed wetland fill consists of a combination of stream channel and wetland creation (0.08 acre; 0.053 acre mitigation credit at 1.5:1), wetland enhancement (0.29 acre; 0.097 acre mitigation credit), and wetland restoration (0.20 acre; 0.20 acre mitigation credit at 1:1). Due to the redesign of Phase 1 of the project, the wetland mitigation plan has been revised slightly. The revised wetland mitigation areas are shown on Sheet 10 of the wetland permit application. The wetland mitigation data form is included in Attachment D. The revised wetland mitigation plan is included in Attachment E.

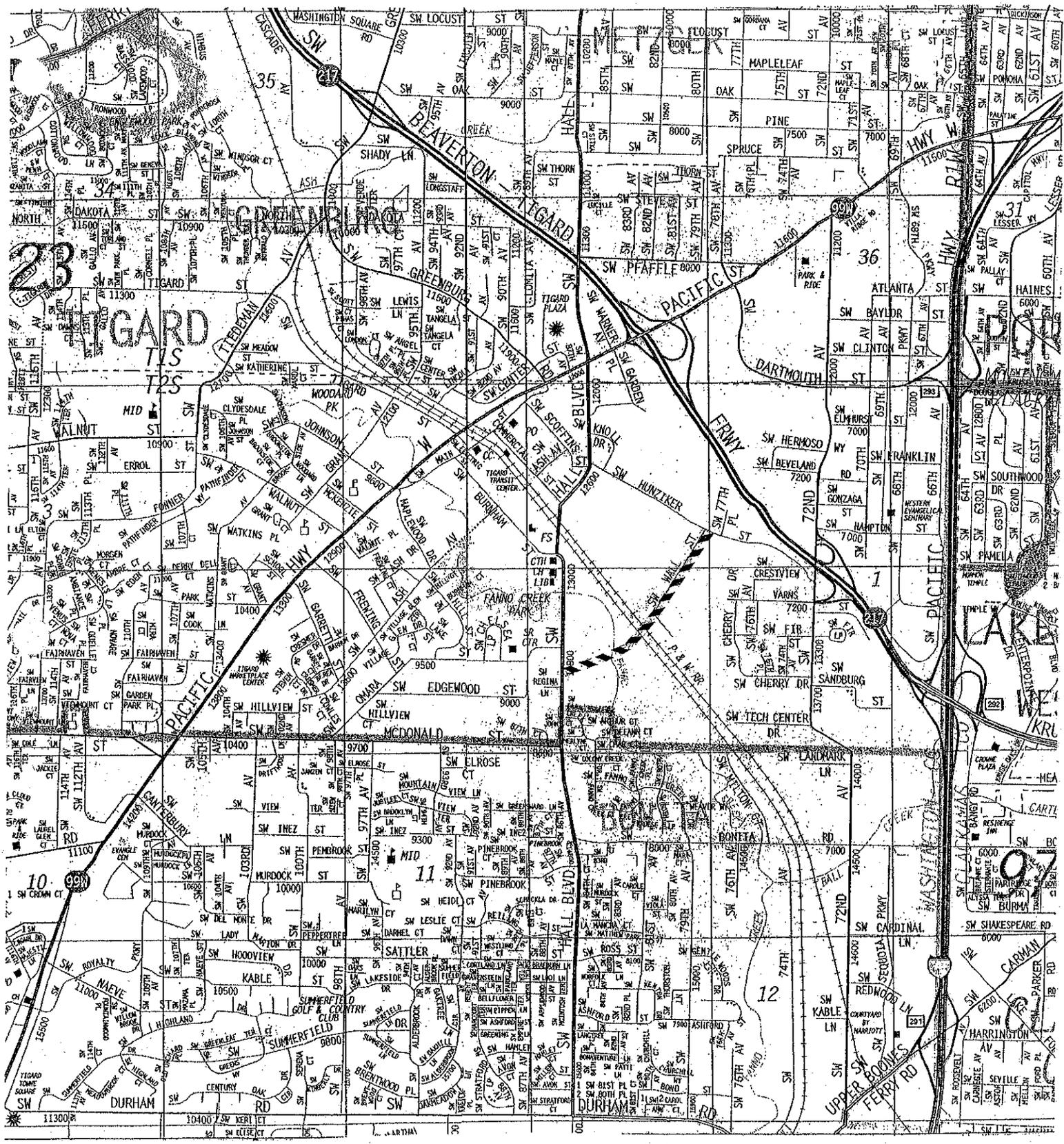
**City of Tigard Wall Street Extension – Permit Modification, November 2005  
Joint Permit Application List of Figures & Attachments**

**FIGURES**

- Sheet 1. Site Location Map
- Sheets 2a & 2b. Existing Conditions
- Sheets 3a & 3b. Proposed Wall Street Site Plan
- Sheets 4a & 4b. Proposed Wetland Impacts
- Sheet 5. Wall Street Typical Section
- Sheets 6a – 6f. Wall Street Plan and Profile Views
- Sheet 7. Bridge Plan & Elevation Views
- Sheet 8. Bridge Typical Deck Section & Wingwall Detail
- Sheet 9. Stormwater Quality Facility Plan and Profile Views
- Sheet 10. Wetland Mitigation Plan
- Sheet 11. Proposed Wetland Impact Area Cross-Sections
- Sheet 12. Fanno Pointe Access Road Culvert Location
- Sheet 13. Fanno Pointe Access Road Culvert Design

**ATTACHMENTS**

- Attachment A. Property Owners
- Attachment B. Project Purpose & Description
- Attachment C. Physical and Biological Character of the Wetland/Waterway Site
- Attachment D. Wetland Mitigation Data Form
- Attachment E. Wetland Mitigation Plan



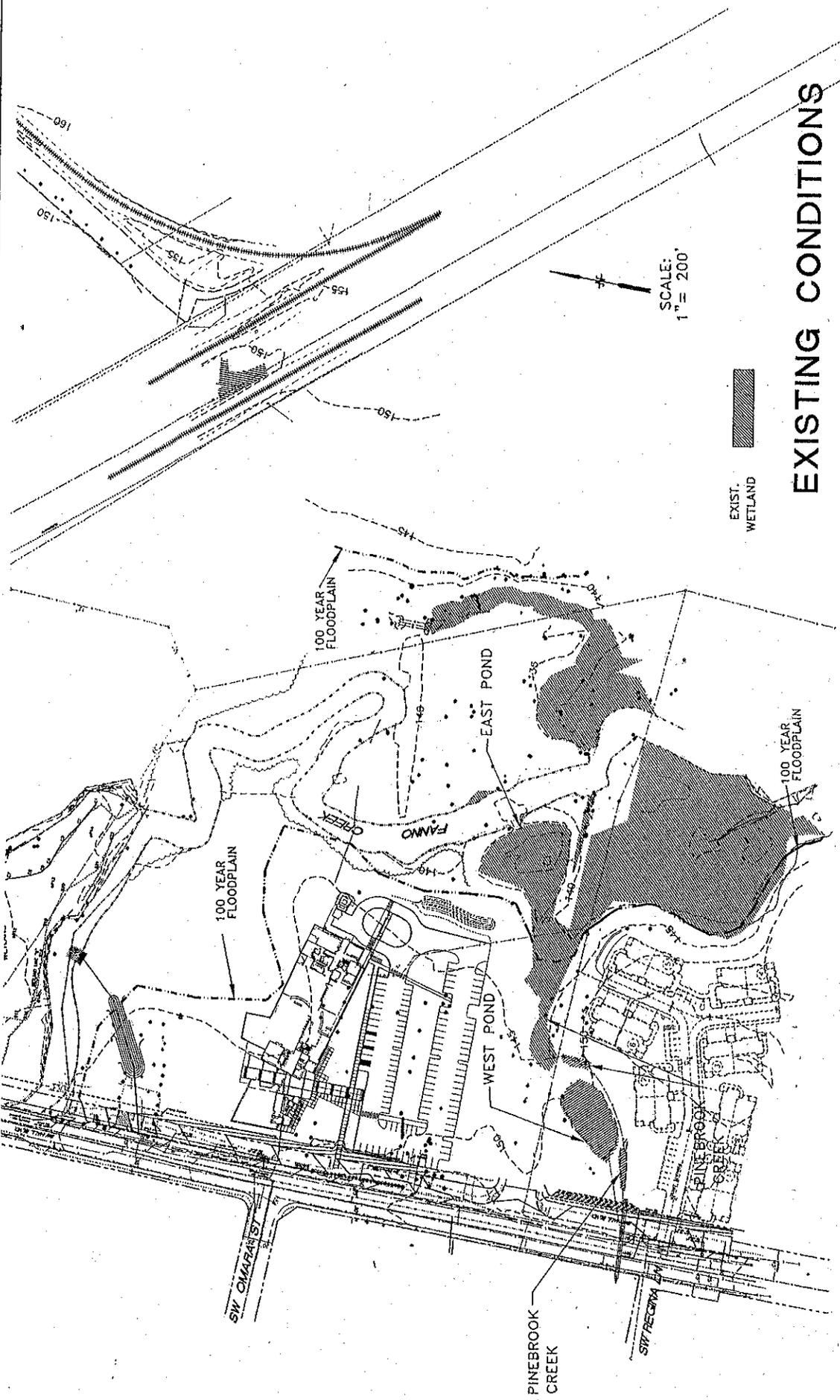
--- Wall Street Extension

Site Location Map



1 inch = 1,900 feet

**APPLICANT:** City of Tigard  
 Vannie Nguyen, Engineering Manager  
  
**WATERWAY:** Pinebrook Creek & wetlands  
  
**ACTIVITY:** Wall Street, permit modification  
  
**DATE:** November 2005; **SHEET:** 1 of 13



EXIST. WETLAND

SCALE:  
1" = 200'

# EXISTING CONDITIONS

SHEET X OF X

WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS



CITY OF TIGARD  
ENGINEERING DEPARTMENT

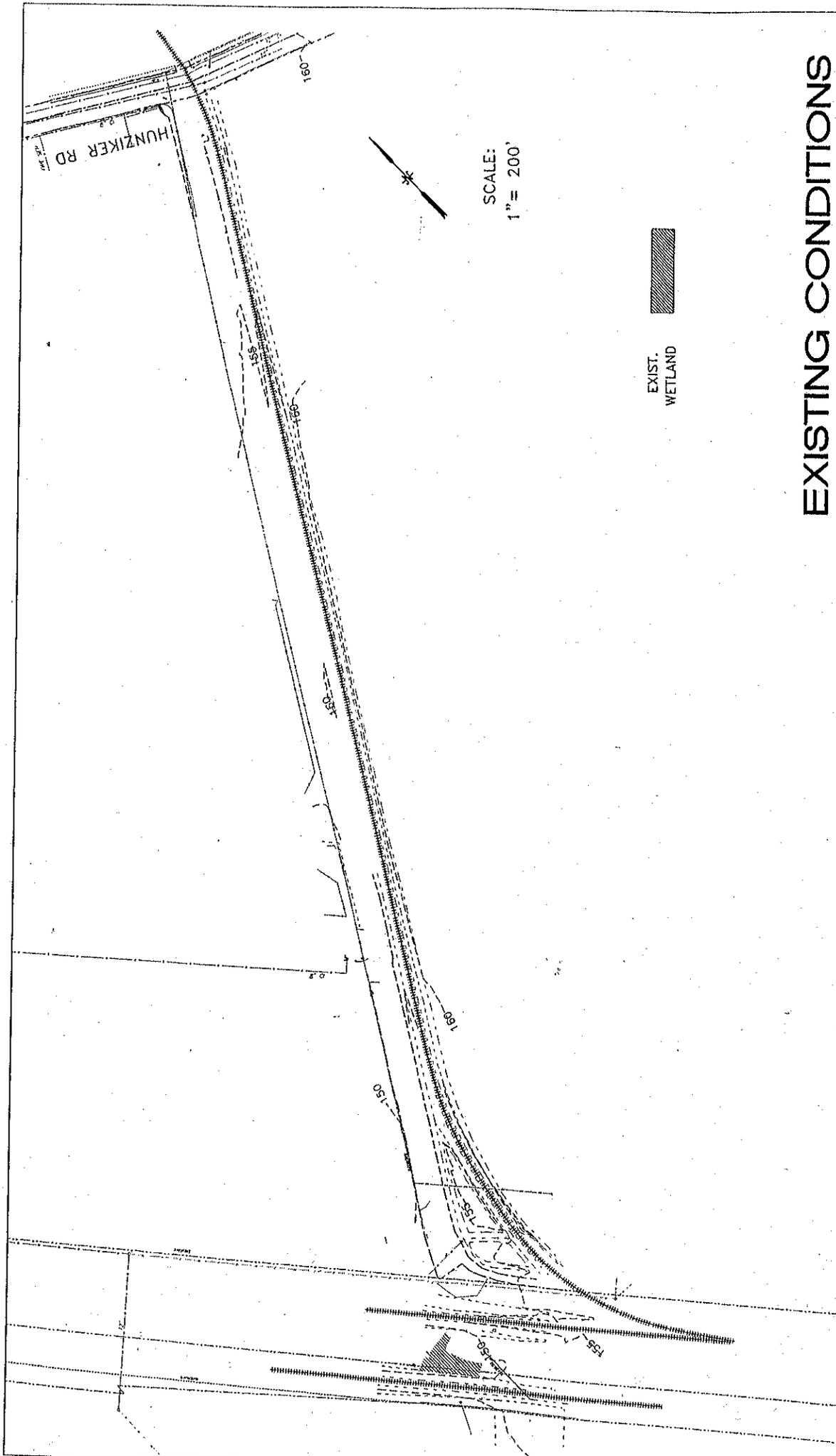
DEHAAS & Associates, Inc.  
Consulting Engineers & Surveyors  
1000 NE Oregon Street, Tigard, Oregon 97138  
PHONE: (503) 832-2500  
FAX: (503) 832-2511



DATE: 12/27/03  
FILE: 02-625-118

ISSUED BY: JN  
DRAWN BY: JN  
CHECKED BY: JN  
SCALE AS SHOWN  
PROJECT NO. 02-625-118

APPLICANT: City of Tigard  
Vannie Nguyen, Engineering Manager  
WATERWAY: Pinebrook Creek & wetlands  
ACTIVITY: Wall Street, permit modification  
DATE: November 2005; SHEET: 2 of 13



# EXISTING CONDITIONS

<b>APPLICANT:</b> City of Tigard Yannie Nguyen, Engineering Manager			DEHAAS & ASSOCIATES, Inc. Consulting Engineers & Surveyors 506 SW Commerce Circle Portland, Oregon 97207 Phone: (503) 825-4555 Fax: (503) 825-4918	CITY OF TIGARD ENGINEERING DEPARTMENT	SHEET x
<b>WATERWAY:</b> Pinebrook Creek & wetlands <b>ACTIVITY:</b> Wall Street, permit modification <b>DATE:</b> November 2005; SHEET: 26 of 13					DATE: MARCH, 2004 FILE: 02.629.118

# OVERALL SITE PLAN

SHEET  
x  
OF  
x

WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS

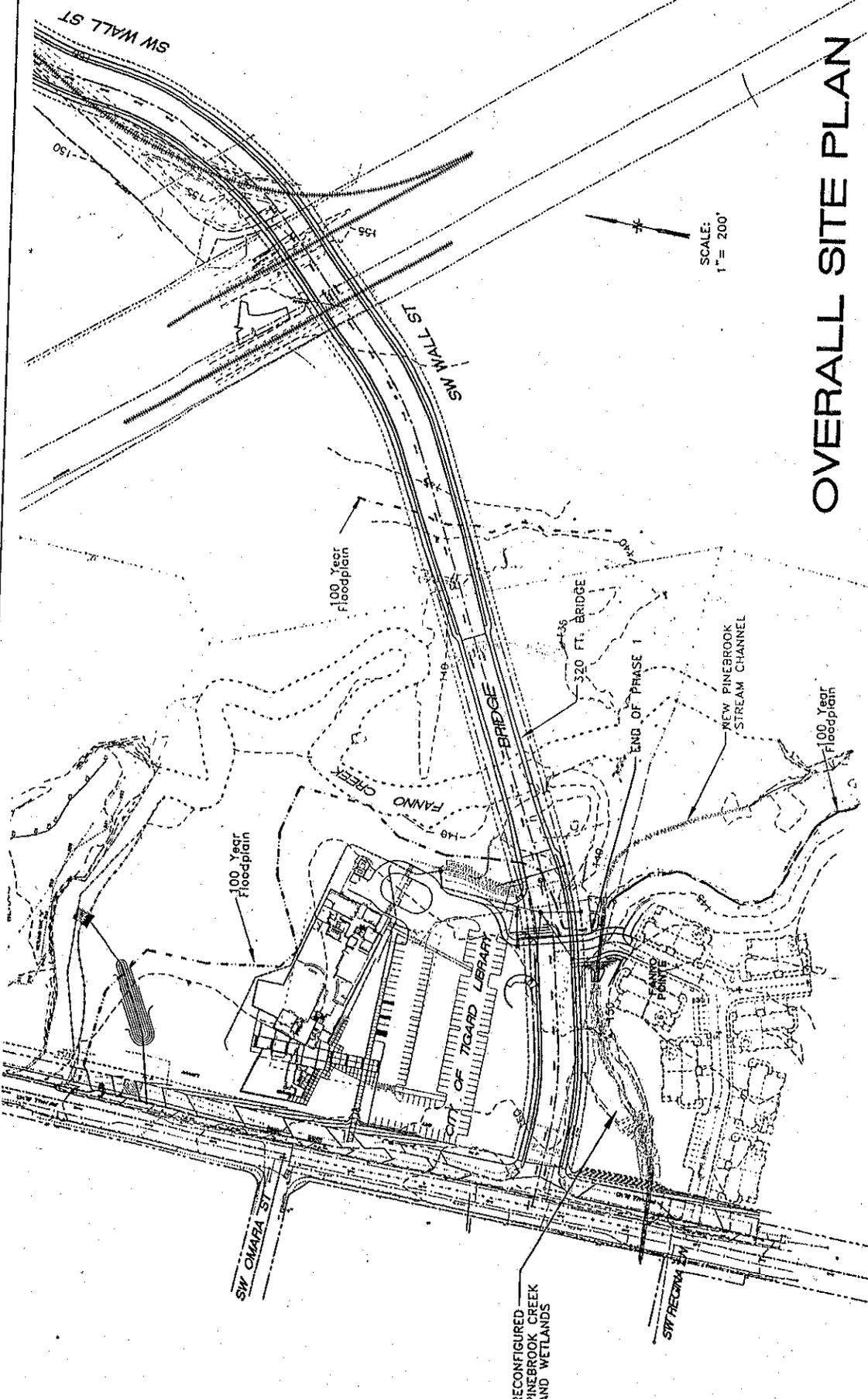


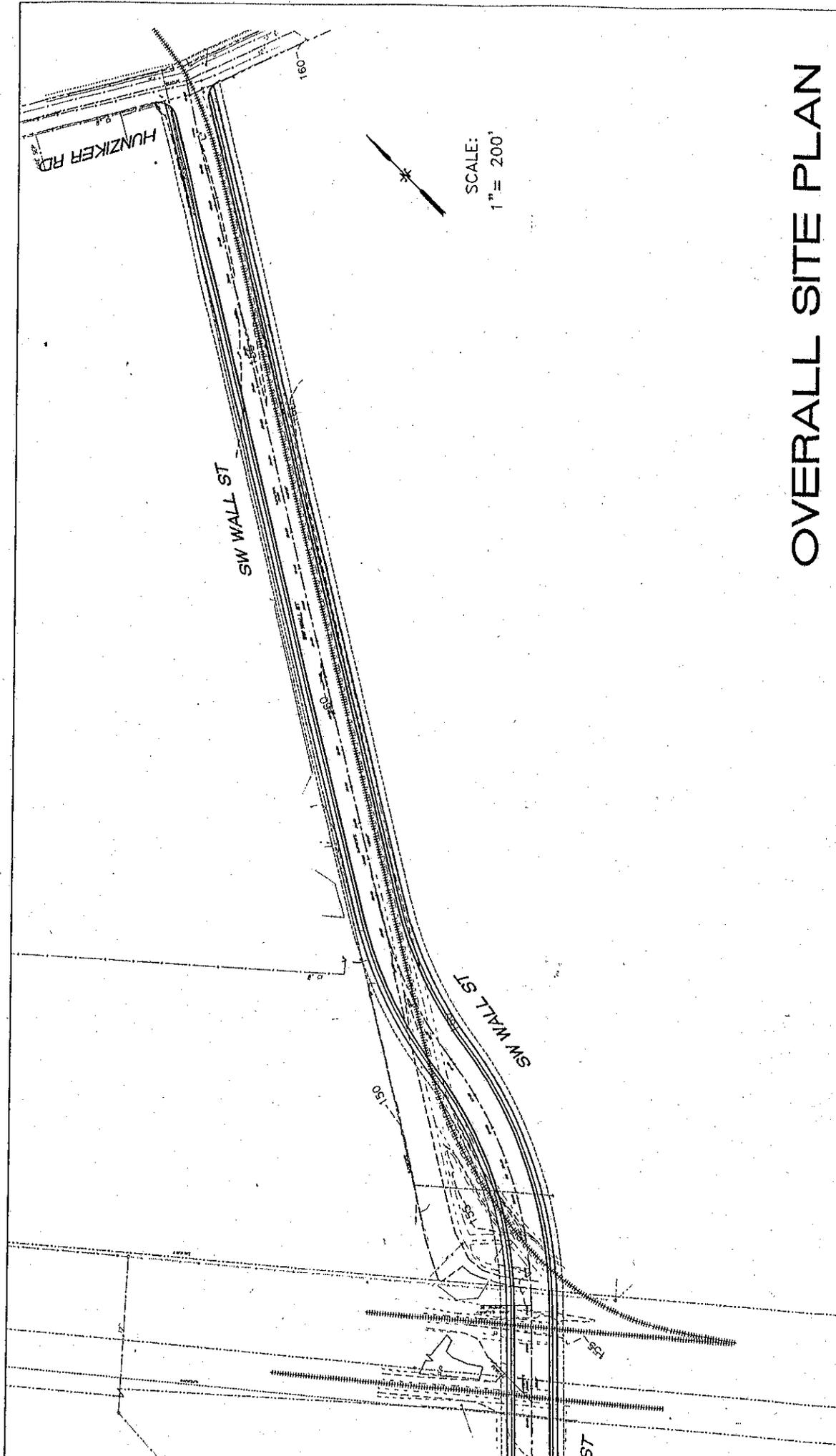
DEHAAS & ASSOCIATES, Inc.  
Consulting Engineers & Surveyors  
500 NE Oregon Street  
Portland, Oregon 97232  
Phone: 503 885-1100  
Fax: 503-885-1011



DATE: MARCH, 2004 FILE: S-18PDI-FS-HAWY

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 APPLICANT: City of Tigard  
 Vannie Nguyen, Engineering Manager  
 WATERWAY: Pinebrook Creek & wetlands  
 ACTIVITY: Wall Street, permit modification  
 DATE: November 2005; SHEET: 3 of 13

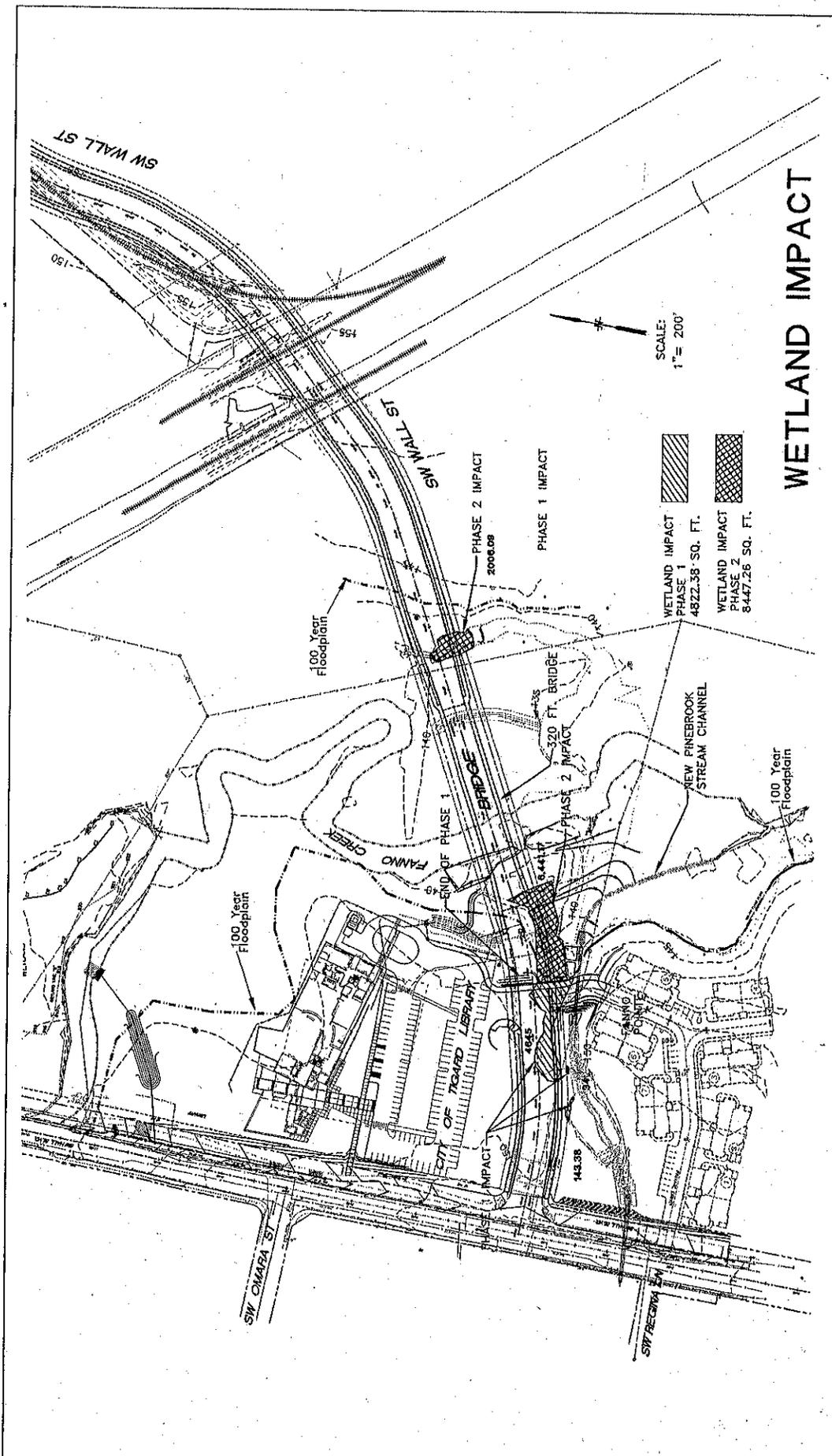




# OVERALL SITE PLAN

SHEET x OF x	
<b>WALL STREET EXTENSION (PH. 1)          STREET &amp; UTILITIES IMPROVEMENTS</b>	
 CITY OF TIGARD ENGINEERING DEPARTMENT	
DEHAAS & ASSOCIATES, Inc. Consulting Engineers & Surveyors Suite 300 - A/C Center 140 SW Commerce Circle Tigard, Oregon 97138 PHONE: (503) 622-7100 FAX: 503-622-0718	
DATE: MARCH, 2004	PREPARED BY: RE
EXP. 12/31/03 	NO. 02-622-118
DWG. NO. 02-622-118 TYP. BY: TML DATE: 12/31/03	S. SHOWN NO. 02-622-118

**APPLICANT:** City of Tigard  
 Vannie Nguyen, Engineering Manager  
**WATERWAY:** Pinebrook Creek & wetlands  
**ACTIVITY:** Wall Street, permit modification  
**DATE:** November 2005; SHEET 3b of 13



# WETLAND IMPACT

SHEET  
x  
OF  
x

## WALL STREET EXTENSION (PH. 1) STREET & UTILITIES IMPROVEMENTS



CITY OF TIGARD  
Engineering Department

DEHAAS & Associates, Inc.  
Engineering, Planning & Surveying  
200 S.W. Commercial Lane  
Tigard, Oregon 97138  
Phone: (503) 635-3000  
Fax: (503) 635-4779

DATE: AUGUST, 2005  
PROJECT NO. 02-623.118



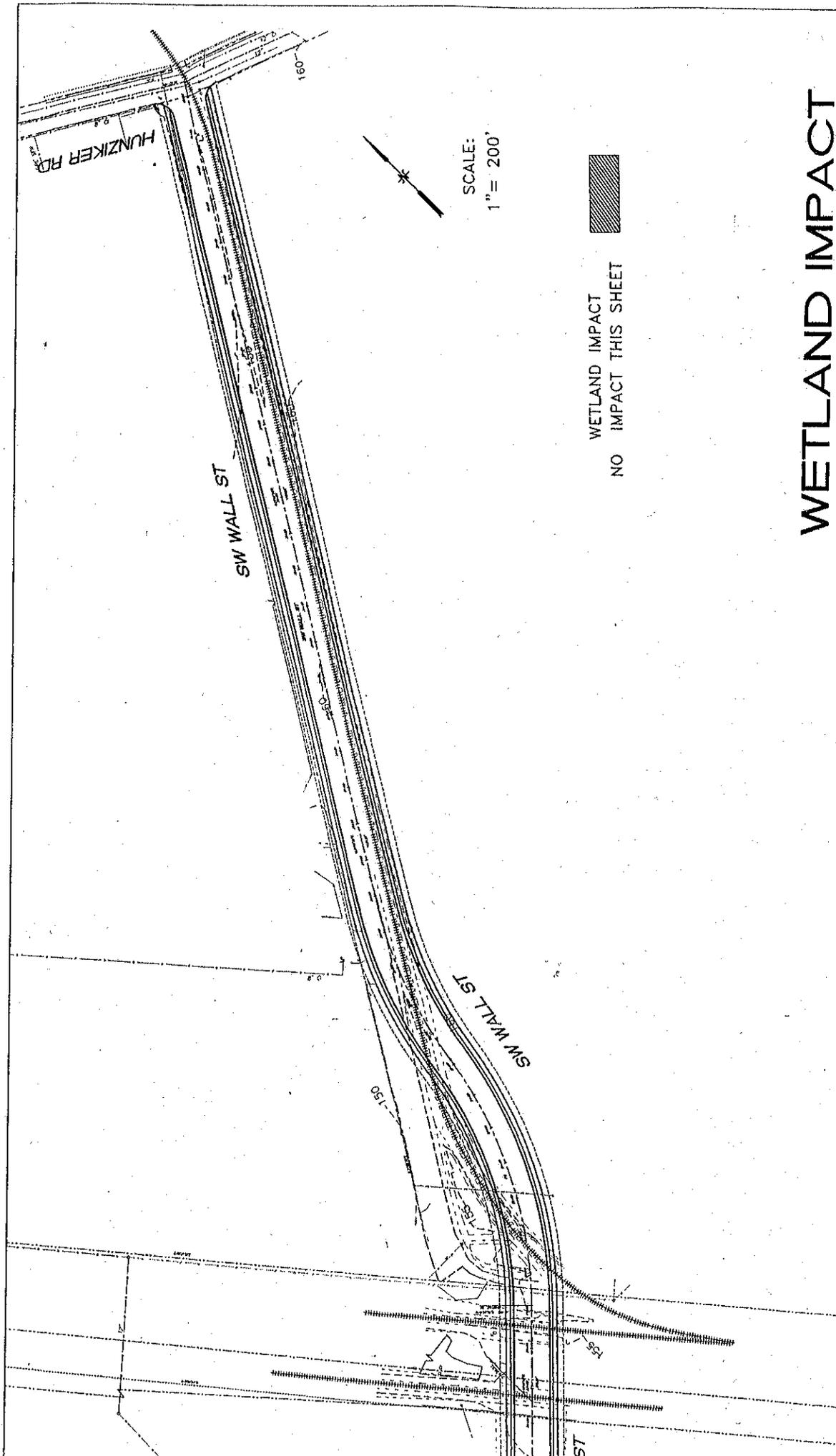
DESIGNED BY: TNA  
DRAWN BY: TNA  
CHECKED BY: TNA  
SCALE: AS SHOWN  
PROJECT NO. 02-623.118

**APPLICANT:** City of Tigard  
Vannie Nguyen, Engineering Manager

**WATERWAY:** Pinebrook Creek & wetlands

**ACTIVITY:** Wall Street, permit modification

**DATE:** November 2005; SHEET: 12 of 13



SCALE:  
1" = 200'

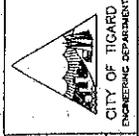


WETLAND IMPACT  
NO IMPACT THIS SHEET

# WETLAND IMPACT

SHEET  
x  
OF  
x

WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS



1000 SW 1st Ave.  
Tigard, Oregon 97138  
PHONE: (503) 862-2400  
FAC: (503) 862-0088

DEHAAS & Associates, Inc.  
Planning, Engineering & Surveying

DATE: MARCH, 2004  
FILE: 02-629-178



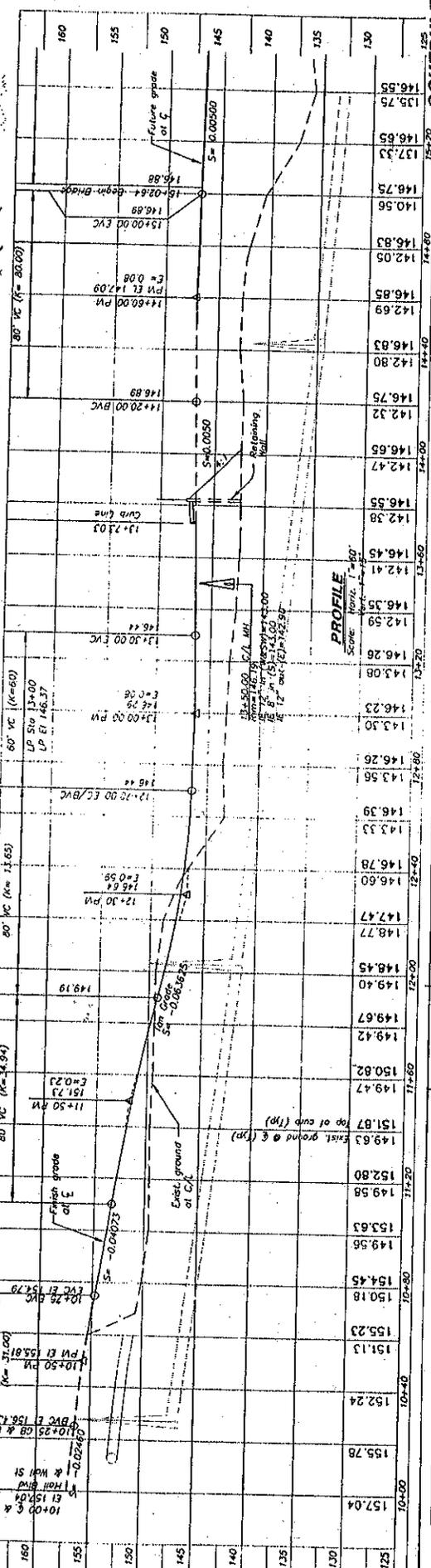
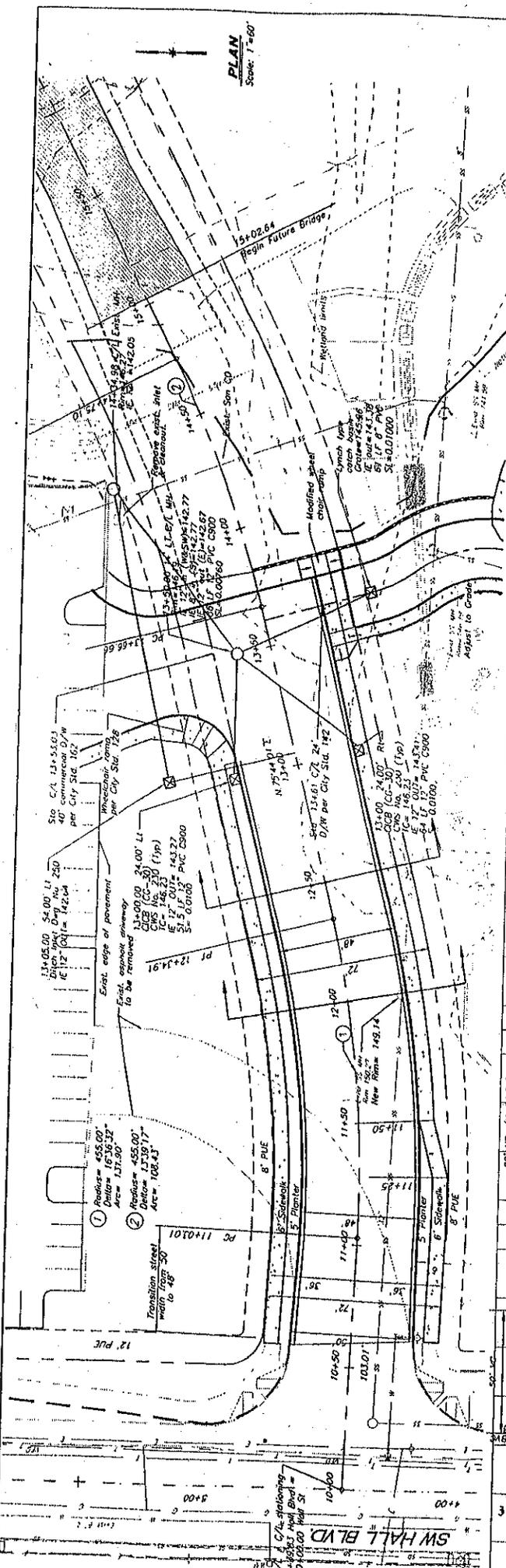
Exp. 12/31/03  
REG. PROFESSIONAL ENGINEER  
NO. 02-629-178

APPLICANT: City of Tigard  
Vannie Nguyen, Engineering Manager  
WATERWAY: Pinebrook Creek & wetlands  
ACTIVITY: Wall Street, permit modification  
DATE: November 2005; SHEET: 46 of 13

**LEGEND**

- 8" HDPE
- 4" HDPE
- 2" HDPE
- 1" HDPE
- 1/2" HDPE
- 1/4" HDPE
- 1/8" HDPE
- 1/16" HDPE
- 1/32" HDPE
- 1/64" HDPE
- 1/128" HDPE
- 1/256" HDPE
- 1/512" HDPE
- 1/1024" HDPE
- 1/2048" HDPE
- 1/4096" HDPE
- 1/8192" HDPE
- 1/16384" HDPE
- 1/32768" HDPE
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- 1/131072" HDPE
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- 1/524288" HDPE
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- 1/2097152" HDPE
- 1/4194304" HDPE
- 1/8388608" HDPE
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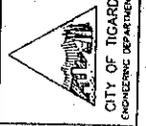
PLAN  
Scale: 1"=60'



SCHEDULE A & B

SHEET  
L1  
4 OF 34

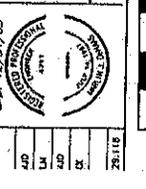
WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS  
PLAN & PROFILE



CITY OF TIGARD  
CONCRETE DEPARTMENT

DEHAAS & Associates, Inc.  
Consulting Engineers & Surveyors  
1000 NE Oregon St., Suite 200  
Tigard, Oregon 97138  
Phone: (503) 862-7300  
Fax: (503) 862-0115

DATE: Sept. 29, 2005  
FILE: 02-629-118



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APPLICANT: City of Tigard  
Vanuie Nguyen, Engineering Manager  
WATERWAY: Pinebrook Creek & wetlands  
ACTIVITY: Wall Street, permit modification  
DATE: November 2005, SHEET 62 of 13

Wall Street Plan and Profile Views





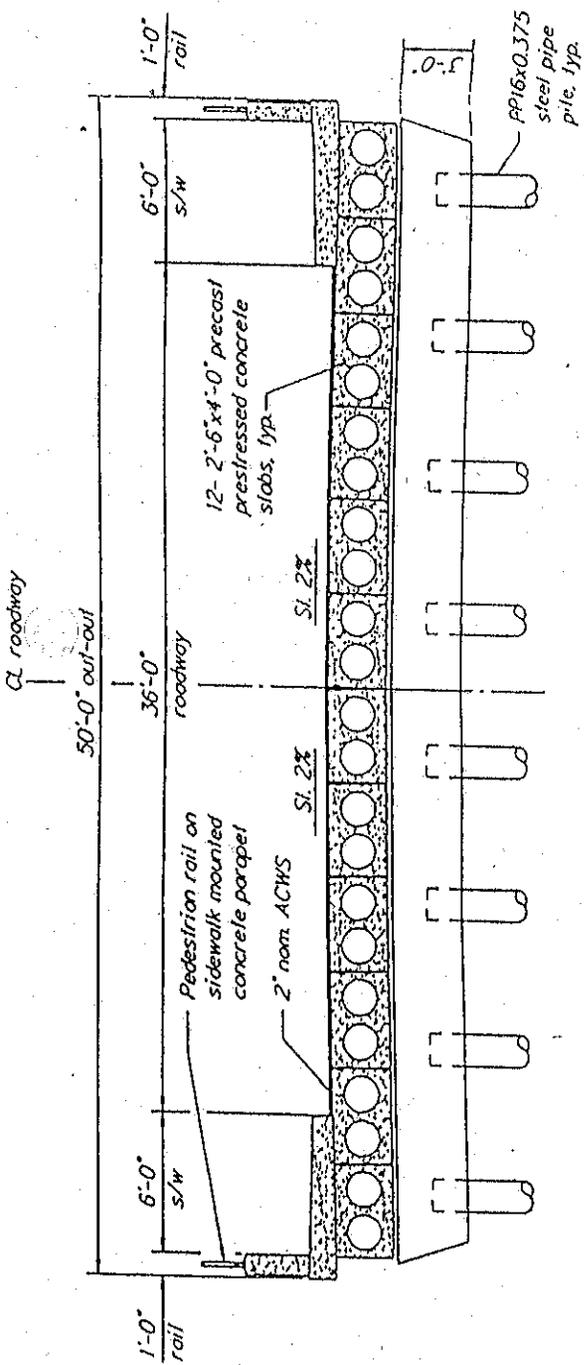




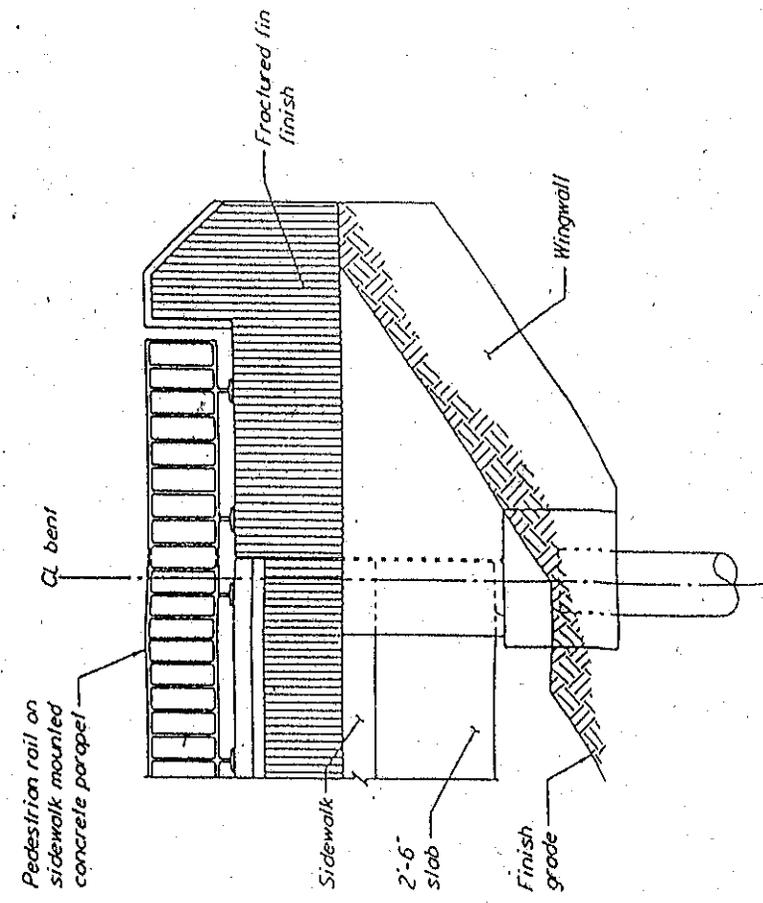








**TYPICAL DECK SECTION**  
1/8"=1'-0"

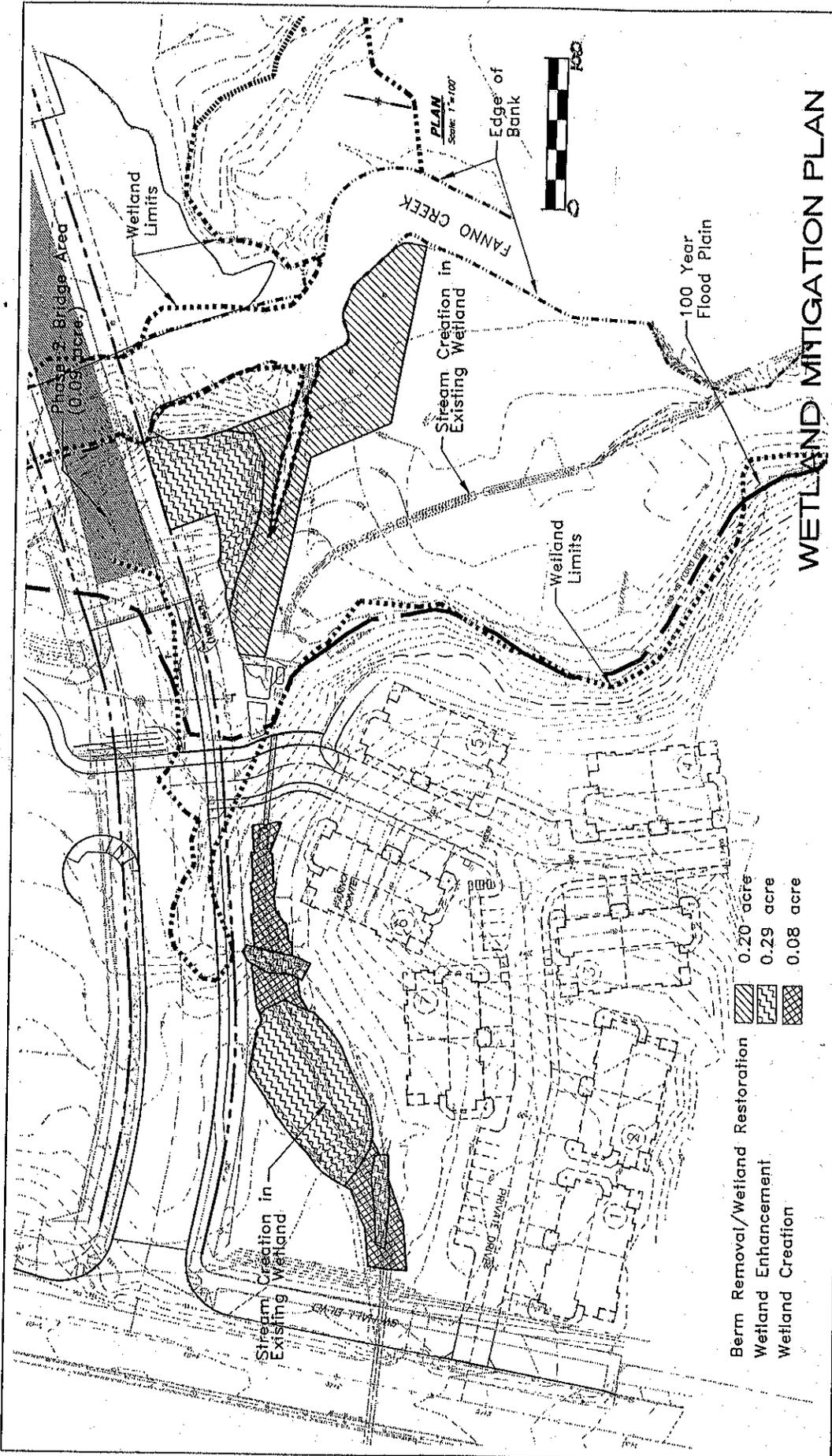


**WINGWALL DETAIL**  
1/4"=1'-0"

**Bridge Typical Deck Section & Wingwall Detail**

APPLICANT: City of Tigard  
 Vannie Nguyen, Engineering Manager  
 WATERWAY: Pinebrook Creek & wetlands  
 ACTIVITY: Wall Street, permit modification  
 DATE: November 2005; SHEET: 8 of 13



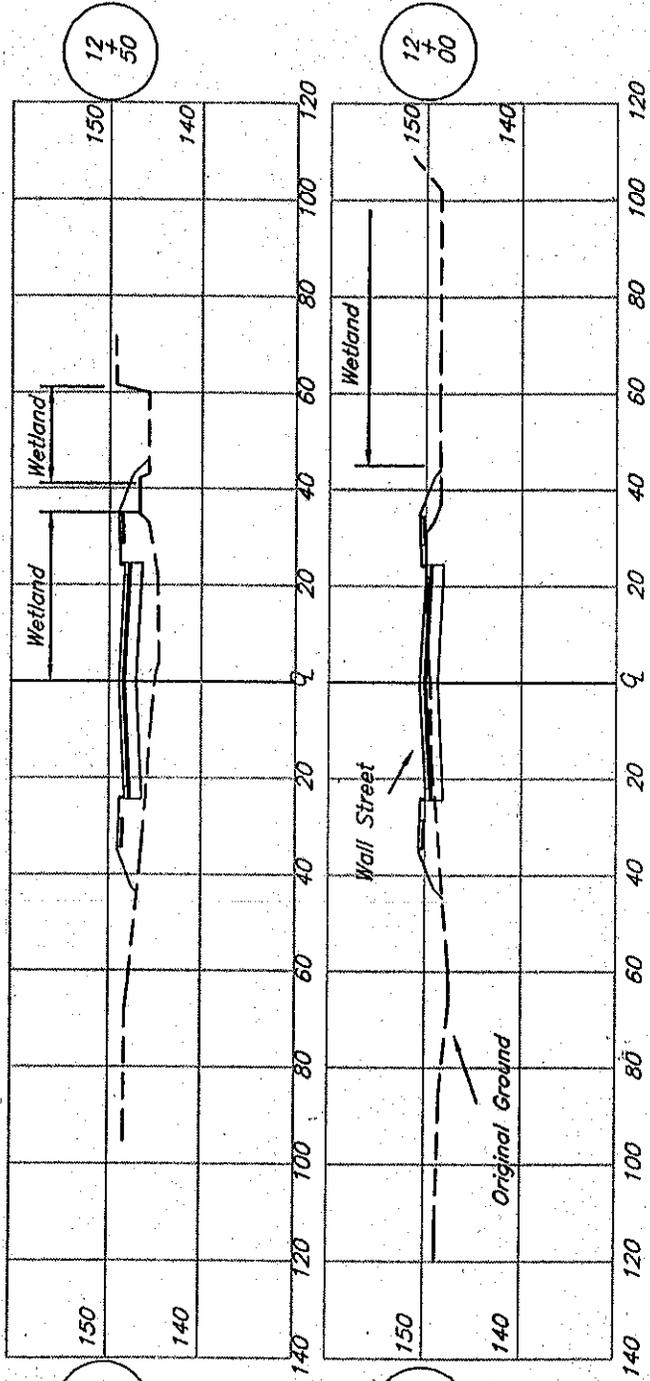


Berm Removal/Wetland Restoration 0.20 acre  
 Wetland Enhancement 0.29 acre  
 Wetland Creation 0.08 acre

# WETLAND MITIGATION PLAN

SHEET <b>WALL STREET EXTENSION (PH. 1)</b> <b>STREET &amp; UTILITIES IMPROVEMENTS</b>		OF
 CITY OF TIGARD DEVELOPING COMMUNITY		
DEHAAS & Associates, Inc. Consulting Engineers & Surveyors 5401 NE Commerce Center Portland, Oregon 97218 TEL: (503) 445-3100 FAX: (503) 445-3100		
Exp. 12/31/05 		
DATE: DECEMBER, 2004 FILE: 02-629.118		
UTM NAD SRTM UTM18		

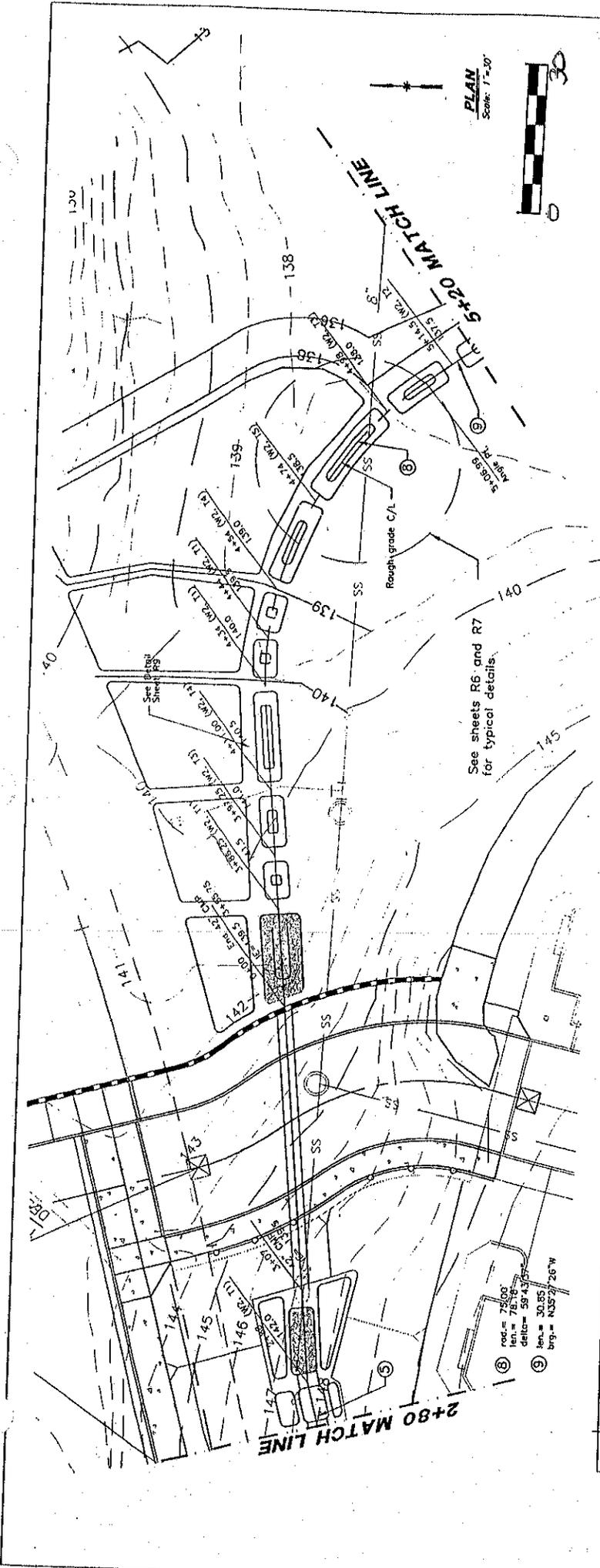
**APPLICANT:** City of Tigard  
 Vannie Nguyen, Engineering Manager  
**WATERWAY:** Pinebrook Creek & wetlands  
**ACTIVITY:** Wall Street permit modification  
**DATE:** November 2005; SHEET: 10 of 13



Scale 1" = 40'

*Proposed Wetland Impact Area Cross-Section*

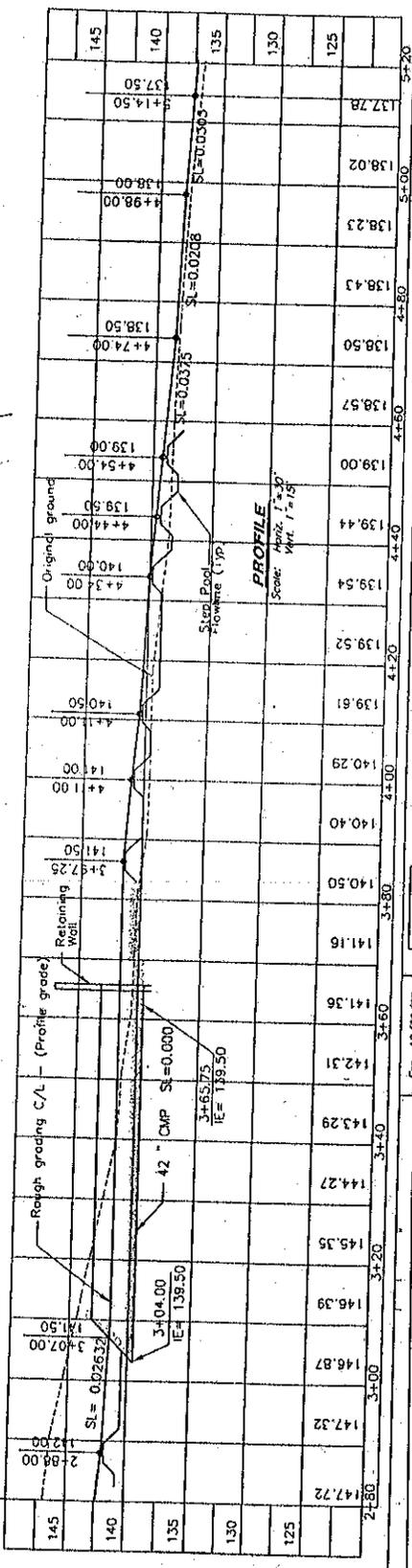
**APPLICANT:** City of Tigard  
 Vannie Nguyen, Engineering Manager  
**WATERWAY:** Pinebrook Creek & wetlands  
**ACTIVITY:** Wall Street, permit modification  
**DATE:** November 2005; SHEET: 11 of 13



PLAN  
Scale: 1"=30'



See sheets R6 and R7  
for typical details.



SCHEDULE G

SHEET  
R5  
25 OF 34

WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS



CITY OF TIGARD  
ENGINEERING DEPARTMENT

DEHAAS & Associates, Inc.  
Consulting Engineers & Surveyors  
1000 NE Oregon Street, Suite 200  
Tigard, Oregon 97138  
Phone: (503) 842-7450  
Fax: (503) 842-7451

DATE: August, 2005  
FILE: 02.629.118

APPLICANT: City of Tigard  
Vanmie Nguyen, Engineering Manager

WATERWAY: Pinebrook Creek & wetlands

ACTIVITY: Wall Street, permit modification

DATE: November 2005; SHEET: 12 of 13

Fanno Pointe Access Road Culvert Location



①

**CITY OF TIGARD WALL STREET EXTENSION JOINT PERMIT APPLICATION  
ATTACHMENT A: PROPERTY OWNERS**

2S 1 01 800, 1100, 1200  
Fred Fields  
1149 SW Davenport  
Portland, Oregon 97201

2S 1 01 1201, 1202  
The COE Manufacturing Company  
P.O. Box 520  
Painesville, Ohio 44077

2S 1 02DD 100, 200  
City of Tigard  
13125 SW Hall Boulevard  
Tigard, Oregon 97223

2S 1 02DD 300  
Fanno Pointe, LLC  
109 E 13<sup>th</sup> Street  
Vancouver, Washington 97660

2S 1 02DD 90000  
Fanno Pointe Condominiums  
Jennifer Cosenza, Homeowners Association President  
13712 SW Hall Blvd.  
Tigard, Oregon 97223

④

CITY OF TIGARD WALL STREET EXTENSION JOINT PERMIT APPLICATION  
ATTACHMENT B: PROPOSED PROJECT PURPOSE & DESCRIPTION

Permit Modification, Revised November 2005

Project Purpose and Need

The purpose of the proposed Wall Street extension is to carry out the requirements of the Tigard Transportation System Plan (TSP) which has been acknowledged by LCDC and approved by ODOT and Metro. The connection between Hall Boulevard and Hunziker Street via the extension of Wall Street is identified in the TSP as a needed system improvement. The TSP is the legally established plan for streets within the city, and it therefore confines the choices available to the city in the completion of its streets system.

The Wall Street extension is one of the projects determined by the TSP to be significant. It is one of only four locations where anticipated connectivity/circulation projects were determined to be primary and significant. The TSP identifies the Wall Street connection as a needed connection, one that is necessary to allow east-west circulation within the city and the region.

Completion of this connection is a critical element of the Tigard TSP; a part of the City's Comprehensive Plan. Tigard is obligated to follow the requirements of the TSP as the city develops. ORS 197.712(2)(e), OAR 660-012-0015, 660-012-0045.

Substitute projects are not included in the TSP, and as a practical matter, there are no alternatives that would be functional substitutes for the Wall Street extension. The purpose of the project is, therefore, to provide transportation connectivity and circulation at the location where it has been determined to be necessary by the city and regional planning processes.

The need for the connection has been established by the public planning process which led to adoption and acknowledgment of the TSP. Currently, there is no east-west connection between Hall Boulevard and 72nd Avenue between Hunziker Street and Bonita Road. The lack of a connection results in not only congestion on the east-west streets, but also excessive traffic and congestion on Hall Boulevard and the Hall/99W intersection. The addition of the Wall Street extension will reduce traffic on the existing east-west routes, as well as on Hall Boulevard. The primary goal of the proposed Wall Street extension is to provide a needed additional east-west connection in the eastern part of Tigard as required by the TSP.

A secondary goal of the project is to provide access to 26 acres of industrially-zoned land located east of Fanno Creek and west of the railroad tracks. This area currently lacks access. Because Tigard has limited undeveloped industrially zoned land, providing access to the area is vital to meet Tigard's targets for allowing industrial development and meeting employment targets. The project would also improve access to an additional 38 acres of industrially-zoned land east of the tracks and west of Hunziker Street.

Another secondary goal is to provide access to the Tigard Library and to the Fanno Pointe Condominiums that is not directly off Hall Boulevard to satisfy ODOT spacing requirements and improve road safety. Hall Boulevard is an ODOT facility and ODOT has permitted the Tigard library and Fanno Pointe Condominiums to construct temporary entrances off of Hall Boulevard, with a requirement to remove the temporary entrances once permanent access from the extended Wall Street is available.

#### Project Description

The project is located south of Highway 99W, west of Highway 217, and east of SW Hall Boulevard in Tigard, Oregon at approximately river mile 3.0 of Fanno Creek (Sheet 1). Pinebrook Creek, associated wetlands, two man-made ponds, and Fanno Creek are located in the project area (Sheets 2a & 2b). The City of Tigard is proposing to construct the Wall Street extension between SW Hall Boulevard and SW Hunziker Street. The project will involve construction of approximately 1,500 feet of new roadway extending northeast of SW Hall Boulevard and crossing Fanno Creek and the Southern Pacific railroad tracks to connect with, and widen, an existing approximately 1,600 linear foot, 2-lane paved section of Wall Street (Sheets 3a & 3b). The Wall Street project will include a 320 foot bridge spanning Fanno Creek and its floodway. The City has applied to the Oregon Department of Transportation for permission to construct a signalized intersection to cross the railroad tracks.

The Wall Street project is proposed to be constructed in two phases. The wetland permit application includes proposed impacts associated with construction of the entire project. Phase 1 includes construction of the western 360 feet of Wall Street, beginning at SW Hall Boulevard and ending west of the East Pond (Sheet 3a). This phase will involve impacts to Pinebrook Creek and associated wetlands and minor impacts to a man-made pond (the West Pond). Phase 2 includes construction of the remainder of Wall Street to Hunziker Street (Sheets 3a & 3b). This phase will involve additional minor wetland impacts to a second man-made pond (the East Pond) and wetlands located east of Fanno Creek. Proposed wetland impacts for Phases 1 and 2 are shown on Sheet 4a.

The basic design of Wall Street includes a 48 foot wide paved roadway (two 11ft. travel lanes, a 14ft. median, and two 6ft. bike lanes). The street will have curbs, 5 foot wide planters, and 6 foot wide sidewalks on each side. Right-of-way (ROW) width will be 72 feet along with additional widths of up to 20 feet outside the ROW to accommodate 8 foot wide public utility easements and cut and fill slopes. A typical section of Wall Street is shown on Sheet 5, and plan and profile views for the entire alignment are shown on Sheets 6a through 6f. The roadway will be constructed with fills up to 8 feet and cuts up to 3 feet. The highest fills occur at the bridge approaches and are a function of the required elevation of the bridge structure crossing Fanno Creek.

A 320 foot bridge over Fanno Creek will span both the creek and its floodway. Bridge details are shown on Sheets 7 & 8. At the bridge crossing, the paved width will be reduced to 36 feet (two 12ft. travel lanes and two 6ft. bike lanes) with curbs, sidewalks and handrails for a total right-of-way width of 50 feet. The bridge will be constructed in four 80 foot sections using precast prestressed concrete slabs supported by three rows of eight 16-inch

diameter steel pipe piles at the junction of each of the sections. The piles will be located outside the stream channel and delineated wetland areas. Since the bridge approach will be constructed on top of up to 8 feet of fill, the elevation of the bridge deck will be located approximately 8 feet above the ground level adjacent to the top of bank of Fanno Creek. Wildlife movement will be possible underneath the bridge deck along Fanno Creek.

Stormwater runoff from the new impervious surfaces associated with the Wall Street project will be captured in storm drains located in the roadway and will be treated in two water quality facilities (treatment bioswales). Runoff will be pre-treated in water quality manholes (sumped oil/water separator) prior to entering the bioswales. These water quality manholes will provide heavy sediment and floatable contaminant removal prior to treatment in the bioswales.

Runoff from Phase 1 of the project will be treated in the water quality facility that has been constructed on the Tigard Library site. The library bioswale was sized to treat runoff from the library as well as Phase 1 of the Wall Street project. CWS' Design and Construction Standards Resolution and Order #03-11, effective April 25, 2003 were utilized with a water quality loading event of 0.36 inches of precipitation falling in 4 hours with a storm return period of 96 hours, as mandated by Oregon Revised Statute 340-41-455(3)(e). The performance of the water quality sumped manhole and bioswale combination was designed in accordance with the CWS model for 65% phosphorus removal from 100% of the newly constructed impervious surfaces as per Tualatin Basin TMDL requirements under OAR 340-41-455. The 65% total phosphorus removal model correlates to 85% total sediment removal efficiency.

A new bioswale will be constructed east of Fanno Creek to treat runoff from Phase 2 of the Wall Street project. The Phase 2 bioswale was sized to accept the impervious surfaces from the Wall Street roadway and sidewalks created by Phase 2 of the project (4.6 acres). The Phase 2 bioswale was designed by the project engineer, DeHaas and Associates, in accordance with the NOAA Fisheries Habitat Conservation Division's stormwater guidance (2003). The NOAA Fisheries 6-month, 24-hour storm event (approximated by 2/3rd the runoff produced by the 2-year, 24-hour storm of 2.50 inches) utilized the Santa Barbara Urban Hydrograph technique. This represents treatment of 90-95% of all annual runoff with a resulting water quality discharge of 1.22 cfs. The NOAA Fisheries criteria exceed the CWS requirements of a total precipitation of 0.36 inches falling in 4 hours with a storm return period of 96 hours. The performance of the water quality sumped manhole and bioswale combination was modeled after the CWS model for 65% phosphorus removal. The trapezoidal bioswale will be 168 feet long, with a 6 foot bottom width, maximum treatment depth of 0.5 feet, 4:1 sloped banks, and a channel slope of 0.5%. This results in a minimum residency time of 9.0 minutes with a maximum flow of 1.22 cfs and a discharge velocity of 0.31 fps.

Bioswale outfalls will be constructed in wetlands adjacent to Pinebrook or Fanno Creek, and water velocity will be diffused by riprap pads. The outfall from the Phase 1/Tigard Library water quality facility was recently constructed (DSL #30238-RF, Corps #2003-00241) and currently outfalls to Pinebrook Creek in an area proposed to be impacted by the Wall Street

project; therefore, this outfall is proposed to be relocated east of its existing location and will outfall into the East Pond which is proposed to be reconfigured into wetland as part of proposed wetland mitigation for the project. The outfall at the downstream end of the Phase 2 bioswale will be located at the edge of a wetland located in the floodplain above the top of bank of Fanno Creek. The wetland is hydrologically connected to Fanno Creek in an area located south of the bioswale. Modeled bioswale discharge from the 6-month, 24-hour design storm is 1.22 cfs with a velocity of 0.31 fps. Bioswale discharge will be further dissipated by outfalling to a 6 foot by 8 foot by 1.5 foot thick rock pad of ODOT class 50 substrate planted with willows positioned at the edge of an elevated Fanno Creek wetland. By discharging the treated stormwater to a wetland area rather than directly to the stream, a further reduction of potential erosive flow forces is attenuated prior to entering Fanno Creek. Flows greater than the 25-year design storm event will be conveyed through a 27-inch diameter high-flow overflow pipe that discharges at a velocity of 9.5 fps into a 7 foot by 12 foot by 2.5 foot thick riprap pad using ODOT class 200 substrate positioned at the uppermost eastern edge of the wetland. Willows will be planted throughout the riprap mattress for temperature mitigation. Sheet 9 provides details of the Phase 2 bioswale, outfall, conveyance system, and overflow outfall.

A total of 0.30 acre of wetland fill is proposed for the entire project (Sheet 4a). Wetland impacts for Phase 1 include 0.11 acre to construct the roadway and fill slopes for the first 360 feet of the project. Wetland impacts for Phase 2 include 0.19 acre to construct the westerly bridge wingwall and the roadway and fill slopes for the remainder of the project. Proposed wetland impacts are mainly to Pinebrook Creek and associated emergent/scrub-shrub wetlands which are heavily invaded by invasive species. Minor wetland impacts are proposed to the West Pond, East Pond, and wetlands east of Fanno Creek located above the top of slope adjacent to Fanno Creek. Impacts to Pinebrook Creek are included in the wetland impact calculations. The section of Pinebrook Creek located in the impact area is not a well-defined channel, instead it consists of two to three approximately 6 inch wide shallow channels that flow through an associated reed canarygrass-dominated wetland. The top of stream bank could not be delineated in the field; therefore, the stream impact area could not be separated from the wetland impact area. The project will result in the loss of approximately 270 linear feet of Pinebrook Creek stream channel, and we estimate that the area of stream channel to be impacted is approximately 270 to 400 square feet. Fill activities in Pinebrook Creek will be conducted during the ODFW in-water work window of June 1 through September 30.

Proposed stream and wetland mitigation consists of a combination of stream channel and wetland creation, wetland enhancement, and wetland restoration (Sheet 10). The Pinebrook Creek stream channel and adjacent wetlands will be reconstructed slightly south of their existing location and Pinebrook Creek will be reconnected to Fanno Creek via a historic stream channel located on the Fanno Pointe Condominiums site. The two man-made ponds will be taken off-line from Pinebrook Creek and will be reconfigured and enhanced as stream-associated wetland areas. The remainder of the project wetland impacts will be mitigated for by removing the upland berm along the south edge of the East Pond to restore historic wetlands.

Wetland mitigation activities will require 0.28 acre of temporary wetland impact due to removal in existing wetlands. These impacts will include 0.08 acre in the proposed wetland enhancement area in order to reconstruct Pinebrook Creek and associated wetlands. Additional temporary wetland impacts will also be necessary in order to lower the existing elevations in three wetland areas in order to connect the berm removal/wetland restoration area with existing wetlands to the south on the Fanno Pointe site. These three wetland areas to be temporarily impacted include: the East Pond at its the south side (0.02 acre), a small existing drainage south of the East Pond (0.02) and existing wetlands on the Fanno Pointe site (0.13 acre). Finally, excavation of the new Pinebrook Creek stream channel on the Fanno Pointe site will result in 0.03 acre of temporary impact to existing wetlands. All temporarily impacted wetland areas will be seeded and planted upon completion of grading according to the mitigation plan.

Approximately 550 linear feet of new stream channel will be reconstructed to mitigate for the approximately 270 linear feet of Pinebrook Creek to be impacted. From the location where the existing Pinebrook Creek enters the site from under Hall Boulevard, the stream is currently culverted twice in culverts not designed for fish passage for a total length of approximately 170 feet. The reconfigured Pinebrook Creek will only be culverted once under the Fanno Pointe access road for a distance of 65 feet (Sheet 12). This culvert will be a 42 inch diameter CMP with a flat grade and will be buried 6 inches and have natural substrate (Sheet 13). More details regarding stream and wetland mitigation are included in the wetland mitigation plan included in Attachment D.

A Biological Assessment was prepared to evaluate potential project-related impacts on federally listed or candidate fish, wildlife and plant species that may occur in the project area. The primary reason for preparation of the BA is the potential for listed Upper Willamette River winter steelhead to be present in Fanno Creek. The effects of the project activities on listed fish and aquatic habitat were evaluated under the programmatic Biological Opinion issued by NOAA Fisheries (2002) Standard Local Operating Procedures for Endangered Species (SLOPES) for Certain Activities Requiring Department of the Army Permits in Oregon and the North Shore of the Columbia River. The proposed project activities were modified to meet all applicable terms and conditions of SLOPES that apply to this project, including general construction, road crossings, and stormwater management thereby preventing potential project impacts from negatively affecting listed fish species. A summary of SLOPES terms and conditions and proposed project actions to meet the SLOPES criteria was included in Appendix D of the Biological Assessment. The Biological Assessment was previously submitted to the Corps of Engineers, who determined that consultation with USFWS and/or NOAA Fisheries was not required for this project.

**⑩ CITY OF TIGARD WALL STREET EXTENSION JOINT PERMIT APPLICATION  
ATTACHMENT C: PHYSICAL AND BIOLOGICAL CHARACTER OF THE  
WETLAND/WATERWAY SITE**

The western third of the proposed Wall Street alignment crosses Pinebrook Creek and its associated emergent/scrub-shrub wetlands, two man-made ponds on-line with Pinebrook Creek, and Fanno Creek and its floodplain. Two projects are currently being constructed adjacent to the western portion of the Wall Street project area just east of SW Hall Boulevard and include the Tigard Library north of the project area and the Fanno Pointe Condominiums south of the project area. The eastern two thirds of the proposed alignment consists of mowed fields dominated by upland pasture grasses including tall fescue, bentgrass and sweet vernalgrass with scattered forbs including spotted cats-ear, Queen Anne's lace, oxeye daisy, English plantain, clover, and wood sorrel. The field edge above the floodplain of Fanno Creek is a narrow, moderately sloped woodland with Douglas fir, Oregon white oak, big leaf maple and Oregon ash in the canopy and snowberry, beaked hazelnut, Indian plum, rose, ornamental hawthorn and Himalayan blackberry in the shrub understory. Scattered sword fern and fringe cup are also present.

Fanno Creek flows southeast through the west portion of the project site. The stream banks along this reach of Fanno Creek are approximately 8 feet high and are steeply sloped and incised. Banks are nearly vertical and covered with dense Himalayan blackberry in many areas. Sections of Fanno Creek are shaded by native shrubs and trees, including red-osier dogwood, Pacific ninebark, willow, Douglas fir, Oregon white oak, Oregon ash and red alder. Upland trees present near Fanno Creek include Douglas fir and Oregon white oak. Fanno Creek is dominated by glides and pools in the project area with less than 5% riffles. Stream substrate is dominated by fines and silt, with bank material dominated by native soil and clay. Bank erosion is noticeable with observable evidence of recent channel scour. Water quality in Fanno Creek is currently managed under the Tualatin Basin TMDL program, but remains limited for temperature, dissolved oxygen (DO), phosphorus, and bacteria (Jan Miller, CWS personal communication, September 5, 2003). The hydrology of the system at the project site is very flashy with pronounced effects observed during a recent rainfall event. During the September 6 through 8, 2003 rain event, approximately 1.05 inches of rain fell over a 32 hour period of time, during which time discharge at Durham road went from approximately 5 cfs to 160 cfs.

Pinebrook Creek has been extensively modified from its historic condition and currently flows easterly through the site to its confluence with Fanno Creek. The stream flows through a series of pipes and is associated with two man-made ponds that adversely affect the downstream water quality of Fanno Creek. The original outfall of Pinebrook Creek onto the project site was from a 115 foot long 18 inch concrete culvert under Hall Boulevard. This culvert has been replaced with a 118.5 foot long, 57 inch wide by 38 inch high arch culvert with natural substrate to meet fish passage requirements as part of the Hall Boulevard widening project that is currently under construction. Hall Street was recently widened approximately 13 to 15 feet east of the existing edge of pavement within the road right-of-way for a distance of approximately 1,000 feet, which was a City and ODOT approval requirement for the Fanno Pointe Condominiums and Tigard Library projects.

Pinebrook Creek is daylighted for approximately 55 feet on the east side of Hall Boulevard before it is culverted around an on-line diversion pond in a 12-inch concrete culvert for approximately 140 feet. The diversion pond (the West Pond) was constructed in the early 1960s based upon a review of historic aerial photographs. The pond contains up to 2 feet of sediment and has a silty clay bottom. Concrete cylinders form the walls of the pond at the downstream end. A narrow fringe of emergent wetland vegetation surrounds the pond; vegetation is dominated by reed canarygrass, and other common fringe species include purple loosestrife (noxious), common horsetail, and nodding beggar's tick. Only very limited shading is provided by a few small trees including curly willow located adjacent to the northeast corner of the pond and an English birch tree located adjacent to the SW corner of the pond. The pond surface was covered with algae during the August, September, and October 2003 site visits. The shallow diversion pond receives flow from Pinebrook Creek via a 4-inch PVC pipe and outfalls back into Pinebrook Creek in a second approximately 35-foot daylighted section of Pinebrook Creek, that is heavily eroded, located below the pond to the east. Below this second daylighted section, Pinebrook Creek is culverted in an 18-inch concrete culvert for approximately 15 feet. Downstream of this culvert, Pinebrook Creek is daylighted for approximately 200 feet and flows through an emergent/scrub-shrub wetland area dominated by invasive and noxious species including reed canarygrass, purple loosestrife, bittersweet nightshade, creeping buttercup and Himalayan blackberry and also including scattered native Oregon ash, rose and willow. Pinebrook Creek appears to consist of two to three narrow (approximately 6-inch) shallow meandering channels through the reed canarygrass. A main stream channel is not visible.

The downstream end of Pinebrook Creek flows into a second on-line man-made pond (the East Pond) located at the top of bank of Fanno Creek. This pond was constructed in the late 1940s or early 1950s based upon a review of historic aerial photographs. The pond appears to have been constructed by pushing up a dirt berm at the downstream end of Pinebrook Creek just prior to its confluence with Fanno Creek, blocking fish passage. The East Pond is heavily silted in and contains 3 to 4 feet of sediment. A fringe of emergent wetland vegetation surrounds the pond; vegetation is dominated by reed canarygrass, reed mannagrass, peppermint, and purple loosestrife; other common species include floating pennywort, American speedwell, spotted ladythumb, soft rush, beggar's tick, and small-fruited bulrush. Limited shading is provided by Oregon ash and red alder trees along Fanno Creek on the southeast side of the pond. The pond surface was covered with algae during the August, September and October 2003 site visits.

Pinebrook Creek does not provide any navigational, fishing, or recreational uses. Fanno Creek and adjacent wetlands and riparian areas may provide for passive recreational uses on the project site including activities such as bird watching. In addition, Fanno Creek may provide recreational uses such as canoeing or fishing, although there are no known canoe access or fishing sites on the project site. The design of the Wall Street project incorporates a 320-foot bridge spanning Fanno Creek to avoid impacts to Fanno Creek; therefore, the project should not affect fishing or canoeing uses of Fanno Creek. The project will result in an increase in noise levels on the site, both during construction and upon completion of construction due to noise of vehicles using the roadway, which may reduce wildlife use of the site as well as recreational uses such as bird watching. However, the Fanno Creek Park is

proposed just north of Wall Street and the Tigard library site which will provide for continued passive recreational uses near the project site. A new section of the Fanno Creek Trail is planned for construction on the project site as well as to the south of the project site on the Fanno Pointe Condominiums site and to the north of the project site on the Tigard Library site. Phase 2 of the Wall Street project will incorporate a crossing of Wall Street for the Fanno Creek Trail to provide a connection between the future trail segments to be constructed north and south of the project site.

Tolerant aquatic insects, three-spined stickleback fish and mosquitofish were present in the West Pond and East Pond during the August 12, 2003 site visit by FES aquatic staff. Water temperatures were measured during an overcast morning and it was found that the West Pond (18.0 °C) warmed Pinebrook Creek water by 0.5 °C (17.0 °C upstream and 17.5 °C downstream of West Pond). Pinebrook Creek water temperature entering the East Pond measured 17.5 °C and near the middle of the East Pond water temperature measured 20.0 °C. Water temperature measured 18.0 °C in Fanno Creek. Clearly, these two man-made ponds on-line with Pinebrook Creek contribute to thermal pollution in Pinebrook and Fanno Creeks. It is apparent that dissolved oxygen and nutrient inputs negatively impact Fanno and Pinebrook Creeks as a result of the current state of these on-line ponds. Furthermore, the East Pond's outfall to Fanno Creek flows over a highly eroded earthen berm dropping 6 feet vertically, and cascading another 2 feet to Fanno Creek. The current condition of this eroded outfall blocks fish passage and has a high future failure potential, which would result in the accumulated silt load in the East Pond depositing in and negatively impacting Fanno Creek's at-risk aquatic habitat.

Forested and scrub-shrub wetlands are present in the floodplain east of Fanno Creek on the project site as well as south of the project site on the undeveloped (open space) portion of the Fanno Pointe site. These wetlands contain several native shrub and tree species including Oregon ash, red alder, willow, red-osier dogwood, Pacific ninebark, and clustered rose, in addition to the invasive species reed canarygrass and Himalayan blackberry. Shrub cover is dense and often greater than 65%. Due to their diversity of vegetation species and structure, these wetlands provide better wildlife habitat values than the invasive-species dominated wetlands associated with Pinebrook Creek. The road alignment has been located to minimize impacts to wetlands on the east side of Fanno Creek. Since the roadway will be constructed on top of up to 8 feet of fill at the bridge approaches, the elevation of the bridge deck will be located approximately 8 feet above ground level. Wildlife movement will be possible underneath the bridge deck along Fanno Creek

A large forested area located southwest of the railroad tracks and southeast of the Fanno Pointe site is mapped as wildlife habitat in the Fanno Creek Watershed Management Plan. The forest consists of a multi-layered mixed deciduous-coniferous canopy with diverse cover and structure. The canopy provides approximately 60% cover and contains big leaf maple, Oregon white oak, Oregon ash, Douglas fir, grand fir, and western red cedar. The diameters of trees range from 6 inches to 30 inches. The shrub understory provides approximately 50% cover and includes snowberry, beaked hazelnut, Oregon grape, Indian plum, vine maple, elderberry, serviceberry, English holly and ornamental hawthorn. Groundcover is dominated by large patches of English ivy in the forest edge but also

includes sword fern, oniongrass, Dewey's sedge, inside-out flower, bracken fern and trailing blackberry. Himalayan blackberry is present in the forest edge but is not a dominant component of the shrub layer. Snags are common and provide potential nesting sites for cavity nesters; large woody debris is also common and provides refugia for small wildlife species.

A second forested area located northeast of the railroad tracks and south of Wall Street is mapped as wildlife habitat by Metro. This forested area does not contain the vegetation diversity or structure of the higher quality wildlife habitat patch to the southwest and contains a higher percentage of Himalayan blackberry. The woodland is mostly deciduous with a patch of Douglas fir with an open understory on the north end close to Hunziker Road. Canopy vegetation is dominated by black cottonwood and red alder with smaller amounts of big leaf maple and Douglas fir. Tree diameters range from approximately 10 inches to 20 inches. The understory is dominated by Himalayan blackberry with scattered ornamental hawthorn, beaked hazelnut, and vine maple. Sword fern is present in the understory with large patches of English ivy. Snags and large woody debris are common. This forest does not contain either a seasonal or permanent water source and is not contiguous with the Fanno Creek corridor due to the presence of the railroad tracks along its southern edge. This forest is currently bordered on the north and west by industrially developed parcels and on the east by residential development. Due to these factors, this forest provides low to moderate wildlife habitat value.

CITY OF TIGARD WALL STREET EXTENSION  
JOINT PERMIT APPLICATION

ATTACHMENT D: WETLAND MITIGATION DATA FORM  
(Permit Modification, Revised November 2005)

# Mitigation Data Form

App# 31719-RF    App Name: Wall Street, permit modification    Resource Coord: Louise Bos    Date: 11/22/2005

Authorized Impact, Mitigation Type	Acreage					HGM Class					Cowardin Class							
	0.25	1	0.04	2	0.01	3	RI	1	RI	2	RI	3	PEM/SS	1	POW	2	PEM	3
Auth. Permanent Impact	0.25	1	0.04	2	0.01	3	RI	1	RI	2	RI	3	PEM/SS	1	POW	2	PEM	3
Mit. Creation	0.08	1		2		3	RI	1		2		3	PEM	1		2		3
Mit. Enhancement	0.29	1		2		3	RI	1		2		3	PFO/SS	1		2		3
Mit. Protection	0.20	1		2		3	RI	1		2		3	PFO/SS	1		2		3
Mit. Restoration		1		2		3	RI	1		2		3	PFO/SS	1		2		3
Mit. Bank Credits	PTP credits*					Bank Name												

Note: Be sure that acreage, HGM, and Cowardin class boxes correspond, i.e., if acreage is 0.57, then you are reporting that this relates to RFI 2 in the HGM class, and PFO 2 in Cowardin class. If you have more than 3 of any impact or mitigation type, use the back of this sheet and write OVER on this side.

- Protection Type**
- None
  - Conservation Easement
  - Restrictive Covenant in Deed
  - Deed Restriction

- Bonding Type**
- None Required
  - Surety Bond
  - Letter of Credit
  - Assignment of CD
  - Other:

**Bond Amount**  
\$ \_\_\_\_\_  
Ave. Buffer Width \_\_\_\_\_ ft

**Monitoring**

Years (3 or 5): 5      Report Due: Nov. 2007      As-Built Due: Winter 2006

**Mitigation Site Location (Only if different from impact site. Add pages for additional sites.)**

Site Number (if applicable):	
Name (if applicable):	
Waterbody (on or adjacent):	
City (if in city limits):	
County (required):	
Tax Lot (if applicable):	
TRSQQ:	

**Mitigation Project Number (For Data Entry Only):** \_\_\_\_\_

CITY OF TIGARD WALL STREET EXTENSION  
JOINT PERMIT APPLICATION

ATTACHMENT E: WETLAND MITIGATION PLAN  
(Permit Modification, Revised November 2005)



**City of Tigard**  
**Wall Street Extension**  
**Compensatory Wetland Mitigation Plan**

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*Prepared for:*

Vannie Nguyen, Engineering Manager  
**City of Tigard**  
13125 SW Hall Boulevard  
Tigard, Oregon 97223

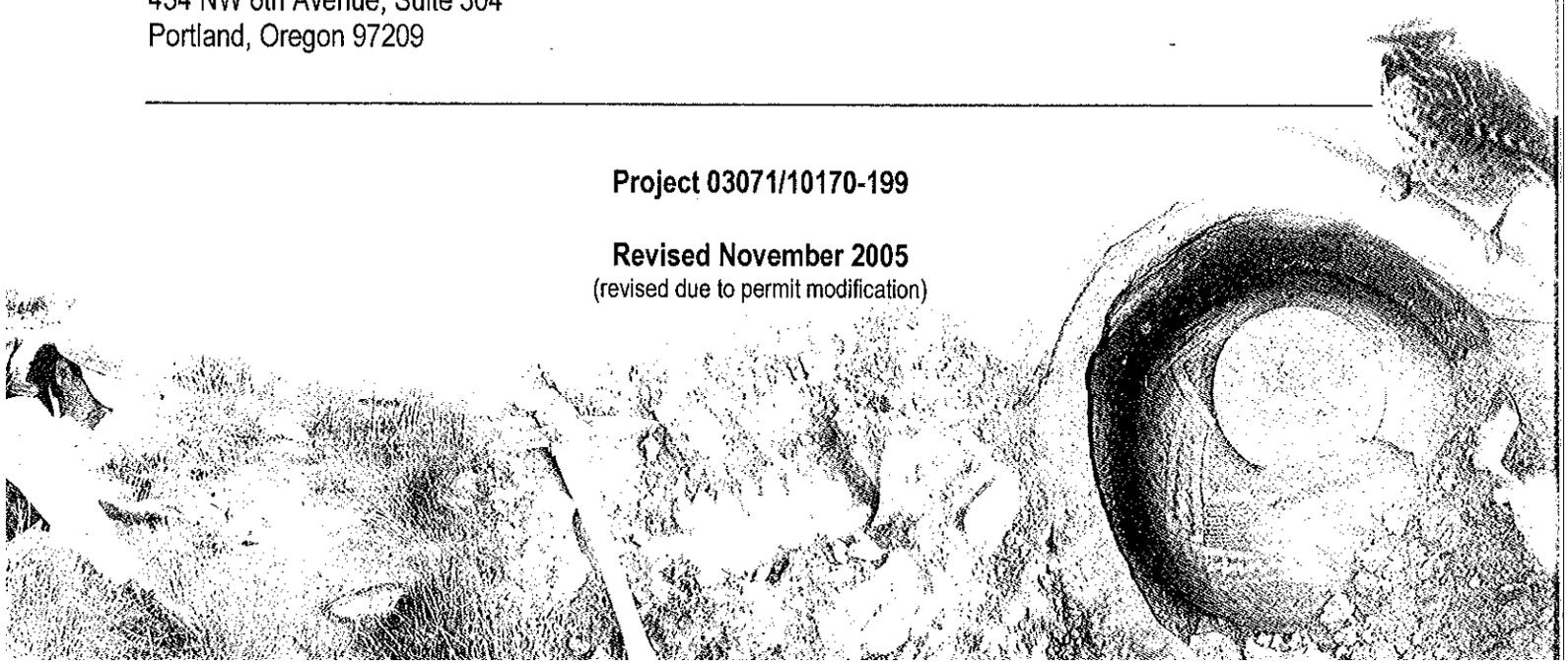
*Prepared by:*

**SWCA Environmental Consultants**  
434 NW 6th Avenue, Suite 304  
Portland, Oregon 97209

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**Project 03071/10170-199**

**Revised November 2005**  
(revised due to permit modification)



**City of Tigard**  
**Wall Street Extension**  
**Compensatory Wetland Mitigation Plan**

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*Prepared for:*

Vannie Nguyen, Engineering Manager  
**City of Tigard**  
13125 SW Hall Boulevard  
Tigard, Oregon 97223

*Prepared by:*

**SWCA Environmental Consultants**  
434 NW 6th Avenue, Suite 304  
Portland, Oregon 97209

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**Project 03071/10170-199**

**Revised November 2005**  
(revised due to permit modification)

## Table of Contents

1	Introduction .....	1
2	Project Description .....	1
3	Existing Site Conditions .....	2
3.1	Wetland Delineation .....	2
3.2	Existing Conditions .....	3
3.3	Wetland Functional Attributes .....	4
3.3.1	Impact Wetlands .....	4
3.3.2	Mitigation Wetlands .....	6
3.4	Hydrology .....	7
3.5	Mitigation Site Area .....	8
4	Compensatory Mitigation .....	8
4.1	Mitigation Site Selection .....	10
4.2	Mitigation Site Constraints .....	10
4.3	Mitigation Design Assumptions .....	11
4.4	Mitigation Goals and Objectives .....	11
4.5	Mitigation Success Criteria .....	12
4.6	Mitigation Site Grading .....	12
4.7	Mitigation Site Planting .....	14
4.8	Mitigation Reference Site .....	16
5	Mitigation Monitoring .....	16
6	Construction Schedule .....	17
7	Maintenance .....	18
8	Contingency .....	19
9	Long-Term Protection & Security Instrument .....	19

## List of Tables

Table 1.	Existing and Proposed Wetlands Functions .....	7
Table 2.	Mitigation Goals and Objectives .....	11
Table 3.	Wetland Planting Mix .....	15
Table 4.	Wetland Tree And Shrub Plantings .....	15
Table 5.	Conceptual Mitigation Project Schedule .....	18

## List of Figures

Sheet 1. Site Location Map .....	20
Sheets 2a & 2b. Site Plan .....	21
Sheet 3. Existing Conditions .....	22
Sheet 4. Wetland Mitigation Plan.....	23
Sheets 5a – 5d. Stream Restoration Grading Plan & Profile.....	24
Sheets 6a – 6d. Stream Restoration Details.....	25
Sheet 7. Proposed Stream and Wetland Mitigation Cross-Section Elevations .....	26

# 1 Introduction

This wetland mitigation plan addresses compensatory mitigation requirements for stream and wetland impacts associated with the City of Tigard's proposed Wall Street Extension project. The mitigation plan meets the Department of State Lands January 15, 2003 administrative rules for compensatory mitigation as well as the U.S. Army Corps of Engineers guidance for the establishment and maintenance of compensatory mitigation projects under the Corps regulatory program pursuant to Section 404(a) of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 (October 31, 2001). The mitigation strategy for proposed stream and wetland impacts focuses on restoration of the extensively altered downstream section of Pinebrook Creek to a more natural condition, including restoring its connection to Fanno Creek and creation of additional stream channel length, along with creation, enhancement and restoration of stream-associated wetlands.

The Wall Street project is located south of Highway 99W, west of Highway 217, and east of SW Hall Boulevard in Tigard, Oregon. The City of Tigard is proposing to construct a new segment of Wall Street extending northeast from SW Hall Boulevard to SW Hunziker Street (Sheet 1). The Wall Street impacts to streams and wetlands include modification to Pinebrook Creek, a first order tributary to Fanno Creek, placement of fill in wetlands and man-made ponds associated with Pinebrook Creek, and placement of fill in wetlands associated with Fanno Creek.

# 2 Project Description

The Wall Street project (Sheets 2a & 2b) consists of constructing a new section of Wall Street extending approximately 1,500 feet east of SW Hall Boulevard and crossing Fanno Creek and the Southern Pacific railroad tracks to connect with an existing approximately 1,600 linear foot section of Wall Street. The City has applied to the Oregon Department of Transportation for permission to cross the railroad tracks. The paved Wall Street roadway will be 48 feet wide and will include curbs, 5 foot wide planters and 6 foot wide sidewalks on both sides. The total width of the roadway and improvements is 72 feet. The existing section of Wall Street, located east of the railroad tracks, is a 40 foot wide paved 2-lane road that will be widened to 48 feet and improved to a total width of 70 feet.

A 320 foot bridge over Fanno Creek will span both the creek and its floodway. Due to the elevation of Hall Boulevard and existing grades along the proposed alignment, the elevation of the bridge deck will be approximately 6 to 8 feet above ground level and will allow for movement of wildlife along Fanno Creek beneath the bridge. The paved roadway of the bridge deck will be 36 feet wide with 6 foot wide sidewalks and pedestrian rails on both sides, for a total width of 50 feet.

The City evaluated nine alternative roadway alignments and five alternative bridge lengths for the proposed Wall Street extension in order to minimize impacts to Pinebrook Creek, associated wetlands and ponds and the Fanno Creek floodway. The presently proposed project (Alternative 9) is a variation of the City's previous Preferred Alternative. The present design keeps the intersection of Wall Street with Hall Boulevard at the same location as the Preferred Alternative,

which has been approved by ODOT, and shifts the remaining roadway up to 70 feet north of the Preferred Alternative. The presently proposed alignment has several advantages over the City's previous Preferred Alternative. The proposed project will result in less impact to Pinebrook Creek and associated wetlands and will allow Pinebrook Creek to remain on the south side of Wall Street, eliminating the need to relocate Pinebrook Creek as would have been required with the Preferred Alternative. Relocating Pinebrook Creek would have required one 90 to 100 foot culvert to take Pinebrook Creek to the north side of Wall Street and possibly a second 90 to 100 foot culvert to take Pinebrook Creek back to the south in order to connect with Fanno Creek in the event that Pinebrook Creek could not be routed underneath the westerly bridge span. In addition, due to the bridge being moved 70 feet north, the bridge will more completely span the East Pond.

The Wall Street project is proposed to be constructed in two phases (Phases 1 and 2). The wetland permit application includes proposed wetland impacts associated with construction of the entire project. A total of 0.30 acre of wetland impact is proposed for the entire project. Phase 1 includes construction of the western 360 feet of Wall Street, beginning at SW Hall Boulevard and ending west of the East Pond, in order to provide access to the Tigard Library and the Fanno Pointe Condominiums that is not directly off of Hall Boulevard. Phase 1 will involve 0.11 acre of wetland and stream impacts to construct the roadway and fill slopes for the first 360 feet of the project. This phase will involve impacts to Pinebrook Creek and associated wetlands and minor impacts to the West Pond. Phase 2 includes construction of the remainder of Wall Street to Hunziker Street. Phase 2 will involve 0.19 acre of wetland impact including minor impacts to the East Pond and wetlands located east of Fanno Creek in order to construct the bridge wingwall on the west side of the bridge and the roadway and fill slopes for the remainder of the alignment. No impacts are proposed to Fanno Creek from either Phase 1 or 2 of the project. A 320 foot bridge over Fanno Creek will span both the creek and its floodway. Bridge pilings will be placed outside the Fanno Creek stream channel and delineated wetland areas.

The project also includes construction of one water quality facility to treat runoff from Phase 2 of the project. This water quality facility will be located on the east side of Fanno Creek underneath the bridge span, and will outfall to wetlands associated with Fanno Creek. Runoff from Phase 1 of the project will be treated in the water quality facility recently constructed in the southeast corner of the Tigard library site. This water quality facility was sized to treat runoff from both the library and Phase 1 of the Wall Street project.

### **3 Existing Site Conditions**

#### **3.1 Wetland Delineation**

Three separate wetland delineations were conducted by different consultants in the proposed Wall Street project and mitigation areas. A wetland delineation report was prepared for the Tigard Library site by Kurahashi & Associates in June 2002 (DSL WD# 2002-0324; DSL concurrence letter dated October 8, 2002). The study area for the library delineation included the proposed library site as well as the Wall Street right-of-way extending from Hall Boulevard to the west side of Fanno Creek. A wetland delineation report for the proposed Wall Street right-of-

way extending from the west side of Fanno Creek to the east side of the railroad tracks was prepared by Pacific Habitat Services in September 2003 (DSL WD# 2003-0599; DSL concurrence letter dated March 15, 2004). A wetland delineation report for the adjacent Fanno Pointe Condominiums site to the south, where a portion of the Wall Street right-of-way is located and where partial wetland mitigation is proposed to occur, was prepared by Rhea Environmental Consultants in August 2002 (DSL WD # 2003-0024; DSL concurrence letter dated June 2, 2003). All delineated streams and wetlands are shown on Sheet 3.

### 3.2 Existing Conditions

Classification of the site wetlands associated with Pinebrook and Fanno Creeks according to Cowardin class is palustrine, persistent emergent and broad-leaved deciduous scrub-shrub wetlands with a saturated semipermanent/seasonal water regime (PEM1Y & PSS1Y). A minor palustrine, broad-leaved deciduous forested, saturated semipermanent/seasonal (PFO1Y) wetland component is also present on the east side of Fanno Creek where a few Oregon ash trees are present. The two man-made ponds associated with Pinebrook Creek are classified as palustrine, open water, permanently flooded, diked/ impounded, excavated (POWHhx).

Pinebrook Creek and associated wetlands and man-made ponds are shown on Sheet 3. Pinebrook Creek has been extensively modified from its historic condition and currently flows easterly through the site to its confluence with Fanno Creek. The stream flows through a series of pipes and is associated with two man-made ponds that adversely affect the downstream water quality of Fanno Creek. The original outfall of Pinebrook Creek onto the project site was from a 115 foot long 18 inch concrete culvert under Hall Boulevard. This culvert has been replaced with a 118.5 foot long, 57 inch wide by 38 inch high arch culvert with natural substrate to meet fish passage requirements as part of the recent Hall Boulevard widening project. Hall Boulevard was widened approximately 13 to 15 feet east of the existing edge of pavement within the road right-of-way for a distance of approximately 1,000 feet, which was a City and ODOT approval requirement for the Fanno Pointe and Tigard library projects.

Pinebrook Creek is daylighted for approximately 55 feet on the east side of Hall Boulevard before it is culverted around a diversion pond (the West Pond) in a 12 inch concrete culvert for approximately 140 feet. The West Pond was constructed in the early 1960s based upon a review of historic aerial photographs. The pond contains up to 2 feet of sediment and has a silty clay bottom. Concrete cylinders form the walls of the pond at the downstream end. A narrow fringe of emergent wetland vegetation surrounds the pond; vegetation is dominated by reed canarygrass, and other common fringe species include purple loosestrife, common horsetail, and nodding beggar's tick. Only very limited shading is provided by a few small trees including curly willow located adjacent to the northeast corner of the pond and an English birch tree located adjacent to the SW corner of the pond. The pond surface was covered with algae during the August, September, and October 2004 site visits. The pond receives flow from Pinebrook Creek via a 4-inch PVC pipe and outfalls back into Pinebrook Creek in a second approximately 35 foot long daylighted section of Pinebrook Creek, that is heavily eroded, located below the pond to the east. Below this second daylighted section, Pinebrook Creek is culverted in an 18 inch concrete culvert for approximately 15 feet. Downstream of this culvert, Pinebrook Creek is daylighted for approximately 200 feet and flows through an emergent and scrub-shrub wetland area dominated by invasive species including reed canarygrass, purple loosestrife, bittersweet nightshade,

creeping buttercup and Himalayan blackberry and also including scattered native Oregon ash, rose and willow. Pinebrook Creek appears to consist of two to three narrow (approximately 6 inch) shallow meandering channels through the reed canarygrass. A main stream channel is not visible.

The downstream end of Pinebrook Creek flows into a second man-made pond (the East Pond) located at the top of bank of Fanno Creek. This pond was constructed in the late 1940s or early 1950s based upon a review of historic aerial photographs. The pond appears to have been constructed by pushing up a dirt berm at the downstream end of Pinebrook Creek just prior to its confluence with Fanno Creek, blocking fish passage. The East Pond is heavily silted in and contains at least 3 to 4 feet of sediment. A fringe of emergent wetland vegetation surrounds the pond; vegetation is dominated by reed canarygrass, reed mannagrass, peppermint, and purple loosestrife. Other common species include floating penny-wort, American speedwell, spotted ladythumb, soft rush, beggar's tick, and small-fruited bulrush. Limited shading is provided by Oregon ash and red alder trees along Fanno Creek on the east side of the pond. The pond surface was covered with algae during the August, September and October 2004 site visits.

### 3.3 Wetland Functional Attributes

Existing wetland functional attributes were evaluated by Fishman/SWCA using the Hydrogeomorphic (HGM) based assessment for the Willamette Valley ecoregion (DSL, February 2001). HGM data sheets are available upon request. Wetlands and ponds associated with Pinebrook Creek belong to the Riverine Impounding class. The two man-made ponds as well as the wetlands along the lower portion of Pinebrook Creek are impounded as a result of having restricted outlets due to the presence of berms and an undersized culvert.

Wetland mitigation will be conducted on-site adjacent to Pinebrook Creek. Wetland mitigation will consist of reconstructing the Pinebrook Creek stream channel along with wetland creation, enhancement and restoration of wetlands along Pinebrook Creek within its active floodplain. The two man-made ponds will be taken off-line from Pinebrook Creek and will be reconfigured into seasonally ponded wetlands. The reconfigured East Pond wetland will receive inputs of treated stormwater from the bioswale for the Tigard Library and Phase 1 of the Wall Street project. The mitigated Pinebrook Creek wetlands will consist of temporarily ponded areas within active biennial floodplains and will therefore still be classified as Riverine Impounding.

#### 3.3.1 Impact Wetlands

Thirteen functional capacities were assessed for the existing wetlands and ponds associated with Pinebrook Creek. The same functional capacities were assessed for the mitigated Pinebrook Creek wetlands in their proposed future post-mitigation condition. Functional capacities are listed below with the corresponding scores, with "1.0" having the highest functional capacity score and "0" having the least.

- |    |  |              |
|----|--|--------------|
| 1. | Water Storage and Delay                          | Score = 0.10 |
| 2. | Sediment Stabilization and Phosphorous Retention | Score = 0.93 |
| 3. | Nitrogen Removal                                 | Score = 0.66 |
| 4. | Thermoregulation                                 | Score = 0.51 |

5.	Primary Production	Score = 0.73
6.	Resident Fish Habitat Support	Score = 0.68
7.	Anadromous Fish Habitat Support	Score = 0.0
8.	Invertebrate Habitat Support	Score = 0.55
9.	Amphibian & Turtle Habitat	Score = 0.57
10.	Breeding Waterbird Support	Score = 0.0
11.	Wintering & Migratory Waterbird Support	Score = 0.48
12.	Songbird Habitat Support	Score = 0.62
13.	Support of Characteristic Vegetation	Score = 0.60

Existing functions 1, 7 and 10 of the Pinebrook Creek wetlands and ponds scored very low (0.10 or lower). Function 1, water storage and delay, scored 0.10 due to the fact that 30% to 60% of the site is inundated only seasonally and the predominant vertical increase in surface water level is less than 2 feet. Since the ponds are permanently inundated, the capacity for these areas to store additional water during seasonal storm events is limited.

Function 7, anadromous fish habitat support, scored 0 since Pinebrook Creek is not accessible to anadromous fish during high water due to the presence of a berm at the downstream end of Pinebrook Creek and the East Pond and the 6 to 8 foot nearly vertical banks of Fanno Creek at the confluence with Pinebrook Creek.

Function 10, breeding waterbird support, scored 0 since less than 0.5 acre of surface water persists until at least July 1; however, we believe its function to be higher than the HGM score indicates. These ponds do provide some breeding waterbird support function since nearby residents have reported observations of ducklings using the ponds. There is potential to increase the scores for functions 1 and 7 through mitigation.

Functions 3, 4 and 13 scored medium (0.51 to 0.66) and also offer an opportunity to increase these functions through mitigation. Function 3, nitrogen removal, is limited due to the fact that the two ponds are ponded at nearly the same depth year-round, which limits the percent of the site that is inundated only seasonally as well as the difference between predominating high and low water levels on the site.

Function 4, thermoregulation, scored 0.51; however, we believe its function to be much lower based upon water temperature data collected on the site by Fishman/SWCA. The thermoregulation function is described in the HGM manual "If measured, this function could be expressed as: the decrease in temperature of water exiting a site via surface flow or infiltration, compared with temperature of the water when it enters the site via surface flow." The current functioning of the ponds is opposite to this definition. Instead of decreasing water temperatures in downstream waters, the ponds remain ponded throughout the summer and contribute heated water to downstream Pinebrook and Fanno Creeks. Fishman/SWCA biologists measured water temperatures as being 17.0 °C in Pinebrook Creek upstream of the West Pond, 18.0 °C in the West Pond, and 17.5 °C downstream of the West Pond. Water temperature near the middle of the East Pond measured 20.0 °C. Water temperature measured 18.0 °C in Fanno Creek. Clearly, these two man-made ponds contribute to thermal pollution in Pinebrook and Fanno Creeks.

Function 13, support of characteristic vegetation, is limited by the low occurrence of trees and shrubs and lack of native species in the wetland.

### 3.3.2 Mitigation Wetlands

Functional capacities and their corresponding scores for the proposed mitigated Pinebrook Creek wetlands (post-mitigation) are shown in Table 1 on the following page. Increases or decreases in function from the existing wetlands proposed to be impacted are also shown. According to the HGM assessment, the wetland mitigation will result in functional gains for several functions including water storage and delay, nitrogen removal, anadromous fish habitat support, amphibian and turtle habitat, wintering and migratory waterbird support, and support of characteristic vegetation.

Although not reflected by the HGM scores, we believe there will be functional gains for several other functions. The proposed mitigation will result in an increase in thermoregulation function due to removal of two on-line ponds that currently contribute thermal pollution to Pinebrook and Fanno Creeks. The mitigation will also provide a net increase in primary production due to the reconfiguration of the two man-made ponds, which are currently unvegetated, into emergent and scrub-shrub wetlands. Resident fish habitat support will also be increased due to the reconfiguration of Pinebrook Creek into a more defined stream channel, whereas its current configuration of two to three shallower undefined channels does not provide fish passage at low flows.

The proposed mitigation may result in minor decreases in a few functions. Any minor loss in sediment stabilization and phosphorous retention will be mitigated for by the water quality facility to be constructed as part of this project. The mitigation wetlands may have reduced invertebrate habitat support and songbird habitat support as compared with the existing wetlands due to the removal of the two on-line ponds; however, the presence of other perennial water sources very close to the project site including Fanno Creek and a more natural pond approximately 900 feet to the north of the project area on the Fanno Creek Park site, should mitigate for the loss of the ponds on the site. The increase in vegetation diversity and structure of the mitigation site, removal of invasives, and increase in the number of native species is considered to provide a net benefit in wildlife habitat function. There will be a minor reduction in the breeding waterbird support function, although it is not reflected by the HGM scores. The existing ponds do provide some breeding waterbird support function based upon observations of nearby residents, and reconfiguring the ponds into seasonally ponded wetlands will reduce this function.

The existing Pinebrook Creek and associated wetlands provide habitat for wildlife species commonly found in disturbed urban wetlands and that are resistant to human and domestic animal disturbance. Construction of the proposed Wall Street when taken in combination with the recently constructed Tigard library and Fanno Pointe Condominiums adjacent to the wetland mitigation site may reduce the wildlife value of the mitigation site, although species likely to use the site should already be accustomed to human disturbance. In order to increase the wildlife habitat function of the wetland mitigation site, an upland buffer will be maintained adjacent to the wetland mitigation site. In addition, educational signs will be posted to request that the public avoid entering or disturbing the mitigation area.

Table 1. Existing and Proposed Wetland Functions			
Function	Impact Wetlands	Mitigation Wetlands	Net Gain/Loss
1. Water Storage and Delay	0.10	0.20	+0.10
2. Sediment Stabilization and Phosphorous Retention	0.93	0.87	-0.06
3. Nitrogen Removal	0.66	0.81	+0.15
4. Thermoregulation	0.51	0.14	-0.37
5. Primary Production	0.73	0.71	-0.02
6. Resident Fish Habitat Support	0.68	0.61	-0.07
7. Anadromous Fish Habitat Support	0.0	0.75	+0.75
8. Invertebrate Habitat Support	0.55	0.42	-0.13
9. Amphibian & Turtle Habitat	0.57	0.63	+0.06
10. Breeding Waterbird Support	0.0	0.0	No change
11. Wintering & Migratory Waterbird	0.48	0.52	+0.04
12. Songbird Habitat Support	0.62	0.46	-0.16
13. Support of Characteristic Vegetation	0.60	0.96	+0.36

### 3.4 Hydrology

The hydrology of Pinebrook Creek and its associated wetlands, as well as wetlands on the east side of Fanno Creek, are driven by inflow of upstream hydrology and direct precipitation on the ground surface and fluctuations in seasonal groundwater levels on the site. In addition, the two man-made ponds both receive surface flow from Pinebrook Creek. The ponds remain ponded year-round since their outlets are restricted due to the presence of berms or an undersized culvert. Both ponds will be taken off-line to prevent these ponds from continuing to contribute thermal and nutrient pollution to Fanno Creek. The ponds will be reconfigured as stream-associated wetland areas (HGM class Riverine Impounding). Wetland mitigation site hydrology sources will include primarily precipitation and groundwater, although the reconfigured East Pond wetland area will also receive treated stormwater from the water quality facility for the Tigard Library and Phase 1 of the Wall Street project. Hydrology is not anticipated to be sufficient to maintain the reconfigured East and West Pond wetland areas as ponded year-round once they are taken off-line from Pinebrook Creek. The reconfigured wetland areas are anticipated to be

seasonally shallowly ponded from the fall through the spring. The fact that these ponds will dry up during the summer is beneficial for native wildlife in the area, especially amphibians, since the ponds will no longer provide habitat for bullfrogs.

### **3.5 Mitigation Site Area**

Wetland mitigation will occur primarily on-site adjacent to the proposed impacts to Pinebrook Creek and associated wetlands. Existing vegetation in the proposed wetland creation and wetland restoration areas includes primarily non-native upland grasses and forbs with a few non-native black locust trees, generally 10 inches in diameter. Cover by native species is very limited. Several noxious and invasive species are also present and include giant hogweed, Himalayan blackberry and thistle. Surface soils are generally fine-textured silty clay loams and are mapped as hydric Huberly silt loam or Quatama loam, which may have hydric Huberly inclusions.

## **4 Compensatory Mitigation**

A total of 0.30 acre of wetland fill is proposed for the entire project (Sheet 2a). Proposed stream and wetland mitigation (Sheet 4) consists of a combination of stream channel and wetland creation (0.08 acre; 0.053 acre mitigation credit at 1.5:1), wetland enhancement (0.29 acre; 0.097 acre mitigation credit at 3:1), and wetland restoration (0.20 acre; 0.20 acre mitigation credit at 1:1). The Pinebrook Creek stream channel and adjacent wetlands will be reconstructed slightly south of their existing location, partially in existing uplands and partially in existing wetland. Pinebrook Creek will be reconnected to Fanno Creek via a historic stream channel located on the Fanno Pointe Condominiums site. The two man-made ponds will be taken off-line from Pinebrook Creek and will be reconfigured as seasonally ponded forested/scrub-shrub wetlands. The remainder of the proposed wetland impacts will be mitigated for by restoring wetlands south of the East Pond. A portion of the upland berm along the south edge of the East Pond will be removed. The berm is likely material sidecast from excavation of the East Pond and placed in an area mapped as having hydric Huberly soils. The upland area located southeast of the berm may also be excavated to restore wetlands. Fill was likely historically placed in this area, mapped as having soils with hydric Huberly inclusions, during construction of an 8 inch sanitary sewer line located just south of the berm. The berm and the area to the southeast were determined to be upland in the wetland delineation conducted by Kurahashi & Associates for the Tigard Library site. These areas are surrounded by wetlands on the north, west and south and are bordered by Fanno Creek on the east; therefore we believe the berm and sewer alignment were constructed in historic wetlands and that removal of the berm and upland fill area to the southeast should receive wetland mitigation credit of 1:1 for wetland restoration.

The two man-made ponds that are on-line with Pinebrook Creek will be taken off-line to prevent these ponds from continuing to contribute thermal and nutrient pollution to Fanno Creek. The ponds will be reconfigured as stream-associated wetland areas. Wetland mitigation site hydrology sources will include primarily precipitation and groundwater, although the reconfigured East Pond wetland area will also receive treated stormwater from the bioswale for Phase 1 of the Wall Street project and the Tigard Library. Hydrology is not anticipated to be

sufficient to maintain these areas as ponded year-round once they are taken off-line from Pinebrook Creek. The reconfigured wetland areas are anticipated to be seasonally shallowly ponded from the fall through the spring. The fact that these ponds will dry up during the summer is beneficial for native wildlife in the area since the ponds will no longer provide habitat for bullfrogs.

Approximately 550 linear feet of new stream channel will be reconstructed to mitigate for the approximately 270 linear feet of Pinebrook Creek to be impacted. The new section of Pinebrook Creek will be constructed along the south side of Wall Street. The new stream channel will begin at the outlet of the culvert under Hall Boulevard and will head easterly through the reconfigured West Pond wetland area, continue along the north edge of the Fanno Pointe Condominiums site, and then head southerly to connect to an historic stream channel located in the open space tract located east of the Fanno Pointe Condominiums and owned by the City of Tigard. Based upon a review of aerial photos dating back to 1936, this historic stream channel appears to be the historic lower portion of Pinebrook Creek, prior to its realignment in the late 1940s or early 1950s for the purpose of creating the East Pond. The relocated Pinebrook Creek is anticipated to provide improved fish habitat over the existing stream in several ways. Most importantly, connecting the relocated Pinebrook Creek with the historic channel at its downstream end will provide fish passage for cutthroat trout and juvenile steelhead during high stream flows of Fanno Creek. There is currently no fish passage from Fanno Creek to Pinebrook Creek since the confluence of Pinebrook and Fanno Creeks consists of an approximately eight foot drop in elevation from the downstream edge of the East Pond to Fanno Creek. In addition, the relocated stream channel will contain higher flows since it will consist of one main stream channel instead of the two to three shallow undefined channels that currently exist. The historic channel has sinuosity, in-stream woody structure, and a mature willow canopy. These habitat features are lacking for the existing Pinebrook Creek. From the location where the existing Pinebrook Creek enters the site from under Hall Boulevard, the stream is currently culverted twice in culverts not designed for fish passage for a total length of approximately 170 feet. The reconfigured Pinebrook Creek will only be culverted once under the Fanno Pointe access road for a distance of 65 feet. This culvert will be a 42 inch diameter CMP with a flat grade and will be buried 6 inches and have natural substrate (Sheet 6d).

Removal of riparian vegetation adjacent to Pinebrook and Fanno Creeks will occur in order to construct the roadway, bridge wingwalls and bridge deck. Construction of Phase 1 of the project will require removal of approximately 12 trees adjacent to Pinebrook Creek. These trees consist mainly of non-native black locust and non-native hawthorn and one willow. Construction of the bridge deck will require larger shrubs and a few trees to be removed, although herbaceous vegetation and smaller shrubs will remain underneath the bridge. The height of the bridge deck will be 6 to 8 feet above grade and will allow light penetration to support vegetation underneath. Construction of Phase 2 of the project, including the bridge, will require removal of approximately 12 Oregon ash and red alder trees and 5 non-native hawthorn trees. Replacement native trees and shrubs will be planted along the top of bank of the Fanno Creek as well as along the new Pinebrook Creek stream channel to mitigate for removal of vegetation in the riparian area. A natural resource assessment and mitigation plan were submitted to Clean Water Services

for impacts within the 50 foot vegetated corridors adjacent to Fanno Creek, Pinebrook Creek and wetlands.

## 4.1 Mitigation Site Selection

The mitigation site is located on-site adjacent to the proposed impact area of Pinebrook Creek and associated wetlands and ponds. Reconstructing Pinebrook Creek on the south side of the proposed Wall Street and south of its existing location is preferred over reconstructing the stream channel on the north side of Wall Street as was originally proposed under the City's previously preferred alternative alignment for Wall Street. Reconstructing Pinebrook Creek on the south side of Wall Street minimizes the number of culvert crossings of Pinebrook Creek. Relocating Pinebrook Creek to the north side of Wall Street would have required one 90 to 100 foot culvert to take Pinebrook Creek to the north side of Wall Street and possibly a second 90 to 100 foot culvert to take Pinebrook Creek back to the south in order to connect with Fanno Creek in the event that Pinebrook Creek could not be routed underneath the westerly bridge span. An access road for the Fanno Pointe Condominiums will need to cross Pinebrook Creek, but the need for the library access road to cross Pinebrook Creek will be eliminated by reconstructing Pinebrook Creek on the south side of Wall Street. The proposed relocation of Pinebrook Creek on the south also works better for realigning Pinebrook Creek with its historic channel and confluence with Fanno Creek.

## 4.2 Mitigation Site Constraints

Mitigation site constraints include the limited site area that is available in which to reconstruct Pinebrook Creek due to the close proximity of the Tigard Library and the Fanno Pointe Condominiums to the location of the proposed right-of-way for the Wall Street project. The distance between the grading limits of the proposed Wall Street and the grading limits of the Fanno Pointe site is 40 feet wide at its narrowest point. The proposed grading plan for the reconstructed Pinebrook Creek and adjacent wetland creation area is constrained by the elevations of the Fanno Pointe site and Wall Street. The grade of the reconstructed stream channel will be 1 to 2 percent in the upper portion and will steepen to 6 percent in the lower portion in the vicinity of the historic channel. The tendency would be for low stream flows to remain in the stream channel, preventing hydrology from reaching the adjacent created wetland areas. The design of the stream channel takes this into account and incorporates in-stream structure, stream meanders and other measures to facilitate stream flows overtopping the streambanks during the two-year flood event in order to provide requisite wetland hydrology.

In addition, the steep and nearly vertical banks of Fanno Creek will prevent the wetland mitigation site, including the wetland restoration/berm removal area, from receiving hydrologic inputs from overbank flooding of Fanno Creek except during very large storm events (the 1996 aerial flood photo does not show any flooding on the site).

### 4.3 Mitigation Design Assumptions

Design assumptions include the presence of requisite wetland hydrology within the created and restored wetland areas. Design of the reconstructed Pinebrook Creek and the adjacent wetland creation area has incorporated a hydrologic analysis of the upstream drainage basin and existing Pinebrook Creek stream flows to determine the size of stream channel that would allow the stream to overtop its banks during the two-year flood event in order to provide hydrology to the created wetland areas adjacent to Pinebrook Creek. In addition, The large rocks and root wads to be used in the weir structures will reduce stream flow velocity and facilitate overbank flooding to provide hydrology to stream-associate wetlands during high flows.

Construction of Phase 1 of the Wall Street project will require re-routing the outfall from the stormwater quality facility that was recently constructed on the Tigard Library site. The stormwater outfall currently outfalls to wetlands associated with Pinebrook Creek that are proposed to be impacted by the Wall Street project. The outfall will be relocated to the east to the reconfigured East Pond wetland area in order to maintain wetland hydrology of this area once the East Pond is taken off-line from Pinebrook Creek. Hydrology from the reconfigured East Pond wetland area will overflow during larger storm events to provide hydrology to the wetland restoration/berm removal area adjacent to the south and will eventually flow to Pinebrook Creek.

### 4.4 Mitigation Goals and Objectives

Table 2 below lists the goals and objectives for the mitigation project. The goals have been formulated based on the focus of improving fish and wildlife habitat in Pinebrook Creek and the lower reach of Fanno Creek.

Goal	Objective
Restore Pinebrook Creek to a more natural stream channel and create associated wetlands	Remove man-made on-line ponds; reconstruct Pinebrook Creek stream channel and associated wetlands based on hydrologic analysis of upstream drainage basin
Restore wetlands within the 100-year floodplain	Remove berm south of East Pond
Improve water quality in Fanno Creek	Take two man-made ponds off-line from Pinebrook Creek to eliminate thermal and nutrient pollution inputs to Fanno Creek; plant trees along top of bank of Fanno Creek to improve shading
Restore fish passage to Pinebrook Creek from Fanno Creek during high flow storm events	Reconnect Pinebrook Creek to its historic stream channel on the Fanno Pointe site
Improve wildlife habitat adjacent to Pinebrook Creek	Remove and control noxious and invasive species including purple loosestrife, Himalayan blackberry and bittersweet nightshade; create stream-associated wetland areas and plant with native species

## 4.5 Mitigation Success Criteria

The success criteria listed below are recommended to be met at the end of the 5-year monitoring period. It is likely that some replanting will be necessary during the first few years, and there may be revisions to the species to be replanted based upon adaptive management reacting to seasonal hydrology of the mitigation site. Recommendations for corrective actions (if needed) to achieve mitigation success will be included in the annual wetland monitoring report, and these actions will be implemented as needed throughout the monitoring period to ensure that the success criteria are met at the end of the 5-year monitoring period. Success criteria and length of the monitoring period are subject to approval by the Division of State Lands and the Corps of Engineers as conditions of the wetland fill permit.

1. Wetland mitigation areas will meet the wetland hydrology criterion in the 1987 Corps of Engineers Wetland Delineation Manual. The presence of free water or soil saturation within 12 inches of the surface at the time of monitoring will meet the primary wetland hydrology indicator.
2. A minimum of 80% survival of planted trees within the wetland mitigation site. Natural recruitment of desirable native species is encouraged.
3. A minimum 80% survival of planted shrubs within the wetland mitigation site. Natural recruitment of desirable native species is encouraged.
4. A minimum 80% herbaceous cover of facultative or wetter species within the wetland mitigation site.
5. Less than 30% combined cover of non-native invasive species within the wetland mitigation site. Non-native invasive target species include: reed canarygrass (*Phalaris arundinacea*), teasel (*Dipsacus sylvestris*), Canada thistle (*Cirsium arvense*), common thistle (*Cirsium vulgare*), purple loosestrife (*Lythrum salicaria*), Himalayan blackberry (*Rubus discolor*) and bittersweet nightshade (*Solanum dulcamara*).

## 4.6 Mitigation Site Grading

A new, approximately 550 linear foot section of Pinebrook Creek will be constructed south of Wall Street (Sheets 5a-5d). The new stream channel will begin at the outlet of the culvert under Hall Boulevard and will head easterly through the reconfigured West Pond wetland area, continue along the north edge of the Fanno Pointe Condominiums, and then head southerly to connect to an historic stream channel located in the open space tract to the east of the Fanno Pointe Condominiums. The reconfigured Pinebrook Creek will be culverted once under the Fanno Pointe access road for a distance of approximately 65 feet. This culvert will be a 42 inch diameter CMP with a flat grade and will be buried 6 inches and have natural substrate.

The West Pond and East Pond will be taken off-line from Pinebrook Creek prior to the summer of 2006 in order to allow these areas to dry up prior to site grading, estimated to begin in late summer or early fall of 2006. The berm at the downstream end of the East Pond is severely

eroded and undercut and will require stabilization to prevent the berm from washing out during a large storm event which could potentially result in a large sediment load being delivered to Fanno Creek. Details of the stabilization of the berm will be provided for agency review as soon as construction plans are available.

The reconstructed stream channel will be a trapezoidal-shaped channel approximately 2 feet wide at the bottom, 5 feet wide at the top of bank, and 1.5 feet deep. The stream channel will be stepped with a series of rock and/or log weir structures to meet ODFW fish passage criteria for juveniles. The approximate location of the reconstructed stream channel is shown in Sheets 5a - 5d, and cross-sections and weir details are shown in Sheets 6a - 6c. The alignment of the reconstructed stream channel may be refined by Fishman/SWCA in the field based upon site topography and other habitat features and will be staked prior to the start of excavation. The stream channel and the adjacent wetland creation area will be constructed using a small track-mounted excavator, or its equivalent, to minimize soil compaction. Erosion control fabric will be used at all weir structures in the restored Pinebrook Creek stream channel to prevent downstream sedimentation into Fanno Creek.

Stream-associated wetlands will be created adjacent to the reconstructed Pinebrook Creek and will extend up to 10 feet north and south of the stream channel. The created wetlands will consist of a series of wetland terraces that will parallel the stepped portions of the stream channel. The wetland terraces will contain central depression areas to retain hydrology for longer periods. Since the existing grade will need to be lowered several feet in order to create stream-associated wetlands, a soil conditioner will need to be incorporated in the wetland creation area. We recommend a fully composted ground bark, fine-textured instead of medium bark mulch, with 5 pounds of 22-16-8 fertilizer mixed with each 5 cubic-yards of composted material. Soil conditioner should be spread to a uniform depth of 4 inches throughout the wetland creation area and incorporated to a depth of 6 to 8 inches prior to completion of final grade. Topsoil salvage and reuse is not recommended in wetland creation or enhancement areas due to the presence of reed canarygrass on the site and the possibility that redistributing the seed bank could result in reed canarygrass colonization of the newly graded wetland areas.

The design of the stream channel and wetland terraces was based upon a hydrologic analysis of the upstream drainage basin and existing stream flows with the goal of ensuring that the stream would overtop its banks during the two-year flood event in order to provide hydrology to the created wetland areas adjacent to the stream channel. The large rocks and root wads to be used in the weir structures will reduce stream flow velocity and facilitate overbank flooding to provide hydrology to stream-associated wetlands during high flows. In addition, lowering the existing topography in the wetland creation area should intersect the seasonal groundwater and soil saturation levels to provide additional wetland hydrology. The total stream and wetland creation area will be 0.08 acre and is shown in Figures 5a - 5d. Cross-sections for the wetland creation areas are shown in Sheet 7.

Wetland restoration will occur immediately south of the East Pond and will consist of removal of a portion of the upland berm that was historically placed in wetlands adjacent to Pinebrook Creek. The upland area located southeast of the berm may also be excavated to restore wetlands

that were likely filled during construction of an 8 inch sanitary sewer line located just south of the berm. The wetland restoration area will total 0.20 acre and will be graded to match the elevation of the reconfigured East Pond wetland to the north and the existing wetlands on the Fanno Pointe site to the south. Since the existing grade will be lowered several feet, soil conditioner will also need to be incorporated in the wetland restoration area. Hydrology of the wetland restoration area will include inputs of treated stormwater from the reconfigured East Pond wetland and seasonal groundwater.

Wetland mitigation activities will require 0.28 acre of temporary wetland impact due to removal in existing wetlands. These impacts will include 0.08 acre in the proposed wetland enhancement area in order to reconstruct Pinebrook Creek and associated wetlands. Additional temporary wetland impacts will also be necessary in order to lower the existing elevations in three wetland areas in order to connect the berm removal/wetland restoration area with existing wetlands to the south on the Fanno Pointe site. These three wetland areas to be temporarily impacted include: the East Pond at its the south side (0.02 acre), a small existing drainage south of the East Pond (0.02) and existing wetlands on the Fanno Pointe site (0.13 acre). Finally, excavation of the new Pinebrook Creek stream channel on the Fanno Pointe site will result in 0.03 acre of temporary impact to existing wetlands

#### **4.7 Mitigation Site Planting**

Mitigation site planting will incorporate a mixture of emergent and forested/scrub-shrub planting areas. Shrubs will be planted along the top of stream bank of the reconfigured Pinebrook Creek. Stream-associated wetland terraces will be seeded with the wetland planting mix, and sedges and rushes will be planted in the central depression areas. The reconfigured West and East Ponds and the wetland restoration/berm removal area will be seeded and planted with native trees and shrubs to create forested/scrub-shrub wetlands. Seeding and planting specifications for the wetland mitigation site are listed below in Tables 3 and 4. Planting specifications for the upland buffer were incorporated into the natural resource assessment and vegetated corridor mitigation plan that was submitted to Clean Water Services (CWS File No. 4203).

We anticipate seeding will occur in the fall of 2006 after completion of grading and prior to the onset of winter rains. The seed will be broadcast evenly over the mitigation site and hand raked into the top few inches of soil to ensure good soil-seed contact. Straw mulch will be placed over seeded areas and crimped into the soil. Once herbaceous groundcover has fully established, straw mulch may be removed and brush blankets or tree mats will be placed around all tree and shrub plantings to retain moisture and discourage weed growth. Protector tubes will be installed around all tree plantings to protect them from beaver, nutria and small rodent damage. Irrigation of plantings may be needed during the summer months until plants become established.

Planting of trees, shrubs, and plugs can occur either after the onset of the fall rainy season if container plants are used or can occur in the winter towards the end of the season if bare-root material is used. Either container or bare root can be used, depending upon seasonal availability and conditions. Smaller shrubs and herbaceous propagules will be installed in groups at moderate densities in random placements. Invasive and noxious species will be removed from the wetland and buffer mitigation areas prior to plant installation.

Table 3. Wetland Planting Mix					
Scientific Name	Common Name	Type	Rate/Spacing	Location*	Quantity
<i>Agrostis exarata</i>	spike bentgrass	seed	2 lbs/acre	All	1.5 lbs
<i>Carex obnupta</i>	slough sedge	propagules	1 ft centers in groups of 5	West Pond	75
				East of West Pond	100
				East Pond	100
<i>Eleocharis ovata</i>	ovoid spikerush	seed	2 lbs/acre	All	1.5 lbs
<i>Hordeum brachyantherum</i>	meadow barley	seed	12 lbs/acre	All	9 lbs
<i>Juncus tenuis</i>	slender rush	seed	1 lb/acre	All	0.75 lbs
<i>Lupinus polyphyllus</i>	large-leafed lupine	seed	8 lbs/acre	All	6 lbs
<i>Scirpus microcarpus</i>	small-fruited bulrush	propagules	1 ft centers in groups of 5	West of West Pond	100
				West Pond	75
				East Pond	100

\*Wetland planting mix to be seeded in all wetland mitigation areas and temporary wetland impact areas. Distribute seed uniformly over the designated area and hand rake to insure that seed is firmly in contact with the soil. Slough sedge and small-fruited bulrush to be planted in central depression areas in wetland terraces to be created east and west of the West Pond and in reconfigured West Pond and East Pond.

Table 4. Wetland Tree and Shrub Plantings					
Scientific Name	Common Name	Size*	Spacing	Planting Location	Quantity
<i>Acer circinatum</i>	vine maple	1 gallon	5-8 feet on center	West Pond (149-150 ft)	10
				perimeter of East Pond (139-140 ft)	10
<i>Cornus stolonifera</i> [[sericea]]	red-osier dogwood	1 gallon	5-10 feet on center	top of stream bank	100
<i>Crataegus douglasii</i>	black hawthorn	1 gallon	10 feet on center	West Pond (148-149 ft)	5
				perimeter of East Pond (138-139 ft)	5
<i>Fraxinus latifolia</i>	Oregon ash	2 gallon	15 feet on center	West Pond (147-148 ft)	20
				East Pond & wetland restoration area (136-137ft) / temporary wetland disturbance area	30

Table 4. Wetland Tree and Shrub Plantings					
Scientific Name	Common Name	Size*	Spacing	Planting Location	Quantity
<i>Physocarpus capitatus</i>	Pacific ninebark	1 gallon	5-8 feet on center	West Pond (148 ft) perimeter of East Pond (138 ft)	10 8
<i>Rosa pisocarpa</i>	wild clustered rose	1 gallon	groups of 3; 3 feet on center	West Pond (148-149 ft) perimeter of East Pond (138-139 ft)	20 15
<i>Salix lasiandra</i>	Pacific willow	1 gallon or stakes	10-15 feet on center	top of stream bank	50
<i>Salix piperi</i>	Piper's willow	1 gallon or stakes	5-10 feet on center	top of stream bank East Pond & wetland restoration area (136-137 ft) / temporary wetland disturbance area	70 30
<i>Salix scouleriana</i>	Scouler willow	1 gallon or stakes	15 feet on center	Wetland restoration area (137-138 ft) / temporary wetland disturbance area	30
<i>Thuja plicata</i>	western red cedar	2 gallon	15 feet on center	West Pond (149 -150 ft) perimeter of East Pond (139-140 ft)	5 5

\*Bare root plants may be substituted for container plants based upon seasonal availability and site conditions.

#### 4.8 Mitigation Reference Site

A combination of reference sites was utilized to assist with design of the mitigation plan to be consistent with site conditions typically found along smaller Fanno Creek tributaries and in associated wetlands in the project vicinity. Reference streams and wetlands include Red Rock Creek, Derry Dell Creek and Ash Creek.

### 5 Mitigation Monitoring

A post-construction report demonstrating “as-built” conditions including grading and discussing any variation from the approved plan will be prepared by a wetland biologist and submitted to DSL and the Corps within 90 calendar days of completing construction. In addition, monitoring will be conducted by a wetland biologist annually for 5 consecutive years, beginning the first year following completion of construction and installation of plantings. Monitoring will take place during the growing season, typically in late spring/early summer.

Monitoring data will be collected for the following parameters:

- The presence of field indicators documenting the presence of wetland hydrology and vegetation (the presence of wetland hydrology will assume the site soils meet the hydric soil criteria).
- Photo documentation of the site will be provided from permanent photo monitoring points strategically located in order to visually document site conditions during the monitoring period. Photos will be taken annually during the field monitoring and presented in the monitoring reports.
- Wildlife utilization will be recorded during field visits and summarized in the annual reports. Wildlife utilization will include the siting or signs of wildlife in the area recorded during site visits.
- Vegetation monitoring will consist of annual data collection from block transects. Transects will be located to include a representative sampling of all plant communities in the mitigation site. Transects may be revised in number or location based on adaptive management during the project monitoring period. Parameters recorded will include survival of planted trees and shrubs, presence of plant recruitment, growth and vigor of the planted trees and shrubs, percent herbaceous cover and individual species present, and percent invasive species cover and individual species present.

## 6 Construction Schedule

Table 5 on the following page presents a conceptual schedule for the mitigation project. The proposed schedule is subject to change, but provides the general sequence of events and tasks that may take place in the course of constructing, maintaining and monitoring the wetland mitigation site.

Table 5. Conceptual Mitigation Project Schedule

Task	Estimated Completion Date
Site prep (take ponds off-line from Pinebrook Creek, procure plants and seeds, etc.)	Summer 2006
Site grading	Late summer 2006
Site seeding	Early fall 2006
Site planting	Fall to winter 2006
As-built report	Winter 2006/2007 (90 days post-construction)
First annual monitoring	Late spring/early summer 2007
Maintenance site visits	Prior to June 1 <sup>st</sup> & prior to Sept. 30 <sup>th</sup> , 2007
First annual monitoring report	November 1, 2007
Supplemental planting/seeding (if necessary)	Fall to winter 2007
Second annual monitoring	Late spring/early summer 2008
Maintenance site visits	Prior to June 1 <sup>st</sup> & prior to Sept. 30 <sup>th</sup> , 2008
Second annual monitoring report	November 1, 2008
Third annual monitoring	Late spring/early summer 2009
Maintenance site visits	Prior to June 1 <sup>st</sup> & prior to Sept. 30 <sup>th</sup> , 2009
Third annual monitoring report	November 1, 2009
Fourth annual monitoring	Late spring/early summer 2010
Maintenance site visits	Prior to June 1 <sup>st</sup> & prior to Sept. 30 <sup>th</sup> , 2010
Fourth annual monitoring report	November 1, 2010
Fifth annual monitoring	Late spring/early summer 2011
Maintenance site visits	Prior to June 1 <sup>st</sup> & prior to Sept. 30 <sup>th</sup> , 2011
Fifth annual monitoring report	November 1, 2011

## 7 Maintenance

During the 5-year monitoring period, the City of Tigard will be responsible for maintenance of the mitigation site. We recommend use of a landscape contractor experienced in maintaining wetland mitigation sites. Maintenance recommendations for corrective actions will be included in the annual wetland monitoring reports, and these actions will be implemented as needed throughout the monitoring period to ensure that the success criteria are met at the end of the 5-year monitoring period. Maintenance tasks include, but are not limited to, minimizing water stress of plants during the first two growing seasons, inspection and repair (as necessary) of browse control measures, installation of supplemental seed or plantings (as necessary), and identification and control of invasive plant species.

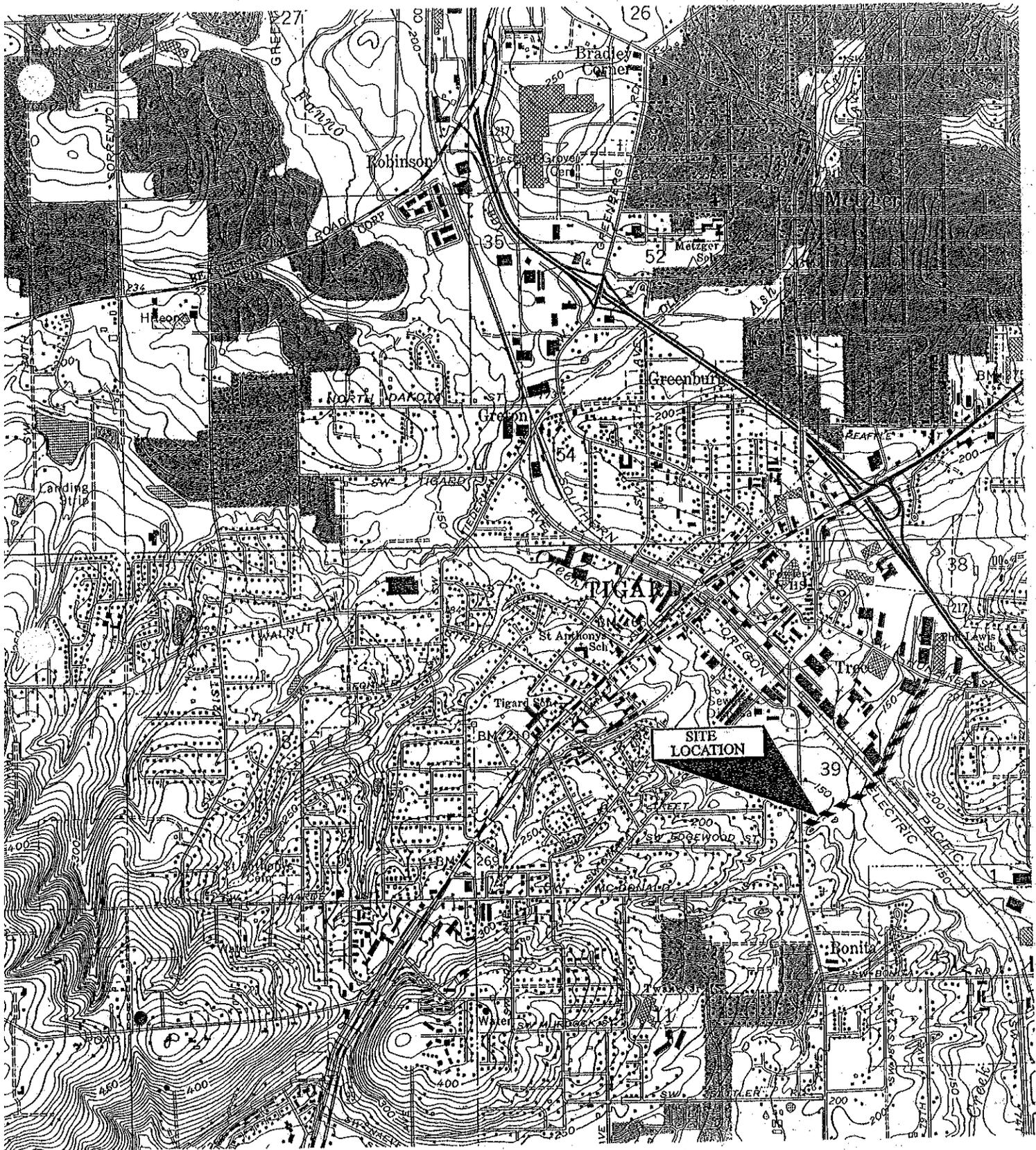
Irrigation will be used as needed during the first two years of plant establishment. All browse control measures will be inspected annually at a minimum during the monitoring period and repairs made to keep them in functioning order. Supplemental seeding and/or planting may be necessary within the mitigation site during the monitoring period, and there may be revisions to the species to be replanted based upon hydrology of the mitigation site. Supplemental plant species and quantities will be based on monitoring results. Invasive species control will be conducted at least twice per year, prior to June 1st and prior to September 30th. Target invasive species include, but are not limited to, purple loosestrife, Himalayan blackberry, bittersweet nightshade, reed canarygrass, giant hogweed, thistle and teasel. We recommend referring to the Clean Water Services' "Integrated Vegetation and Animal Management Guidance" (CWS 2003) for invasive species management strategies.

## **8 Contingency**

If the mitigation goals are not met at the end of the 5-year monitoring period, contingency measures will be implemented to correct the deficiencies. Initially, project deficiencies will be assessed by wetland experts in order to determine the appropriate response(s) to the problem and to discuss these with the regulatory agencies prior to implementation. Contingencies may include, but are not limited to, planting additional vegetation, performing weed control, performing herbivore control, modifying drainage features, and adjusting site elevations through grading. It is likely that some replanting will be necessary during the first few years, and there may be revisions to the species to be replanted based upon hydrology of the mitigation site. Recommendations for achieving mitigation success will be included in the annual wetland monitoring report, and these recommendations will be implemented as needed throughout the monitoring period to ensure that the success criteria are met at the end of the 5-year monitoring period.

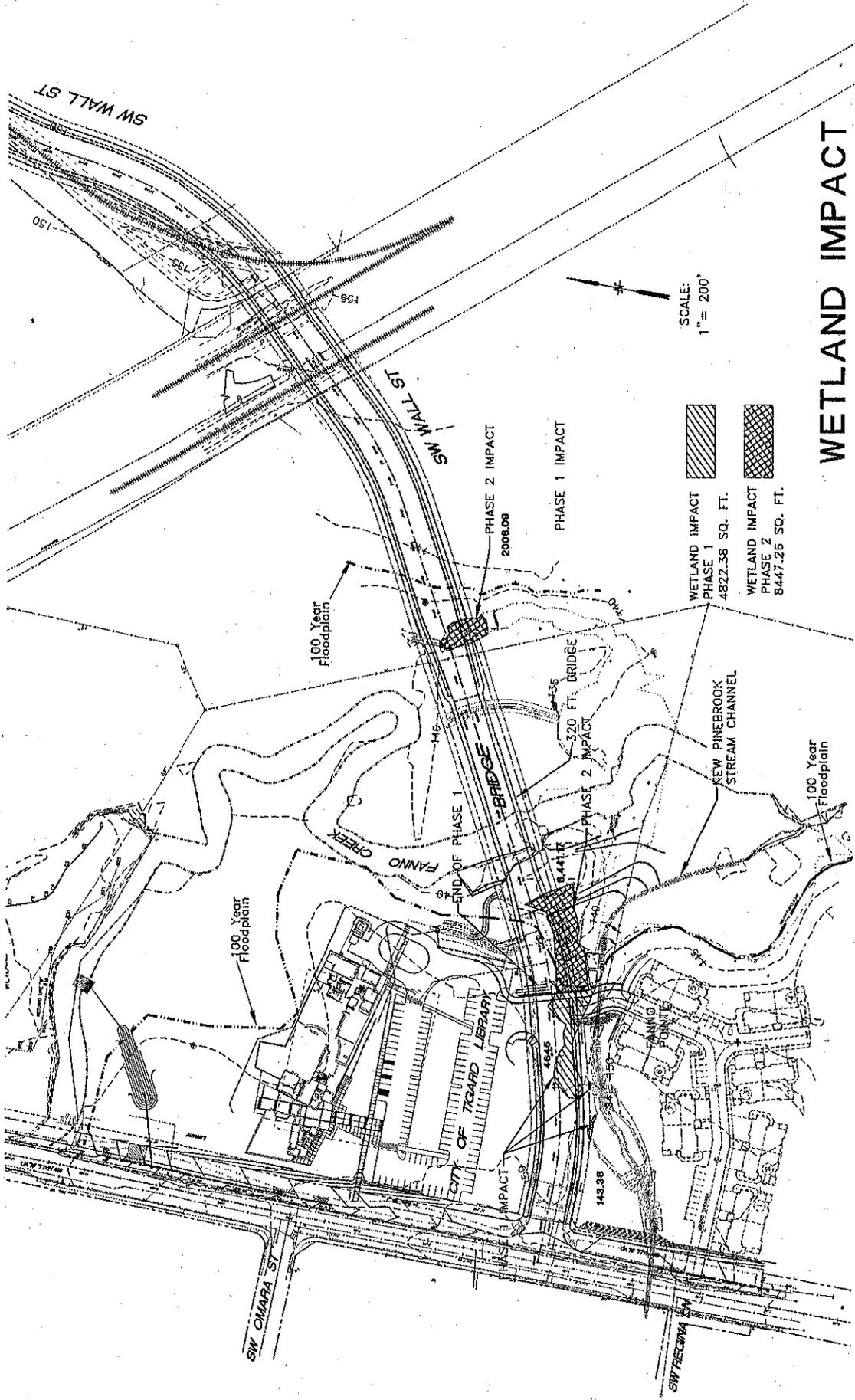
## **9 Long-Term Protection & Security Instrument**

Long-term protection of the mitigation site will be ensured by placing deed restrictions over the mitigation site. The mitigation site is located on property owned by the City of Tigard and the Fanno Pointe Condominiums Owners Association. A financial security instrument to ensure compliance with compensatory mitigation requirements is not required for projects conducted by government agencies according to OAR-141-085-0176(2).



**APPLICANT:** City of Tigard  
 Junie Nguyen, Engineering Manager  
**WATERWAY:** Pinebrook Creek & wetlands  
**ACTIVITY:** Wall Street, permit modification  
**DATE:** November 2005; **SHEET:** 1 of 7

Site Location Map



SCALE:  
1" = 200'

 WETLAND IMPACT PHASE 1  
4822.38 SQ. FT.  
 WETLAND IMPACT PHASE 2  
8447.26 SQ. FT.

# WETLAND IMPACT

SHEET  
x OF x

WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS



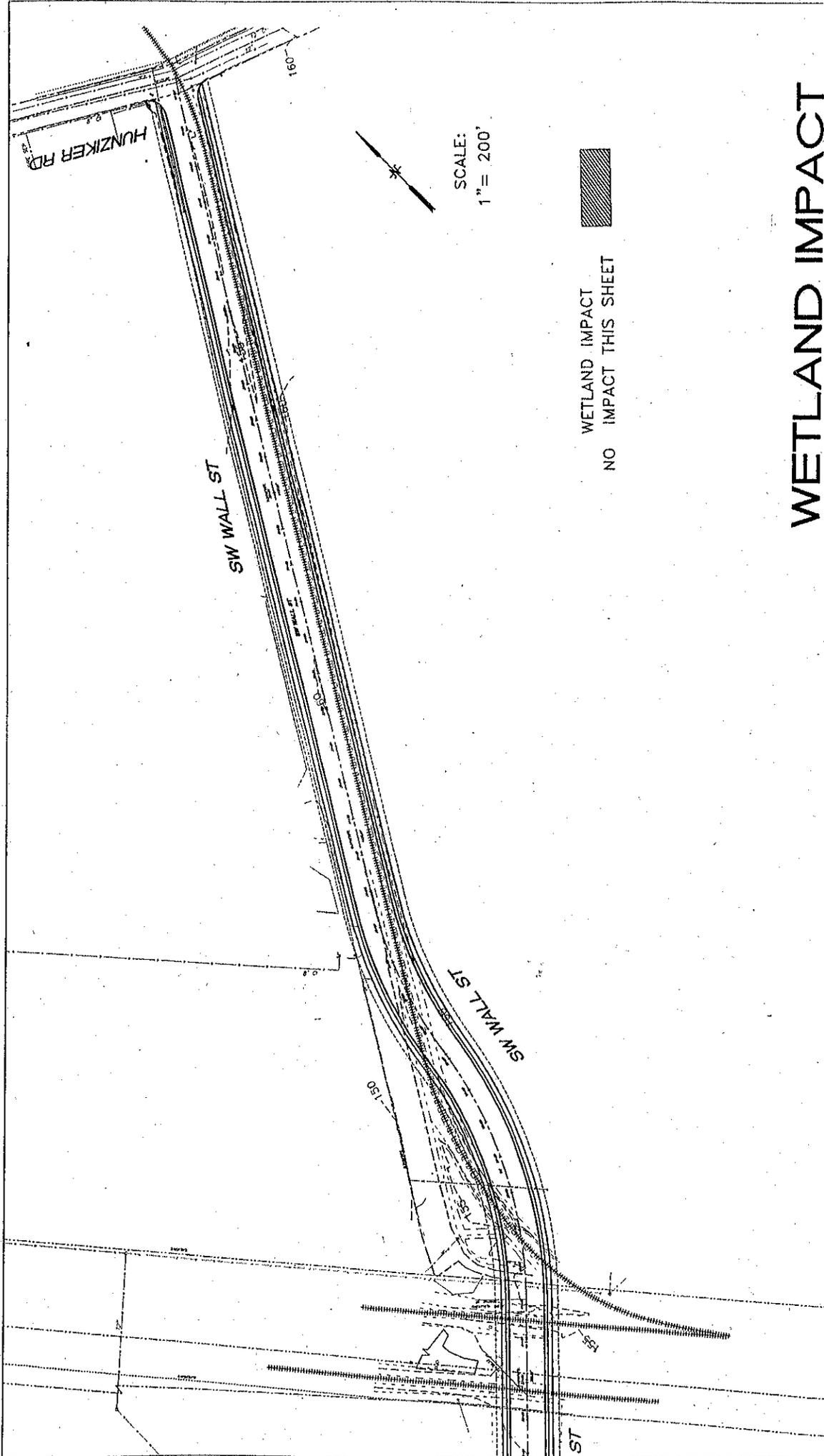
DEHAAS & ASSOCIATES, Inc.  
 Consulting Engineers & Surveyors  
 5405 SW 402 Avenue  
 Portland, Oregon 97209  
 PHONE: (503) 862-2400  
 FAX: (503) 862-0218

DATE: AUGUST, 2005  
 FILE: 02.629.118

Exp. 12/31/03  
  
 SIGNED: \_\_\_\_\_  
 ID: 02.629.118

APPLICANT: City of Tigard  
 Vaunne Nguyen, Engineering Manager  
 WATERWAY: Pinebrook Creek & wetlands  
 ACTIVITY: Wall Street, permit modification  
 DATE: November 2005; SHEET: 22 of 7

DATE: \_\_\_\_\_  
FILE LOCAT: \_\_\_\_\_



SCALE:  
1" = 200'



WETLAND IMPACT  
NO IMPACT THIS SHEET

# WETLAND IMPACT

SHEET  
x  
OF  
x

WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS



City of Tigard  
Engineering Department

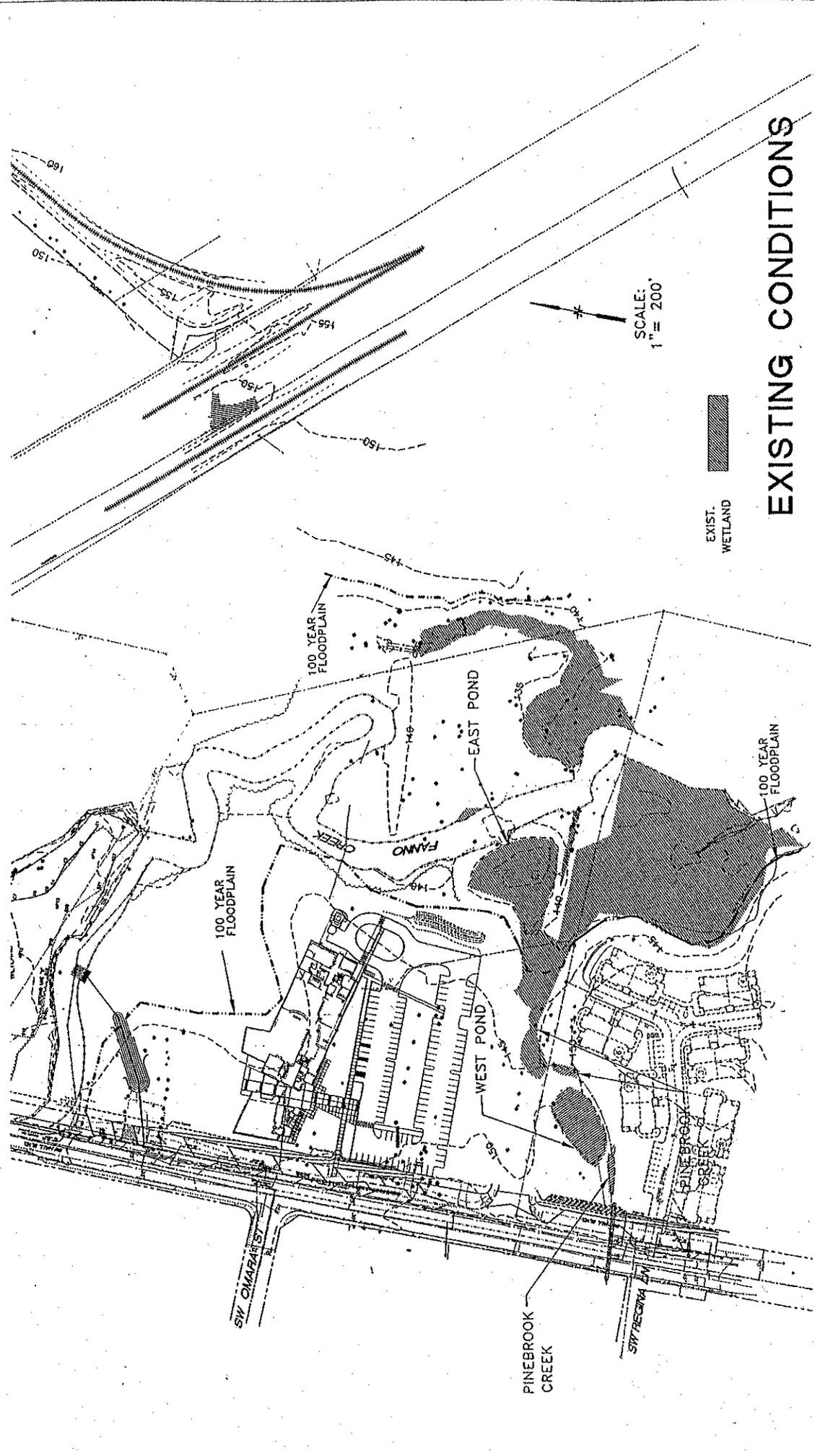
DEHAAS & Associates, Inc.  
Civil, Mechanical, Electrical, and Surveying Engineers

DATE: MARCH, 2004  
FILE: 02-029-118



DESIGNED BY: LM  
CHECKED BY: DLA  
DATE: AS SHOWN  
SCALE: AS SHOWN  
PROJECT NO. 02-029-118

APPLICANT: City of Tigard  
Vannie Nguyen, Engineering Manager  
WATERWAY: Pinebrook Creek & wetlands  
ACTIVITY: Wall Street, permit modification  
DATE: November 2005; SHEET: **2b** of **7**



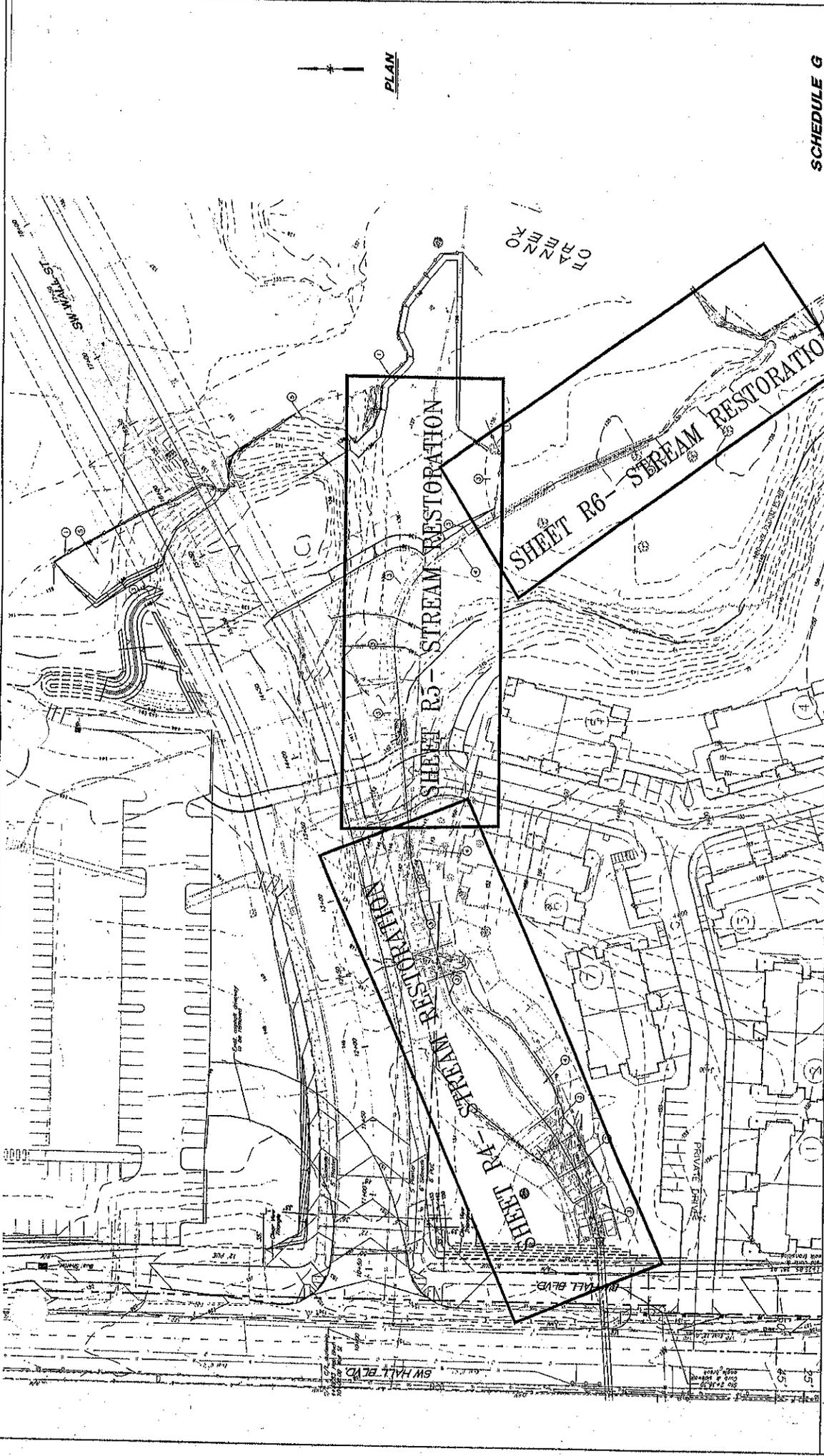
EXIST.  
WETLAND

SCALE:  
1" = 200'

**EXISTING CONDITIONS**

<p>APPLICANT: City of Tigard Vannie Nguyen, Engineering Manager</p>		<p>DATE: November 2005; SHEET: 3 of 7</p>
<p>WATERWAY: Pinebrook Creek &amp; wetlands</p>		
<p>ACTIVITY: Wall Street, permit modification</p>		<p>DATE: MARCH, 2004</p>
<p>PROJECT NO. 02-628-118</p>		
<p>DESIGNED BY: UM DRAWN BY: TML CHECKED BY: RE DATE: AS SHOWN</p>		<p>FILE: 02-628-118</p>
<p>PROJECT NO. 02-628-118</p>		
<p>DEHAAS &amp; Associates, Inc. Consulting Engineers &amp; Surveyors 1000 SW 2nd Ave., Suite 200 Portland, Oregon 97204 PHONE: (503) 497-2400 FAX: (503) 497-2401</p>		<p>CITY OF TIGARD Engineering Department</p>
<p>DATE: 12/21/03</p>		
<p>WALL STREET EXTENSION (PH. 1) STREET &amp; UTILITIES IMPROVEMENTS</p>		<p>SHEET X OF X</p>





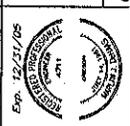
SCHEDULE G

SHEET R1  
21 OF 34

**WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS**

WETLAND MITIGATION & STREAM RESTORATION KEY MAP

DEHAAS & ASSOCIATES, Inc.  
Consulting Engineers & Surveyors  
1000 S. 10th St., Suite 200  
Tulsa, Oklahoma 74106  
Phone: (918) 438-4400  
Fax: (918) 438-4401



DATE: Nov. 2005  
SCALE: 02.625/118

**APPLICANT:** City of Tigard  
Vannie Nguyen, Engineering Manager

**WATERWAY:** Pinebrook Creek & wetlands

**ACTIVITY:** Wall Street, permit modification

**DATE:** November 2005; SHEET: **52** of **7**

DATE	REV.	FILE LOCATION: S.V.

WALL STREET

2+80 MATCH LINE

WALL BLVD.



- ① len. = 28.46'    len. = 63.08'    ④    len. = 48.05'    ⑤    len. = 48.05'
- bfg. = N75°13'36"E    bfg. = N71°48'40"E
- bfg. = N59°11'43"E    bfg. = N76°15'34"E
- len. = 115.30'    bfg. = N51°10'52"E

Exist. 4" PVC to be removed

See Detail Sheet R9

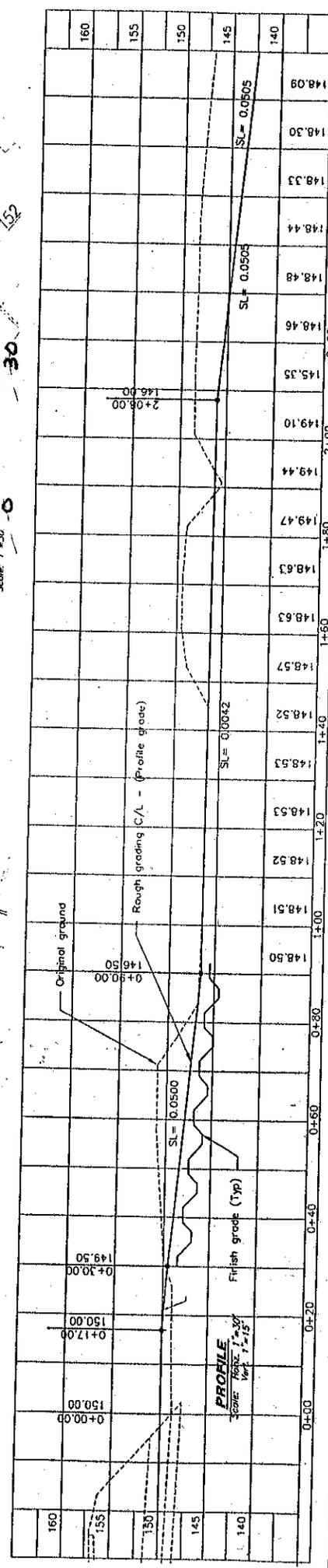
See sheets R7 and R8 for typical details

Rough grade C/L

Exist. 12" conc. culvert to be removed

Exist. 4" PVC to be removed

Exist. 12" conc. culvert to be removed



STATION	ORIGINAL GROUND	ROUGH GRADING C/L - (PROFILE GRADE)	FINISH GRADE (TYP)
0+00	148.50	148.50	148.50
0+20	148.51	148.52	148.52
0+40	148.53	148.53	148.53
0+60	148.53	148.53	148.53
0+80	148.57	148.57	148.57
1+00	148.63	148.63	148.63
1+20	148.63	148.63	148.63
1+40	148.63	148.63	148.63
1+60	148.63	148.63	148.63
1+80	148.63	148.63	148.63
2+00	148.63	148.63	148.63
2+20	148.63	148.63	148.63
2+40	148.63	148.63	148.63
2+60	148.63	148.63	148.63
2+80	148.63	148.63	148.63

SCHEDULE G SHEET R4 24 OF 34

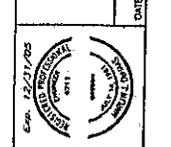
WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS  
STREAM RESTORATION PLAN & PROFILE



CITY OF TIGARD  
ENGINEERING DEPARTMENT

DE HAAS & Associates, Inc.  
Consulting Engineers & Surveyors  
PHONE: (503) 687-7400  
FAX: 687-0808

DATE August, 2005 FILE 02.629.118



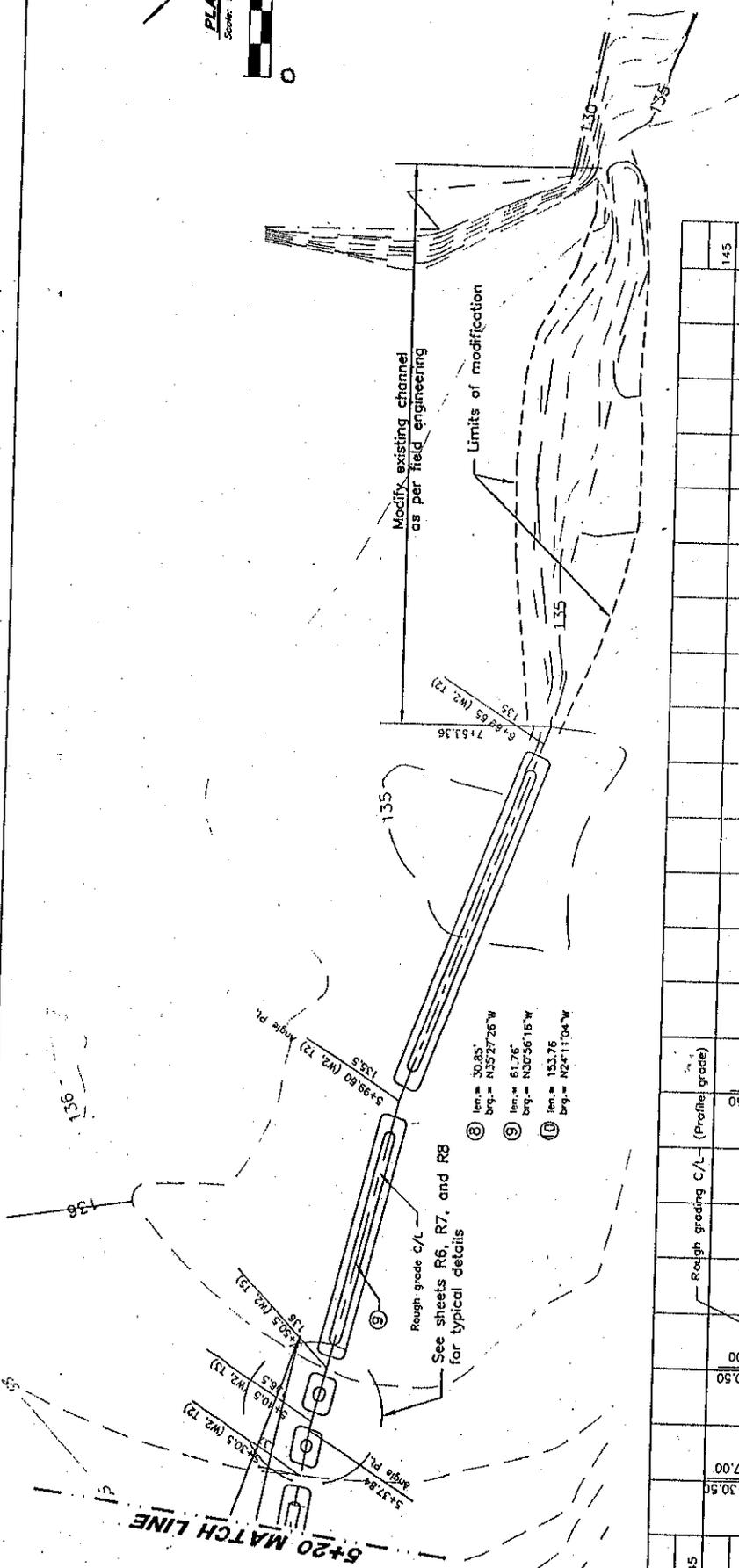
APPLICANT: City of Tigard  
Vannie Nguyen, Engineering Manager

WATERWAY: Pinebrook Creek & wetlands

ACTIVITY: Wall Street, permit modification

DATE: November 2005; SHEET 5b of 7





Station	Profile	Original ground	Rough grading C/L (Profile grade)	Finish Grade (Type)
5+20	137.49	137.09	137.09	137.09
5+40	138.68	138.50	138.50	138.50
5+60	136.17	136.00	136.00	136.00
5+80	135.68	135.50	135.50	135.50
5+100	135.71	135.50	135.50	135.50
5+120	135.38	135.38	135.38	135.38
5+140	134.82	134.82	134.82	134.82
5+160	134.64	134.64	134.64	134.64
5+180	134.46	134.46	134.46	134.46
5+200	134.47	134.47	134.47	134.47
5+220	135.00	135.00	135.00	135.00
5+240	135.00	135.00	135.00	135.00
5+260	135.00	135.00	135.00	135.00
5+280	135.00	135.00	135.00	135.00
5+300	135.00	135.00	135.00	135.00
5+320	135.00	135.00	135.00	135.00
5+340	135.00	135.00	135.00	135.00
5+360	135.00	135.00	135.00	135.00
5+380	135.00	135.00	135.00	135.00
5+400	135.00	135.00	135.00	135.00
5+420	135.00	135.00	135.00	135.00
5+440	135.00	135.00	135.00	135.00
5+460	135.00	135.00	135.00	135.00
5+480	135.00	135.00	135.00	135.00
5+500	135.00	135.00	135.00	135.00
5+520	135.00	135.00	135.00	135.00
5+540	135.00	135.00	135.00	135.00
5+560	135.00	135.00	135.00	135.00
5+580	135.00	135.00	135.00	135.00
5+600	135.00	135.00	135.00	135.00
5+620	135.00	135.00	135.00	135.00
5+640	135.00	135.00	135.00	135.00
5+660	135.00	135.00	135.00	135.00
5+680	135.00	135.00	135.00	135.00
5+700	135.00	135.00	135.00	135.00
5+720	135.00	135.00	135.00	135.00
5+740	135.00	135.00	135.00	135.00

PROFILE  
Scale: Horiz. 1"=10'  
Vert. 1"=10'

**SCHEDULE G**

**WALL STREET EXTENSION (PH. 1)  
STREET & UTILITIES IMPROVEMENTS**

STREAM RESTORATION PLAN & PROFILE

SHEET R6  
25 OF 34

APPLICANT: City of Tigard  
Vannie Nguyen, Engineering Manager

WATERWAY: Pinebrook Creek & wetlands

ACTIVITY: Wall Street, permit modification

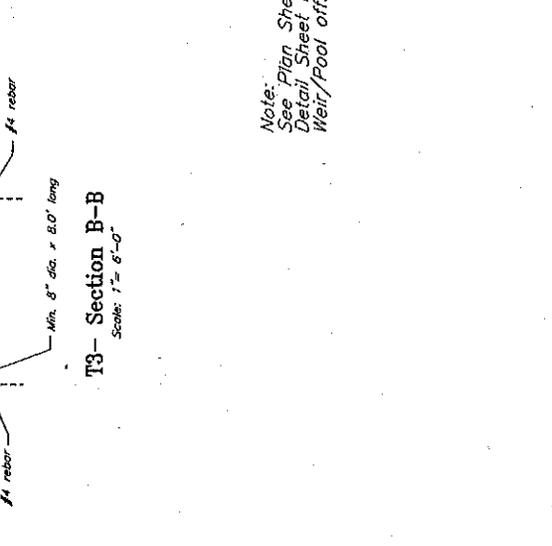
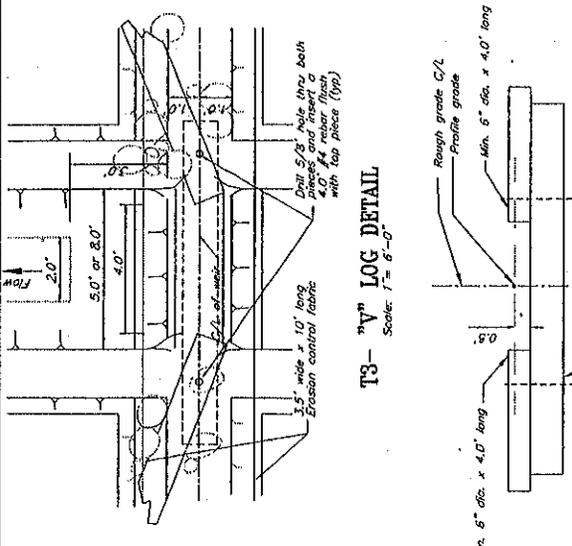
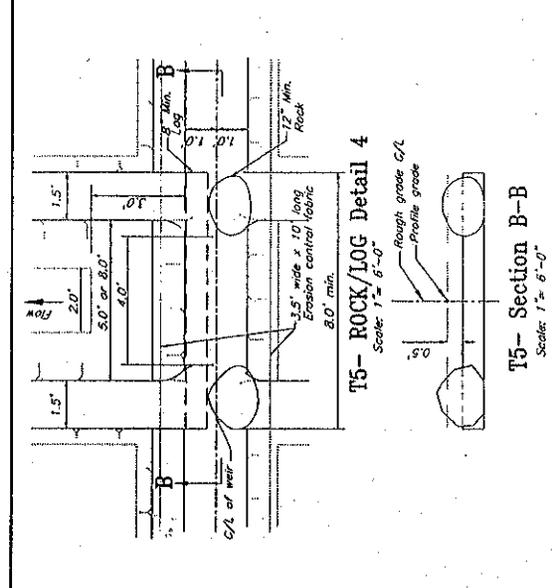
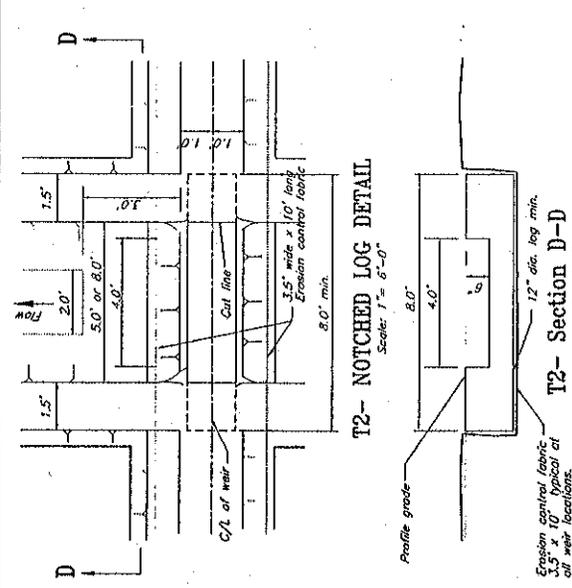
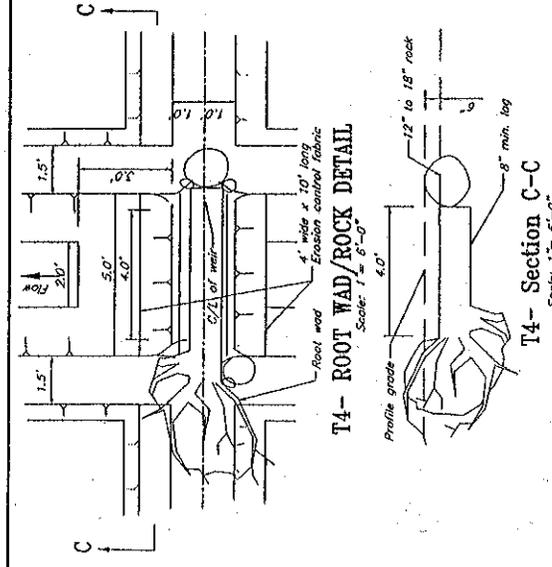
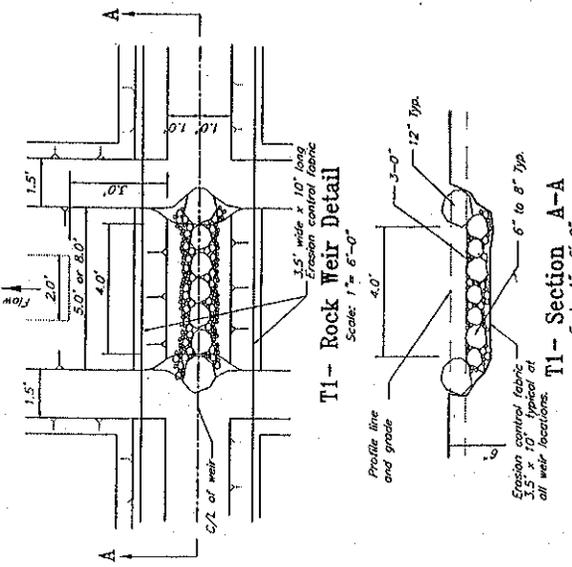
DATE: November 2005; SHEET 5d of 7

CITY OF TIGARD  
ENGINEERING DEPARTMENT

DEHAAS & Associates, Inc.  
Consulting Engineers & Surveyors

DATE: August, 2005  
FILE: 02.629.1.18





Note:  
See Plan Sheets R2, R3, R4 and  
Detail Sheet R5 and R6 for  
Weir/Pool offset dimensions.

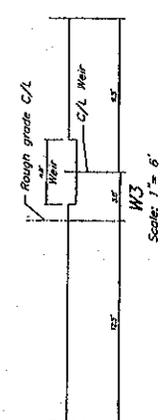
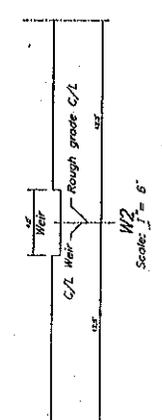
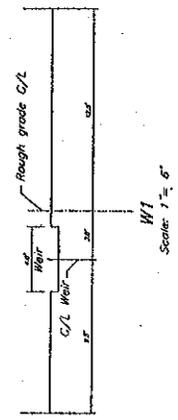
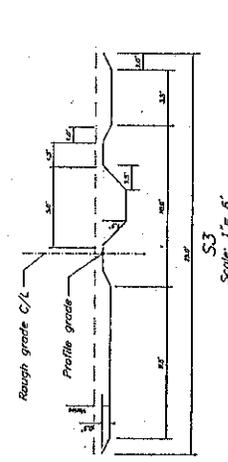
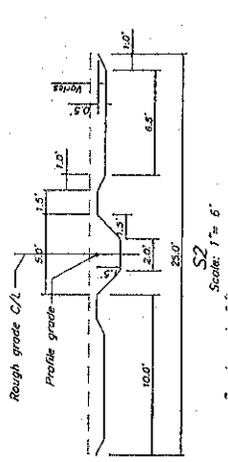
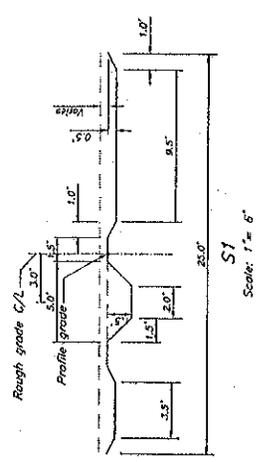
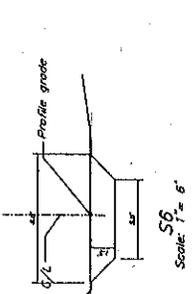
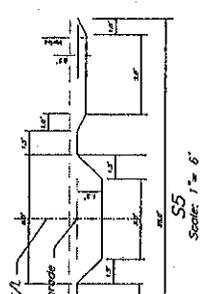
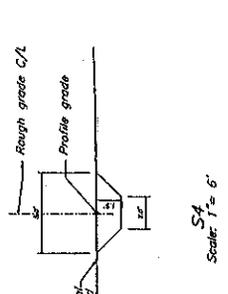
DATE	REVISION	DEHAAS & ASSOCIATES, Inc. Consulting Engineers & Surveyors 200 S.W. Commercial Circle Portland, Oregon 97201 Phone: (503) 832-2400 Fax: (503) 832-2418	CITY OF TIGARD ENGINEERING DEPARTMENT	SHEET R7
DESIGNED BY: MJD	DATE: MARCH, 2004	PROJECT NO.: 02.E29.118	WALL STREET EXTENSION (PH. 1) STREET & UTILITIES IMPROVEMENTS STREAM RESTORATION DETAILS	X OF X
DRAWN BY: LM	DATE: 12/31/03	DATE: 02.E29.118		
CHECKED BY: MJD	DATE: 02.E29.118			
SCALE: 1" = 6'-0"				

**APPLICANT:** City of Tigard  
Vannie Nguyen, Engineering Manager

**WATERWAY:** Pinebrook Creek & wetlands

**ACTIVITY:** Wall Street, permit modification

**DATE:** November 2005; SHEET: 6b of 7



**Weir Location**  
(See sheet R7 for  
weir type details)

**Fish Stream Details**

**APPLICANT:** City of Tigar  
Vannic Nguyen, Engineering Manager  
**WATERWAY:** Pinebrook Creek & wetlands  
**ACTIVITY:** Wall Street, permit modification  
**DATE:** November 2005; SHEET: 6 of 7

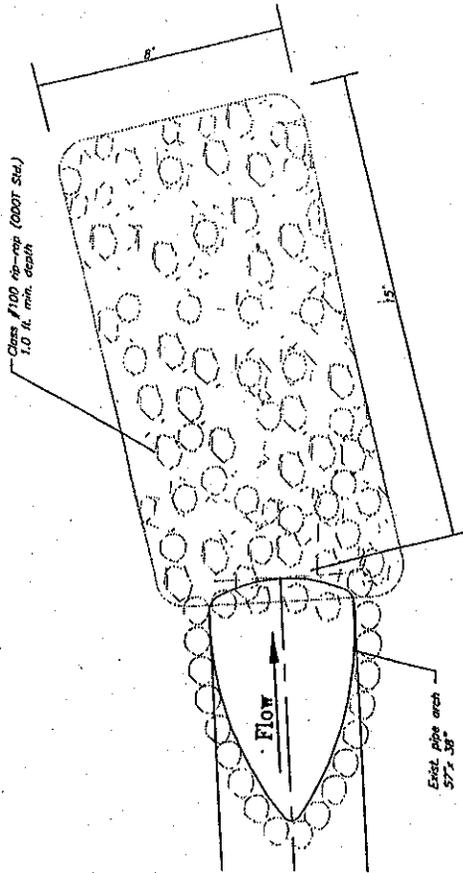
DESIGNED BY:	LMJ
IN CHARGE:	LMJ
CHECKED BY:	MJD
DATE:	03-03-06
SCALE:	AS SHOWN
PROJECT NO.:	02.629.118



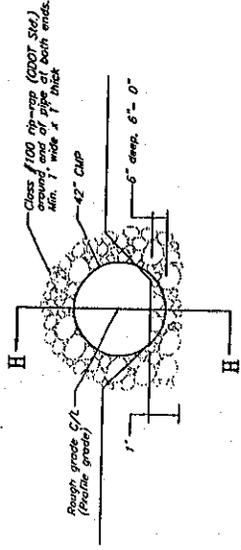
**DEHAAS & Associates, Inc.**  
Consulting Engineers & Surveyors  
100 S.E. Commercial Ave.  
Tigard, Oregon 97138  
Phone: (503) 982-3400  
Fax: (503) 982-4018  
DATE: MARCH, 2004 FILE: 02.629.118



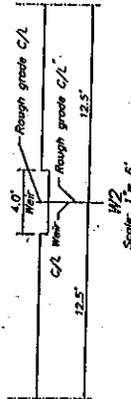
**WALL STREET EXTENSION (PH. 1)**  
**STREET & UTILITIES IMPROVEMENTS**  
STREAM RESTORATION DETAILS  
SHEET R6  
X OF X



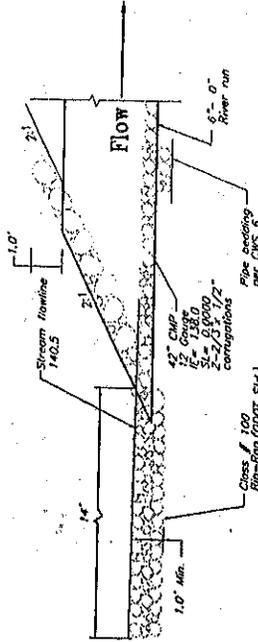
Hall Blvd. Culvert-Outlet Rip-Rap  
Scale: 1" = 6'-0"



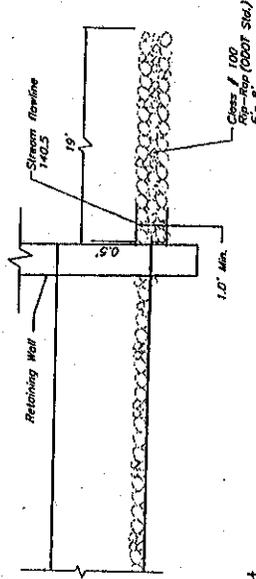
Rip-Rap End Slope Detail  
Scale: 1" = 6'-0"



Scale: 1" = 6'



Fanno Point Culvert Section H-H  
Scale: 1" = 6'-0"



DATE	REVISION

APPLICANT: City of Tigard  
Vannie Nguyen, Engineering Manager

WATERWAY: Pinebrook Creek & wetlands

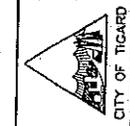
ACTIVITY: Wall Street, permit modification

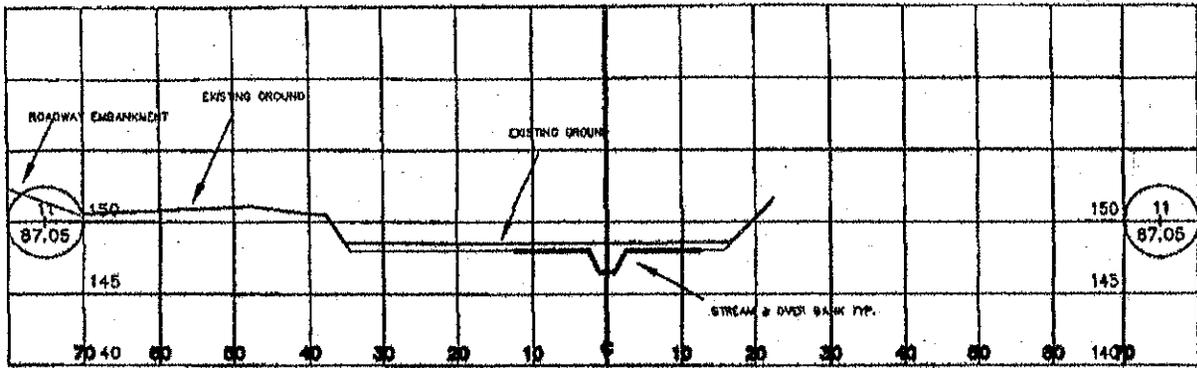
DATE: November 2005; SHEET: 6 of 7



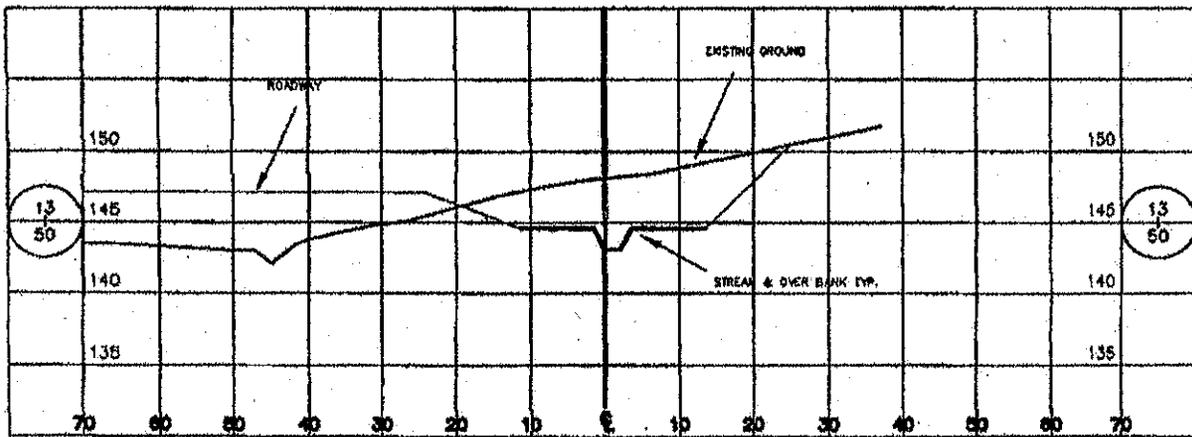
DEHAAS & Associates, Inc.  
Civil Engineering & Surveying  
1400 SW Commercial Court  
Medford, Oregon 97504  
Phone: (531) 462-7000  
Fax: (531) 462-2011

DATE: August, 2005  
FILE: 02-629, 118

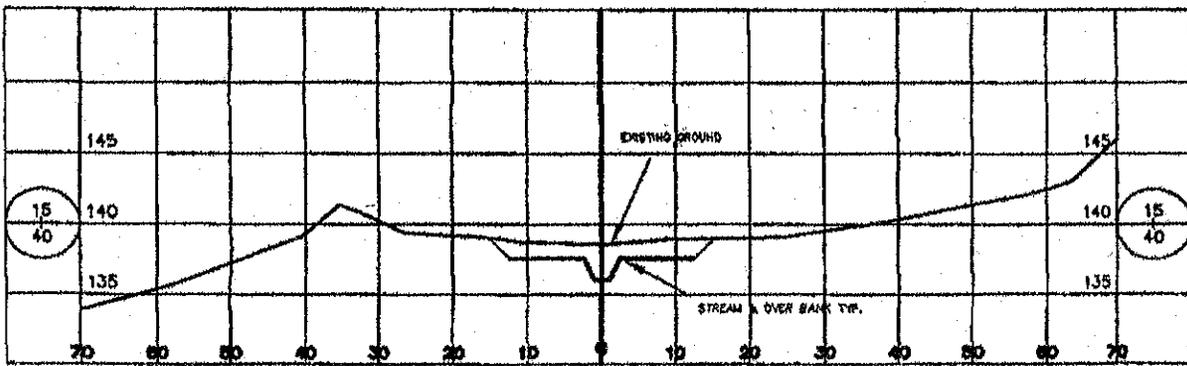




**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

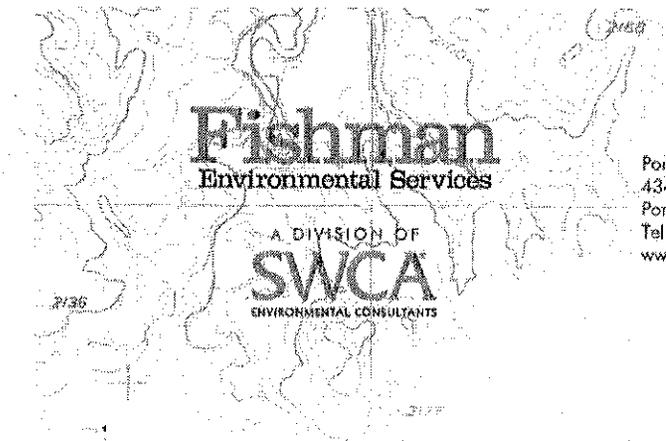
Proposed Stream and Wetland Mitigation Cross-Section Elevations

APPLICANT: City of Tigard  
 Vannie Nguyen, Engineering Manager

WATERWAY: Pinebrook Creek & wetlands

ACTIVITY: Wall Street, permit modification

DATE: November 2005; SHEET: 7 of 7



**Fishman**  
Environmental Services

A DIVISION OF  
**SWCA**  
ENVIRONMENTAL CONSULTANTS

Portland Office  
434 NW Sixth Avenue, Suite 304  
Portland, Oregon 97209  
Tel 503.224.0333 Fax 503.224.1851  
www.swca.com

Exhibit I

**Date:** November 23, 2005  
**To:** Astrid Dragoy, Clean Water Services  
**Cc:** Vannie Nguyen, City of Tigard  
Marlin DeHaas, DeHaas & Associates  
Geraldene Moyle, Group Mackenzie  
**From:** Stacy Benjamin, Senior Wetland Ecologist  
**Subject:** City of Tigard Wall Extension, Phase 1 Redesign  
Request for Revised Service Provider Letter; CWS File No. 4203

## INTRODUCTION AND BACKGROUND INFORMATION

The Portland office of SWCA Environmental Consultants (SWCA)<sup>1</sup>, under subcontract to DeHaas and Associates, is applying for necessary local, state and federal permits for the City of Tigard's proposed Wall Street Extension project. A Service Provider Letter was issued for the project on December 21, 2004 (CWS File No. 4203). Phase 1 of the project was recently redesigned to meet the local planning requirements of the City of Tigard. The redesign of Phase 1 involves reducing the length of roadway from 425 feet to 360 feet and shifting the library access and Fanno Pointe Condominiums access to the west to avoid development within the 100-year floodplain. The length of Phase 2 has been correspondingly increased by 65 feet at its western extent. The overall length of the proposed project is unchanged from the previously permitted design. The redesigned Phase 1 includes a retaining wall along the eastern edge of the Fanno Pointe Condominiums access to minimize the amount of wetland and vegetated corridor impact.

## REVISIONS TO THE PROPOSED VEGETATED CORRIDOR IMPACTS

Due to the reduction in the length of Phase 1, proposed vegetated corridor impacts for Phase 1 have been reduced from the previously permitted 24,274 SF to 18,429 SF. Proposed Phase 2 impacts have been increased from the previously permitted 18,610 SF to 22,305 SF. The total proposed project impact is 40,734 SF, which is a reduction of 2,150 SF from the previously permitted impact. The reduction in impact is due to the fact that the Fanno Pointe Condominiums access has been shifted to the west further upslope of the sensitive area, and a retaining wall was added to further minimize encroachment. The previously proposed and currently proposed vegetated corridor impacts are summarized in the table on the following page. The revised site plan and currently proposed vegetated corridor impact areas are shown in Figure 1.

<sup>1</sup> The Portland, Oregon office of SWCA was acquired from Fishman Environmental Services in 2004.

**REVISIONS TO THE PROPOSED VEGETATED CORRIDOR MITIGATION PLAN**

Vegetated corridor mitigation for the project consists of vegetated corridor replacement as well as vegetated corridor enhancement. The Phase 1 and Phase 2 vegetated corridor replacement and enhancement areas are summarized in the table below. Vegetated corridor replacement and enhancement areas are shown in Figure 1, and planting specifications tables follow at the end of this section.

TABLE 1. SUMMARY OF PROPOSED VEGETATED CORRIDOR IMPACTS AND MITIGATION				
Phase	Previously Proposed Impact	Revised Impact	Proposed Mitigation	
			Buffer replacement	Buffer enhancement
Phase 1	24,274 SF	18,429 SF	18,829 SF	28,217 SF
Phase 2	18,610 SF	22,305 SF	22,305 SF	6,025 SF
TOTAL	42,884 SF	40,734 SF	41,134 SF	34,242 SF

Invasive species removal will occur prior to plant installation, and any bare soil areas greater than 25 square feet will be seeded with the seed mix in Table 2 below.

Phase 1 Plantings

The vegetated corridor enhancement area adjacent to Phase 1 of the project and located west of Fanno Creek totals 28,217 square feet (areas 3, 4, 10, 17, 18, 25 & 26). The Phase 1 vegetated corridor replacement area is located both west and east of Fanno Creek (areas 1, 2, 6, 8, 35 & 36) and totals 18,829 SF. The vegetated corridor replacement and enhancement areas will be densely planted in order to meet CWS plant spacing requirements. Plant quantities for this area include 482 trees and 2,411 shrubs.

Phase 2 Plantings

The vegetated corridor enhancement area adjacent to Phase 2 of the project is located both west and east of Fanno Creek and totals 6,025 SF (areas 14, 19, 28 & 29). The Phase 2 vegetated corridor replacement area is located east of Fanno Creek and totals 22,305 SF (areas 34 & 37). The vegetated corridor replacement and enhancement areas will be densely planted in order to meet CWS plant spacing requirements. Plant quantities for this area include 272 trees and 1,358 shrubs.

Plant quantities are in accordance with Clean Water Services Design and Construction Standards, Resolution and Order 04-9. Appendix D (Landscape Requirements) of the Design and Construction standards specify that trees shall be planted at 10 feet on-center, and shrubs shall be planted at 4' to 5 feet on-center.

TABLE 2. VEGETATED CORRIDOR SEEDING & PLANTING MIX			
Scientific Name	Common Name	Type	Rate/Spacing
<i>Achillea millefolium</i>	common yarrow	Seed	2 lbs/acre
<i>Bromus carinatus</i>	California brome	Seed	15 lbs/acre
<i>Elymus glaucus</i>	blue wildrye	Seed	10 lbs/acre

TABLE 2. VEGETATED CORRIDOR SEEDING & PLANTING MIX			
Scientific Name	Common Name	Type	Rate/Spacing
<i>Festuca roemerii</i>	Romer's fescue	Seed	8 lbs/acre
<i>Polystichum munitum</i>	sword fern	Propagules (50 total)	3. ft centers in shady area south of wetland creation area between West Pond and Fanno Pointe access

TABLE 3. VEGETATED CORRIDOR TREE & SHRUB PLANTINGS					
Scientific Name	Common Name	Size/ Height*	Spacing** (on center)	Planting Location	Quantity
<i>Acer macrophyllum</i>	big-leaf maple	2 gallon/ 3 feet	10 feet	Phase 1	181
				Phase 2	106
<i>Amelanchier alnifolia</i>	Saskatoon serviceberry	1 gallon/ 2 feet	4-5 feet	Phase 1	300
				Phase 2	150
<i>Mahonia aquifolium</i>	tall Oregon grape	1 gallon/ 6 inches	4-5 feet	Phase 1	437
				Phase 2	269
<i>Holodiscus discolor</i>	oceanspray	1 gallon/ 1.5 feet	4-5 feet	Phase 1	300
				Phase 2	150
<i>Oemleria cerasiformis</i>	Indian plum	1 gallon/ 1.5 feet	4-5 feet	Phase 1	300
				Phase 2	150
<i>Pseudotsuga menziesii</i>	Douglas fir	2 gallon/ 3 feet	10 feet	Phase 1	181
				Phase 2	106
<i>Quercus garryana</i>	Oregon white oak	2 gallon/ 2 feet	10 feet	Phase 1	60
				Phase 2	30
<i>Rhamnus purshiana</i>	cascara	2 gallon/ 2 feet	10 feet	Phase 1	60
				Phase 2	30
<i>Ribes sanguineum</i>	red flowering currant	1 gallon/ 1.5 feet	4-5 feet	Phase 1	200
				Phase 2	100
<i>Rosa woodsii</i>	Woods rose	1 gallon/ 1.5 feet	4-5 feet in groups of 3	Phase 1	437
				Phase 2	269
<i>Symphoricarpos albus</i>	snowberry	1 gallon/ 1.5 feet	4-5 feet in groups of 3	Phase 1	437
				Phase 2	269

\*Bare root plants may be substituted for container plants (except for Douglas fir and Oregon white oak) based upon seasonal availability and site conditions. Bare-root stock to be 18-24 inch minimum height.

\*\*Plant spacing as required to meet Clean Water Services Design & Construction Standards, (R&O 04-9), March 1, 2004.



Received

DEC 22 2004

File Number

4203

SWCA Portland

**Clean Water Services  
Service Provider Letter**

Jurisdiction	Tigard	Date	December 21, 2004
Map & Tax Lot	2S102DD00100 200 300	Owner	City of Tigard (ROW)
	90000 & 2S1010001200	Contact	Vannie Nguyen
Site Address	East of Hall blvd, to Wall St	Address	13125 SW Hall Blvd.
Proposed Activity	Phase 1 and 2 of Wall Street extension to Hall	Phone	Tigard, OR 97223 503.639.4171

**This form and the attached conditions will serve as your Service Provider Letter in accordance with Clean Water Services Design and Construction Standards (R&O 04-9).**

	YES	NO		YES	NO
Natural Resources Assessment (NRA) Submitted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Alternatives Analysis Required (Section 3.02.6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
District Site Visit Date: 5/24/04	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tier 1 Alternatives Analysis	<input type="checkbox"/>	<input type="checkbox"/>
Concur with NRA/or submitted information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tier 2 Alternatives Analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sensitive Area Present On-Site	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tier 3 Alternatives Analysis	<input type="checkbox"/>	<input type="checkbox"/>
Sensitive Area Present Off-Site	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Vegetated Corridor Averaging	<input type="checkbox"/>	<input type="checkbox"/>
Vegetated Corridor Present On-Site	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Vegetated Corridor Mitigation Required	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Width of Vegetated Corridor (feet)	<b>50</b>		On-Site Mitigation See graphic for total amt and location with each phase	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Condition of Vegetated Corridor	<b>Marginal/ degraded</b>		Off-Site Mitigation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Enhancement Required	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Planting Plan Attached	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Encroachment into Vegetated Corridor (Section 3.02.4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Enhancement/restoration completion date	Mitigation/ enhancement to be completed with construction of each phase	
Type and Square Footage of Encroachment	Phase 1: 24,274 Phase 2: 18,610		Geotechnical Report required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Allowed Use (Section 3.02.4)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Conditions Attached	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**This Service Provider Letter does NOT eliminate the need to evaluate and protect water quality sensitive areas if they are subsequently discovered on your property.**

**In order to comply with Clean Water Services (the District) water quality protection requirements the project must comply with the following conditions:**

1. No structures, development, construction activities, gardens, lawns, application of chemicals, uncontained areas of hazardous materials as defined by Oregon Department of Environmental Quality, pet wastes, dumping of materials of any kind, or other activities shall be permitted within the sensitive area which may negatively impact water quality, except those allowed by Section 3.02.3.
2. No structures, development, construction activities, gardens, lawns, application of chemicals, uncontained areas of hazardous materials as defined by Oregon Department of Environmental Quality, pet wastes, dumping of materials of any kind, or other activities shall be permitted within the vegetated corridor which may negatively impact water quality, except those allowed by Section 3.02.4.
3. Prior to any site clearing, grading or construction the vegetated corridor and water quality sensitive areas shall be surveyed, staked, and temporarily fenced per approved plan. During construction the vegetated corridor shall remain fenced and undisturbed except as allowed by Section 3.02.5 and per approved plans. **See attached graphics.**
4. **Prior to any activity within the sensitive area, the applicant shall gain authorization for the project from the Oregon Division of State Lands (DSL) and US Army Corps of Engineers (USACE). The applicant shall provide the District with copies of all DSL and USACE project authorization permits.**
5. An approved Oregon Department of Forestry Notification is required for one or more trees harvested for sale, trade, or barter, on any non-federal lands within the State of Oregon.
6. Appropriate Best Management Practices (BMP's) for Erosion Control, in accordance with the CWS Erosion Control Technical Guidance Manual shall be used prior to, during, and following earth disturbing activities. A DEQ 1200C permit may be required for this project if total disturbed area is over 1 acre for either phase.
7. Prior to construction, a Stormwater Connection Permit from the District or its designee is required pursuant to Ordinance 27, Section 4.B.
8. The District or City/County may require an easement over the vegetated corridor conveying storm, surface water management, and/or sanitary sewer rights to the District or City that would prevent the owner of the vegetated corridor from activities and uses inconsistent with the purpose of the corridor and any easements therein.
9. Activities located within the 100-year floodplain shall comply with Section 3.13 of R&O 04-9.
10. Removal of native, woody vegetation shall be limited to the greatest extent practicable.
11. Removal of invasive non-native species by hand is required in all vegetated corridors rated "good". Replanting is required in any cleared areas larger than 25 square feet.
12. Should final development plans differ significantly from those submitted for review by the District, the applicant shall provide updated drawings, and if necessary, obtain a revised Service Provider Letter.

**SPECIAL CONDITIONS**

13. The vegetated corridor width for sensitive areas within the project site shall be a minimum of 50 feet wide, as measured horizontally from the delineated boundary of the sensitive area.
14. For vegetated corridors 50 feet wide or greater, the first 50 feet closest to the sensitive area shall be equal to or better than a "good" corridor condition as defined in Section 3.02.7, Table 3.2. All areas within the right-of-way, and/or that have been disturbed by construction shall be enhanced/restored.
15. Clean Water Services shall be notified 72 hours prior to the start and completion of enhancement/restoration activities. Enhancement/restoration activities shall comply with the guidelines provided in Landscape Requirements (R&O 04-9: Appendix D).
16. Prior to installation of plant materials, all invasive vegetation within the vegetated corridor shall be removed. During removal of invasive vegetation care shall be taken to minimize impacts to existing native trees and shrub species. Invasive species removal and control methods shall be in compliance with CWS' "Integrated Vegetation and Animal Management Guide".
17. Enhancement/restoration of the vegetated corridor shall be provided in accordance with the attached planting plan and R&O 04-9, Appendix D.
18. Maintenance and monitoring requirements shall comply with Section 2.11.2 of R&O 04-9. If at any time during the warranty period the landscaping falls below the 80% survival level, the Owner shall reinstall all deficient planting at the next appropriate planting opportunity and the two year maintenance period shall begin again from the date of replanting.
19. Performance assurances for the vegetated corridor shall comply with Section 2.06.2, Table 2-1 and Section 2.10, Table 2-2.
20. For any developments, which create multiple parcels or lots intended for separate ownership, the District shall require that the vegetated corridor and the sensitive area be contained in a separate tract. The tract plat shall include language protecting the vegetated corridor and sensitive areas. *No lots created with this activity.*
21. The water quality swale and detention pond shall be planted with District approved native species, and designed to blend into the natural surroundings. Stormwater shall be treated in compliance with R&O 04-9.

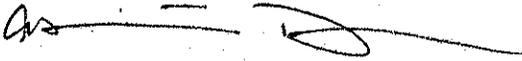
**CONDITIONS TO BE INCLUDED ON CONSTRUCTION PLANS**

22. Final construction plans shall include landscape plans. Plans shall include in the details a description of the methods for removal and control of exotic species, location, distribution, condition and size of plantings, existing plants and trees to be preserved, and installation methods for plant materials. Plantings shall be tagged for dormant season identification. Tags to remain on plant material after planting for monitoring purposes.
23. A Maintenance Plan shall be included on final plans including methods, responsible party contact information, and dates (minimum two times per year, by June 1 and September 30).
24. Final construction plans shall clearly depict the location and dimensions of the sensitive area and the vegetated corridor (indicating good, marginal, or degraded condition). Sensitive area boundaries shall be marked in the field.

25. Protection of the vegetated corridors and associated sensitive areas shall be provided by the installation of permanent fencing and signage between the residential development and the outer limits of the vegetated corridors. Fencing may not be required along the ROW. **Fencing details to be included on final construction plans.**

**This Service Provider Letter is not valid unless CWS-approved site plan is attached.**

Please call (503) 681-5157 with any questions.



**Astrid Dragoy  
Environmental Plan Review**

**Attachments**

- Site plan with impacts and mitigation
- Site planting areas
- Plant list

**CC Stacy Benjamin**

**TABLE 2. UPLAND BUFFER SEEDING & PLANTING MIX**

Scientific Name	Common Name	Type	Rate/Spacing
<i>Achillea millefolium</i>	common yarrow	Seed	2 lbs/acre
<i>Bromus carinatus</i>	California brome	Seed	15 lbs/acre
<i>Elymus glaucus</i>	blue wildrye	Seed	10 lbs/acre
<i>Festuca roemerii</i>	Romer's fescue	Seed	8 lbs/acre
<i>Polystichum munitum</i>	sword fern	Propagules (50 total)	3 ft centers in shady area south of wetland creation area between West Pond and Fanno Pointe access

**TABLE 3. UPLAND BUFFER TREE & SHRUB PLANTINGS**

Scientific Name	Common Name	Size/ Height	Spacing (on center)	Planting Location	Quantity
<i>Acer macrophyllum</i>	big-leaf maple	2 gallon/ 3 feet	10 feet	West of Fanno Creek	110
				East of Fanno Creek (Phase 1: areas 35 & 36)	60
				East of Fanno Creek (Phase 2: area 34)	40
<i>Amelanchier alnifolia</i>	Saskatoon serviceberry	2 gallon/ 2 feet	4-5 feet	West of Fanno Creek	153
<i>Mahonia aquifolium</i>	tall Oregon grape	1 gallon/ 6 inches	4-5 feet	West of Fanno Creek	324
				East of Fanno Creek (Phase 2: area 34)	90
<i>Holodiscus discolor</i>	oceanspray	1 gallon/ 1.5 feet	4-5 feet	West of Fanno Creek	300
				East of Fanno Creek (Phase 2: area 34)	90
<i>Oemleria cerasiformis</i>	Indian plum	1 gallon/ 1.5 feet	4-5 feet	West of Fanno Creek	140
				East of Fanno Creek (Phase 1: areas 35 & 36)	100

**TABLE 3. UPLAND BUFFER TREE & SHRUB PLANTINGS**

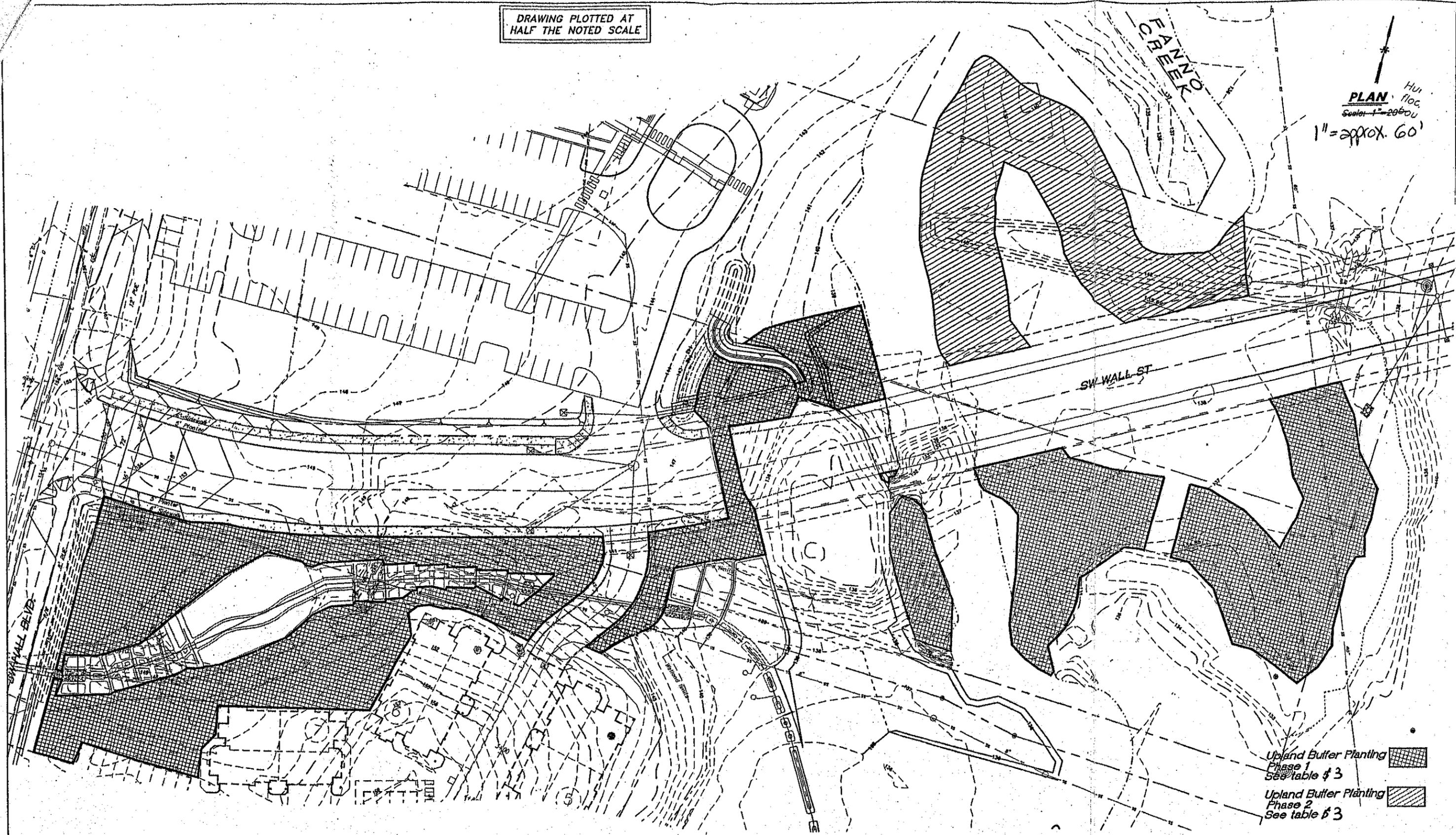
Scientific Name	Common Name	Size/ Height	Spacing (on center)	Planting Location	Quantity
<i>Pseudotsuga menziesii</i>	Douglas fir	2 gallon/ 3 feet	10 feet	West of Fanno Creek	110
				East of Fanno Creek (Phase 1: areas 35 & 36)	60
				East of Fanno Creek (Phase 2: area 34)	40
<i>Quercus garryana</i>	Oregon white oak	2 gallon/ 2 feet	10 feet	West of Fanno Creek	45
				East of Fanno Creek (Phase 2: area 34)	25
<i>Rhamnus purshiana</i>	Cascara	2 gallon/ 2 feet	10 feet	West of Fanno Creek	75
				East of Fanno Creek (Phase 1: areas 35 & 36)	40
				East of Fanno Creek (Phase 2: area 34)	35
<i>Ribes sanguineum</i>	red flowering currant	1 gallon/ 1.5 feet	4-5 feet in groups of 3	West of Fanno Creek	174
<i>Rosa woodsii</i>	woods rose	1 gallon/ 1.5 feet	4-5 feet in groups of 3	West of Fanno Creek	300
				East of Fanno Creek (Phase 1: areas 35 & 36)	100
<i>Symphoricarpos albus</i>	snowberry	1 gallon/ 1.5 feet	4-5 feet in groups of 3	West of Fanno Creek	300
				East of Fanno Creek (Phase 1: areas 35 & 36)	100
				East of Fanno Creek (Phase 2: area 34)	90





DRAWING PLOTTED AT  
HALF THE NOTED SCALE

PLAN  
Scale: 1" = 20' 0"  
1" = approx. 60'



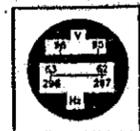
Upland Buffer Planting  
Phase 1  
See table # 3

Upland Buffer Planting  
Phase 2  
See table # 3

**SCHEDULE G**

DATE	REVISION	NO.	BY

DESIGNED BY: TKA  
 DRAWN BY: LM  
 CHECKED BY: MJD  
 DATE: XX-XX-XX  
 SCALE: AS SHOWN  
 PROJECT NO. 02.629.118



**DEHAAS & Associates, Inc.**  
 Consulting Engineers & Surveyors  
 Suite 300 - AGC Center  
 9450 S.W. Commerce Circle  
 Wilsonville, Oregon 97070  
 PHONE: (503) 682-2450  
 FAX: 682-4018



DATE: MARCH, 2004 FILE: 02.629.118

**WALL STREET EXTENSION (PH. 1&2)  
 STREET & UTILITIES IMPROVEMENTS**

UPLAND BUFFER PLANTING (TABLE #3)

SHEET  
3 OF 3

**Exhibit J*****Tigard-Tualatin School District 23J  
Resolution 0708-03***

A RESOLUTION OF THE BOARD OF DIRECTORS OF TIGARD-TUALATIN SCHOOL DISTRICT NO. 23J AUTHORIZING THE SUPERINTENDENT TO CONTINUE TO WORK WITH FRED W. FIELDS AND THE CITY OF TIGARD IN EXPLORING OPTIONS FOR A MUTUALLY BENEFICIAL REAL ESTATE TRANSACTION INVOLVING THE HALL BOULEVARD BUS STORAGE SITE.

WHEREAS, the Board of Directors (the "Board") recognizes that the Hall Boulevard bus storage site (the "Bus Storage Site"), located at 13000 S.W. Hall Boulevard, Tigard, is not large enough to accommodate all of the existing Tigard-Tualatin School District No 23J's (the "District") buses or related employees' personal vehicles; and

WHEREAS, the Board recognizes that the Bus Storage Site has inherent access constraints onto S.W. Hall Boulevard; and

WHEREAS, the Board recognizes that the District is growing and the number of buses and related employees necessary to serve the transportation needs of the District's school-age population will continue to increase in the future; and

WHEREAS, efforts have been made over the last several years to explore options for meeting the current and future bus and related employee vehicle parking needs; and

WHEREAS, the District has been approached by Mr. Fred W. Fields, who owns approximately 70 acres of land (the "Fields Property") adjacent to and nearby the Bus Storage Site; and

WHEREAS, Mr. Fields has expressed a desire to explore the possibility of relocating the Bus Storage Site to a site within the Fields Property that is larger in acreage and that provides better site access; and

WHEREAS, Mr. Fields has expressed a desire to purchase from the District the Bus Storage Site to provide access to adjacent property within the Fields Property; and

WHEREAS, Mr. Fields is also working with the City of Tigard (the "City") to locate a site within the Fields Property on which the City could consolidate its public works facilities; and

WHEREAS, there may be some cost efficiencies in the City's public works facilities and a new District bus storage site being located near to each other within the Fields Property; and

WHEREAS, a non-binding memorandum of understanding ("MOU") has been prepared to establish the District's, the City's and Mr. Fields' understanding of the needs of each party and the process by which the parties will endeavor to proceed with a further exploration of the

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options available to meet the parties' needs through the use of the Fields Property and the Bus Storage Site, attached as Exhibit A.

NOW THEREFORE, BE IT RESOLVED:

- 1. The Board hereby authorizes the Superintendent to proceed with discussions and negotiations that may lead to a mutually acceptable real estate transaction involving the Bus Storage Site and the Fields Property.
- 2. The Superintendent shall report to the Board from time to time on progress made in those discussions and negotiations.
- 3. The Superintendent shall bring any tentative offers and purchase and sale agreements back to the Board for its review and approval.
- 4. The MOU is not a binding document against the District, and no part of any negotiations or discussions with respect to this matter shall be binding on the District unless agreed to by the Board in a resolution.

DATED THIS 12th day of July 2007.

By: Carol B. Poyed  
 Chairman of the Board

ATTEST:

By: Rob S. Saxton  
 Rob S. Saxton, Superintendent

## Exhibit A

## MEMORANDUM OF UNDERSTANDING

## PARTIES TO THE MEMORANDUM:

Fred W. Fields  
1149 SW Davenport  
Portland, OR 97201

"Fields"

City of Tigard  
c/o Craig Prosser  
City Manager  
13125 SW Hall Blvd.  
Tigard, OR 97223

"City"

Tigard/Tualatin School District 23J  
Rob S. Saxton  
Superintendent  
Larry Hibbard Administrative Center  
6960 SW Sandburg Street  
Tigard, OR 97223

"School District"

The Parties to this Memorandum of Understanding each has real property needs within the City of Tigard. The purpose of the Memorandum of Understanding is to outline the Parties' needs and provide a process which enables the Parties to work towards a solution for all Parties to this memorandum to fulfill their needs. The definitions of the respective Parties' needs are as follows:

## NEEDS:

- I. Fields owns the following lots:
  - a. North of railroad tracks:
    - i. Tax Lot 1100, 13.21 acres
    - ii. Tax Lot 800, 24.32 acres; these two parcels are zoned industrial park (I-P) and serviced from Hunziker Road and accessed by a private road owned by Fields. This road is in the process of being improved to a 24 foot two-way, right of way.
    - iii. Tax Lot 300, 3.11 acres; fronting Hunziker Road; zoned commercial park (C-P)
    - iv. Tax Lot 004, south of Tax Lot 300, 2.0 acres; zoned residential (R-3.5).

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## Memorandum of Understanding

May 9, 2007

Page 2

- b. South of railroad tracks:
  - i. Tax Lot 1200, 26.32 acres; zoned light industrial. (I-L)

Fields believes the above properties may be developed to their highest and best use under a revised master plan to include substantially more residential. Fields also does not have access appropriate to the commercial development under the current zoning and/or any future zoning changes that may include more residential use. Fields desires to position the approximately 70 acres of land for development in a manner satisfactory to Fields and the City. To do so Fields seeks support from the City of Tigard within the same spirit documented in the sale of land by Fields to the City for its public library.

2. The School District currently owns Tax Lot 500, 8.41 acres south of the railroad tracks, of which more than 50% may not be useable due to wetland issues. The property has access from SW Hall Boulevard. School District currently needs additional property, approximately six acres, for purposes of the maintenance and parking of the School District's buses. In addition there is some concerns with regard to traffic congestion created by the buses departing from their property onto Hall Boulevard. Any future location will require the construction of a maintenance facility to replace the existing facility.
3. City of Tigard has multiple locations for its Public Works facilities scattered throughout the city. The City desires and believes there are economic efficiencies to be gained by consolidating the public works maintenance facilities onto a single property. It is estimated the City may need up to ten acres with facilities to be constructed.
4. There is the possibility that the City and the District might achieve future savings by combining the maintenance facilities for the School District and the City of Tigard's Public Works.

**PROCESS:**

1. Fields, working with the Parties to this memorandum, will prepare a master plan for the entire property to and including appropriate zoning and comprehensive plan changes to include residential development which may be more appropriate, i.e. the portion of the property that abuts residential and has the greatest severity of contour change.
2. Fields seeks commercial access for the parcel south of the railroad tracks. Fields and the City previously executed an easement and an agreement of cooperation whereby the City would cooperate with Fields in resolving access issues. Without deferring any of these agreements, the Parties herein seek a more viable option to provide access. A possible solution to the access needs of Fields is the acquisition of the School District property. In addition, Fields will need

PDXDOCS:1556827.1  
07/16/07 8:49 AM

## Memorandum of Understanding

May 9, 2007

Page 3

commercial access to the property north of the railroad tracks from Hunziker via a dedicated street currently privately held. This concept will be studied including the creation of a public right of way with dedications to the appropriate

municipality. It may also be appropriate to study access from SW Varnes Street and SW Tech Center Drive for the property north of the railroad tracks.

3. School District will need a larger site (up to 8 acres) and more appropriate location for access purposes to mitigate it's current traffic congestions on SW Hall. Fields has property available that appears to be acceptable for relocating the School District's bus maintenance and parking needs.
4. City of Tigard's needs with regards to consolidation of their Public Works maintenance facilities can also be accommodated on Fields property.

**ACTIONS:**

Fields will prepare a master plan to submit to the City with the intention of moving towards the following:

1. Applications for approvals allowing Fields to proceed with the development of his parcels referenced above. These applications may include a master comprehensive plan and zoning change and access to Fields property, including all planning and approvals necessary for permitting of the to be agreed upon allowable uses.
2. City of Tigard Staff will investigate the amount of land and building required for the consolidation and relocation of its various Public Works facilities currently spread throughout the City of Tigard. A tentative timetable will also be developed. The concept is to sell land to the City of Tigard from within the Fields holdings to accommodate the City of Tigard's needs. Fields and City will agree as to the location of the property within Fields holdings north of the railroad tracks.
3. School District will appraise its property in order to evaluate the option of transferring the real estate to accommodate Fields' needs for access in exchange for a site within Fields holdings to provide the School District expansion, shop maintenance facility, and traffic mitigation needs. Any difference in land values will require cash consideration. The Parties hereto will study a site within Fields holdings north of the railroad tracks.
4. All Parties to this transaction will work in good faith with a sense of urgency to develop a plan which could produce an agreement in which the School District receives a site to house and maintain its busses; Fields receives commercial access and the appropriate master plan change and zoning to allow permitting for the uses

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Memorandum of Understanding  
May 9, 2007  
Page 4

mutually agreed by Fields and the City. The City may agree to consolidate its Public Works facilities on Fields property on a site and at a price to be mutually agreed upon by Fields and the City. All values will be mutually agreed upon and with the appropriate support required by public agencies.

The foregoing is an outline of non-binding discussion points among the Parties. No Party will be bound in any manner by this memorandum of understanding unless an agreement among the Parties has been fully negotiated, executed, and delivered.

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**RESOLUTION NO. \_\_\_\_\_**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TIGARD AUTHORIZING THE CITY MANAGER AND COMMUNITY DEVELOPMENT DIRECTOR TO CONTINUE TO WORK WITH FRED W. FIELDS AND THE TIGARD TUALATIN SCHOOL DISTRICT IN EXPLORING OPTIONS FOR A MUTUALLY BENEFICIAL REAL ESTATE TRANSACTION INVOLVING THE HALL BOULEVARD BUS STORAGE SITE AND THE FIELDS PROPERTY.

WHEREAS, the City Council recognizes that the City could benefit from consolidation of public works facilities; and

WHEREAS, the City Council is aware that the Tigard – Tualatin School District is examining options to replace its bus storage site, located at 13000 S. W. Hall Boulevard, Tigard because of inherent access issues and because the site is not large enough to accommodate all of the District's busses; and

WHEREAS, the City and the District have made efforts over the last several years to explore options for meeting their respective land needs; and

WHEREAS, the City and the District have been approached by Mr. Fred W. Fields, who owns approximately 70 acres of land (the "Fields Property") adjacent to and nearby the Bus Storage Site; and

WHEREAS, Mr. Fields has expressed a desire to explore the possibility of relocating certain City of Tigard public works facilities and the Bus Storage Site to a site within the Fields Property; and

WHEREAS, Mr. Fields has expressed a desire to purchase from the District the Bus Storage Site to provide access to adjacent property within the Fields Property; and

WHEREAS, there may be some cost efficiencies in the City's public works facilities and a new District bus storage site being located near to each other within the Fields Property; and

WHEREAS, a non-binding memorandum of understanding ("MOU") has been prepared to establish the District's, the City's and Mr. Fields' understanding of the needs of each party and the process by which the parties will endeavor to proceed with a further exploration of the options available to meet the parties' needs through the use of the Fields Property and the Bus Storage Site, attached as Exhibit A.

NOW THEREFORE, BE IT RESOLVED:

1. The City Council hereby authorizes the City Manager and Community Development Director to proceed with discussions and negotiations that may lead to a mutually acceptable real estate transaction involving the Bus Storage Site and the Fields Property.

2. The City Manger and Community Development Director shall report to the Board from time to time on progress made in those discussions and negotiations.

3. The City Manager shall bring any tentative offers and purchase and sale agreements back to the Board for its review and approval.

4. The MOU is not a binding document against the City, and no part of any negotiations or discussions with respect to this matter shall be binding on the City unless agreed to by the City Council.

DATED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2007.

\_\_\_\_\_  
Tigard-Tualatin School District Board of Directors

ATTEST:

\_\_\_\_\_

## **CITY OF TIGARD WALL STREET ALTERNATIVES ANALYSIS**

The alternatives analysis that was initially prepared for the Wall Street project included a discussion of both Phase 1 and Phase 2 of the project. This approach was required by several of the natural resource regulatory agencies reviewing the project, including the Oregon Department of State Lands, U.S. Army Corps of Engineers, and Clean Water Services. The alternatives analysis and discussion of alternative roadway alignments that follows below therefore includes information regarding both Phases 1 and 2 of the project, although the City is only proposing to construct Phase 1 at this time.

The purpose and need of Phase 1 of the Wall Street project is to provide access to the Tigard Library and to the Fanno Point Condominiums that is not directly off Hall Boulevard to satisfy ODOT spacing requirements and improve road safety. Hall Boulevard is an ODOT facility, and ODOT permitted the library and Fanno Pointe to construct temporary entrances off of Hall Boulevard, with a requirement to remove the temporary accesses from Hall Boulevard at such time that permanent access from Wall Street became available. The Phase 2 purpose and needs information pertaining to the Tigard Transportation System Plan and the need to provide access to industrial lands is no longer applicable since this Comprehensive Plan Amendment submittal pertains only to Phase 1 of the project; therefore, this information has been removed from the revised alternatives analysis.

Several of the alternatives described below are no longer practicable due to the construction of the Tigard Library and the Fanno Pointe Condominiums. The reason for the inclusion of these alternative alignments in the alternative analysis is as follows. The City evaluated Alternatives 1 through 4 in 2002, prior to permitting of the Tigard library and prior to the sale of the Fanno Pointe property and initiation of site development. Although Alternatives 1, 3 and 4 are no longer possible due to recent developments, they were included in the alternatives analysis since the Corps of Engineers stated that they wanted to see evidence that the City had evaluated alternative alignments to the presently proposed Wall Street alignment that would have been possible prior to construction of the new library, as well as documentation of the reasons why these other alternatives would not have been possible. Alternatives 5 through 9 were developed more recently in conjunction with preparation of the wetland permit application in order to evaluate options that are potentially feasible given the fact that the library and Fanno Pointe Condominiums have been developed. The goal of Alternatives 5 through 9 was to evaluate alternatives to avoid or minimize impacts to wetlands and other natural resources. As a result of this alternatives analysis process, we identified and recommended to the City of Tigard a new alternative (Alternative 9) that we determined would avoid and minimize impacts to the greatest extent practicable. The City accepted Alternative 9, and that has become the Proposed Alternative. The following sections present and discuss: road alignment alternatives considered for the Wall Street extension; the implications of a no-build alternative; ecological setting and functions; and ecological impacts of project alternatives.

The extension of Milton Court has been suggested by the City as an additional alternative to provide access to the industrial lands located west of the railroad tracks that should be investigated. This alternative is outside the scope of the current Phase 1 Comprehensive Plan Amendment submittal but may be evaluated in the future at such time as the City decides to proceed with providing this access.

The 425 ft length is necessary to serve the library and condominiums while providing adequate length for the westbound left-turn lane at the intersection with SW Hall Boulevard, the accompanying left-turn lane transition, and the eastbound left-turn lane at the library access. This distance is further explained in the Kittelson memo of 2/21/05 included as Attachment \_\_\_\_.

### **WALL STREET EXTENSION ALIGNMENT ALTERNATIVES (Phase 1 & 2)**

Factors taken into consideration during alternative design and selection of the Proposed Project for the Wall Street project included: the width of the Fanno Creek floodplain and floodway, location of channel meanders in Fanno Creek, bridge construction costs, quantity and quality of wetlands associated with Fanno Creek and Pinebrook Creek, ODOT spacing requirements on Hall Boulevard; minimum radius curves to operate safely at 35 miles per hour, ODOT requirements for crossing the railroad tracks (crossings are required to be less than 5 degrees from perpendicular), the goal of preventing additional traffic congestion on Hall Boulevard by requiring the Tigard Library and Fanno Pointe development to access onto an interior street (Wall Street), and the goal of providing access to 26 acres of industrially zoned land located between Fanno Creek and the railroad tracks. Impacts associated with each of the alternatives are summarized in Table 1 at the end of this section. Environmental impacts associated with the alternatives are also discussed at the end of this section.

The City evaluated nine alternative roadway alignments and five alternative bridge lengths for the proposed Wall Street extension with the goals of improving traffic circulation and providing access to the Tigard Library and the Fanno Pointe development while minimizing impacts to Fanno Creek, Pinebrook Creek, and associated wetlands and ponds. The alternatives considered included shifting the roadway alignment either north or south of the Preferred Alternative as well as evaluating the effect of different bridge lengths on the 100-year floodplain and floodway elevations of Fanno Creek. All nine roadway alignments include a generally common segment from the railroad tracks to Hunziker Street but differ in alignment from Hall Boulevard to the railroad tracks.

Four alternative alignments for the Wall Street extension (Alternatives 1 through 4) were evaluated by the City early in 2002, prior to permitting of the Tigard Library and prior to the sale of the Fanno Pointe property and subsequent initiation of site development. At that time, the City determined that Alternative 2 was the Preferred Alternative for the Wall Street extension, and site development planning, permitting and construction for the Tigard library was initiated using this location for the future Wall Street project. Alternatives 5 through 9 were recently developed with the goal of evaluating the possibilities for minimizing impacts to natural resources given the fact that current site development on both the Tigard Library site and the Fanno Pointe site means that Alternatives 1, 3 and 4 are no longer possible. The Preferred Alternative has been replaced with Alternative 9, which is referred to as the Proposed Project. Alternatives 1 – 9 are shown in Figure A-8. A description of each alternative, the associated environmental impacts, and engineering considerations for each alternative, and the rationale for selection of Alternative 9 as the Proposed Project follows below.

Wetland delineations have not been conducted along the entire alignment (Phases 1 & 2) of each of the alternatives. Approximate wetland boundaries were determined in order to estimate

wetland impacts in areas that have not been delineated that would result from each of the alternative alignments for Phases 1 and 2 of the project. Approximate wetland boundaries were determined based upon the City's Local Wetland Inventory, aerial photos, and field observations of site vegetation, topography and hydrology indicators. Approximate wetland impacts for each alternative were calculated assuming that in each alternative the floodway would be spanned by a bridge;<sup>1</sup> therefore wetland areas located inside the floodway were not included in the wetland impact area for each alternative. Similarly, approximate floodplain impacts for each alternative were calculated assuming that in each alternative the floodway would be spanned by a bridge; therefore the floodway area included inside the boundary of the floodplain was subtracted from the total floodplain area to determine the approximate floodplain impact area for each alternative. Wetland and floodplain impacts for each alternative are summarized in Table 1 at the end of this section.

**Alternative 1: Connect Wall Street to Hall Boulevard at O'Mara Street**

This alternative connects to Hall Boulevard at O'Mara Street and would need to be curved northerly sufficient to avoid having to bridge three sections of Fanno Creek due to channel meanders. This alternative would also require reverse curves, the last of which extends to the railroad crossing right-of-way, creating an objectionable curved approach to the railroad signals. Due to the constraints posed by needing to connect with O'Mara Street, cross Fanno Creek north of the channel meanders, and cross the railroad at less than 5 degrees from perpendicular, it was not possible to design this alignment geometrically correctly.

This alternative would have likely created a situation whereby traffic could increase along O'Mara. The surrounding neighborhood voiced strong public opposition to aligning Wall Street directly across from O'Mara Street due to concerns about the potential for an increase in cut-through traffic on a local neighborhood street. Although this public opposition was taken into consideration during the alternatives analysis, it was not the reason this alternative was not selected. This alignment would also have severely impacted the potential to develop the Tigard Library site due to the location of the roadway midway between the south property boundary and Fanno Creek to the north. In addition, crossing Fanno Creek in this location, which is in close proximity to channel meanders, would potentially have increased the length of stream habitat affected by noise and other disturbance due to the roadway and bridge. This alternative had less wetland impacts than the Preferred Alternative and would not have resulted in any wetland impacts west of Fanno Creek, but would have impacted wetlands east of Fanno Creek (the area east of Fanno Creek has not been delineated but wetlands areas were observed in this area in the field). This alternative had approximately the same floodplain impact as the Preferred Alternative. This alignment would have required land acquisition of right-of-way from the Tigard-Tualatin School District.

Although this alternative had less wetland impacts than the Preferred Alternative, it was not selected due to its not being geometrically acceptable.

**Alternative 2a (Previously Preferred Alternative): Connect Wall Street to Hall Boulevard at the south side of tax lot 200 (south side of the Tigard Library site).**

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<sup>1</sup> All project alternatives have a bridge that spans the floodway. The bridge design incorporates 80 foot sections supported by piles. Bridge supports will not be located in the stream or in wetlands.

This alignment includes the 20-foot wide access easement immediately south of this tax lot. This alternative would be constructed in two phases: Phase 1 consists of construction of the western 425 feet of Wall Street, beginning at Hall Boulevard and ending just west of the East Pond. Phase 2 includes construction of a 320 foot bridge over Fanno Creek and the floodway and construction of the remainder of Wall Street to connect with Hunziker Street. The purpose of Phase 1 of the project is to provide access to the Tigard Library and the Fanno Pointe development. Although these developments are currently being built with accesses off of Hall Boulevard, due to high traffic volumes on Hall Boulevard and ODOT spacing requirements and safety concerns, ODOT permitted the new library and Fanno Pointe to construct temporary entrances off of Hall Boulevard with the understanding that these accesses would be removed and replaced with permanent accesses off of Wall Street at the time that the first 425 feet of Wall Street was constructed.

The alignment of Alternative 2 locates the intersection approximately 350 feet south of the Hall/O'Mara intersection, and has been approved by ODOT. The location of the Hall/Wall intersection minimizes the likelihood of increasing traffic on O'Mara and allows site development to occur as envisioned in the model prepared for the Tigard Library. This alignment requires impacts to Pinebrook Creek and associated emergent/scrub-shrub wetlands and man-made ponds and minor impacts to wetlands located east of Fanno Creek. This alignment would require culverting Pinebrook Creek under Wall Street and constructing a new stream channel on the north side of the roadway. Proposed stream and wetland impacts include 0.20 acre for Phase 1 and 0.28 acre for Phase 2 for a total of 0.48 acre. Floodplain impacts for this alternative are 0.08 acre for Phase 1 and 0.57 acre for Phase 2 for a total of 0.65 acre. This section of Pinebrook Creek proposed to be impacted has been extensively modified from its historic condition and has a high occurrence of invasive plant species. The need to relocate and reconstruct the Pinebrook Creek stream channel provides an opportunity to restore the stream to a more natural condition as well as potentially restoring fish passage from Fanno Creek to Pinebrook Creek. Construction of the relocated Pinebrook Creek on the north side of Wall Street would prevent future expansion of the parking lot for the Tigard Library. The number of parking spaces is currently at the minimum required.

A variation to this alternative was to move the street 70 to 80 feet south of the 20-foot wide access easement. This variation would have required acquisition of a right-of-way from the lot adjacent to the library site, but would have allowed for better use of the library site for site development and parking. This variation would have avoided Pinebrook Creek and associated wetlands but would have involved impacting approximately the same amount of wetland area and impacts would have been to higher quality scrub-shrub and forested wetlands located east and west of Fanno Creek in the floodplain.

**Alternative 2b: Construct only Phase 1 of the Wall Street extension in order to minimize impacts to Pinebrook Creek and associated wetlands.**

This alternative involves constructing only as much of Wall Street as is required to access the Tigard Library and the Fanno Pointe development. These accesses are proposed to occur approximately 400 feet east of the intersection of Wall Street with Hall Boulevard. The minimum roadway length for Phase 1 was determined by a traffic study conducted by DKS Associates in 2002. A 250 foot long westbound left-turn lane was determined to be necessary for

the Wall/Hall intersection in the year 2017. In addition, the traffic study recommended providing a 100 foot long eastbound left-turn lane into the library. The proposed library access cannot be shifted closer to Hall Boulevard without resulting in a conflict between the storage length needed for these two left turn lanes. Therefore, the length of Phase 1 cannot be reduced to less than 425 feet.

At this point in time, the City is proceeding with engineering studies and permitting for the entire Wall Street project. If it were determined that Phase 2 could not be constructed due to engineering, environmental or cost issues, the City would continue to pursue permitting for construction of Phase 1.

**Alternatives 3 and 4: Connect Wall Street to Hall Boulevard at the south side of tax lot 300 (south side of the Fanno Pointe site).**

These alignments were ideal from the standpoint of intersection spacing because they placed Wall Street approximately 650 feet from O'Mara Street to the north and the same distance from McDonald Street to the south. Alternatives 3 and 4 are two slightly different variations of the same basic alignment. Alternative 3 begins the curve in the street toward the railroad tracks earlier than Alternative 4 and leaves less of the parcel for development. Alternative 4 begins the curve towards the railroad tracks to the east of Alternative 3 and leaves slightly more land available for development north of the road.

These alignments crossed long sections of floodplain and wetlands. The requirement to span the floodway would have required lengthening the bridge from the currently proposed 320 foot length to approximately 480 feet (Alternative 3) or 580 feet (Alternative 4), which would have been cost prohibitive for the project. These alignments would have required land acquisition from the adjacent property owner to accommodate the street construction. In addition, unless the City purchased the entire parcel, development would most likely have occurred on the remaining north portion of the site and adjacent to the Tigard Library. There was a concern about whether this future development would be compatible with the library. These alignments would have involved similar wetland impacts as the Preferred Alternative but Alternative 3 would have resulted in greater floodplain impacts. Although these alternatives would have avoided impacts to Pinebrook Creek and associated wetlands, the scrub-shrub and forested wetlands located east and west of Fanno Creek which would have been impacted are of higher quality than the emergent/scrub-shrub and invasive species dominated wetlands associated with Pinebrook Creek

These alternatives were not selected due to the greater wetland and floodplain impacts of Alternative 3, impacts to higher quality wetlands, greater floodway distance, higher bridge construction expense, and right-of-way purchasing limitations.

**Alternative 5: Connect Wall Street to Hall Boulevard on tax lot 600 north of the Tigard Library.**

This alternative is a variation of Alternative 1 that avoids impacting the footprint of the Tigard Library located to the south as well as the footprint of the new water quality facility for the Hall Boulevard widening located to the north. This alignment does not meet ODOT intersection spacing requirements due to its location approximately 100 to 150 feet north of O'Mara Street, and it is highly unlikely that a Major Deviation Request for reduced spacing would be approved by ODOT for this alternative. An approximately 355 ft. centerline radius curve would be

required to meet the railroad crossing requirement while the minimum safe radius for a 35 mile per hour road is 455 ft.

This alternative had less wetland impacts than the Preferred Alternative and would not have resulted in any wetland impacts west of Fanno Creek, but would have impacted wetlands east of Fanno Creek (the area east of Fanno Creek has not been delineated but wetlands areas were observed in this area in the field). Most of this alternative west of the railroad crossing is located within the floodplain, and this alternative has the second to the largest floodplain impact of all 9 alternatives examined (as stated on pages 4-5, the floodplain impact calculation assumes that the floodway is spanned by a bridge and the floodplain impact does not include the spanned floodway). This alternative would require modifications to the design of the entrance road and parking lot of the Tigard Library and would require the Fanno Pointe development to access directly off of Hall Boulevard, which is objectionable to ODOT. This alignment would require land acquisition of right-of-way from the Tigard-Tualatin School District.

This alternative was not selected due to its greater floodplain impact and failure to meet ODOT requirements.

**Alternative 6: Connect Wall Street to Hall Boulevard on tax lot 600 North of Fanno Creek.**

This alternative follows the general location of the Clean Water Services 60 inch sanitary sewer interceptor until curving easterly for the approach to the railroad crossing. An approximately 265 ft. centerline radius curve would be required to meet the railroad crossing requirement, while the minimum safe radius for a 35 mile per hour road is 455 ft.

This alternative has greater wetland impacts than the Preferred Alternative. This alternative avoids the need for a bridge over Fanno Creek but is problematic due to the fact that the FEMA floodway mapping extends north of Fanno Creek for a distance of up to 150 feet. floodway elevation. Unless a bridge were constructed to span the floodway, this alternative would involve floodway impacts that would require approval by FEMA and the local community. Moving the alignment to the north would result in impacts to the North Pond, which is in considerably better condition than the East and West Ponds. This alternative would require crossing two Fanno Creek tributaries, including Red Rock Creek. Culverts would be required to meet current ODFW fish passage requirements. The portion of the alignment located west of the railroad tracks is located almost entirely in the floodplain, and this alternative has the greatest amount of floodplain impact of all of the alternatives. Since the roadway will be built on 6 to 8 feet of fill, this alternative would result in unacceptable floodplain impacts. This alternative would require Tigard Library and the Fanno Pointe development to access directly off of Hall Boulevard which would not be allowed by ODOT; therefore, Phase 1 of Alternative 2 would still need to be constructed to meet the City's goal of not allowing the Tigard Library or the Fanno Pointe development to access directly off of Hall Boulevard. This alignment would require land acquisition of right-of-way from the Tigard-Tualatin School District.

This alternative was not selected due to its greater wetland and floodplain impacts and potential for floodway impacts.

**Alternative 7: Connect Wall Street to Hall Boulevard immediately north of Alternative 2.**

This alignment locates the intersection of Wall Street with Hall Boulevard approximately 270 feet south of the Hall/O'Mara intersection and does not meet ODOT intersection spacing requirements. It is highly unlikely that a Major Deviation Request for reduced spacing would be approved by ODOT for this alternative. This alignment would prevent future expansion of the parking lot for the Tigard Library. The number of parking spaces is currently at the minimum required. This alignment had less wetland and floodplain impacts than the Preferred Alternative. Although this alternative is shifted north of Pinebrook Creek and would avoid impacts to the stream channel, it would still require impacting wetlands associated with Pinebrook Creek, including the East Pond. This alignment would require the Fanno Pointe development to construct an access road across Pinebrook Creek and associated wetlands in order to connect to Wall Street and avoid a direct access off of Hall Boulevard to meet ODOT requirements.

This alternative was not selected due to not meeting ODOT's intersection spacing requirements and unlikelihood of obtaining a Major Deviation Request for reduced intersection spacing.

**Alternative 8: Realign Alternative 2 to follow the existing Clean Water Services sanitary sewer alignment crossing of Fanno Creek.**

This alternative follows the first part of the Alternative 2 alignment and then instead of curving northerly to fit the desired railroad crossing point, swings slightly southerly to follow the existing 8-inch Clean Water Services sanitary sewer crossing of Fanno Creek. Although this alignment avoids the East Pond, it has approximately the same wetland impacts as the Preferred Alternative and involves impacting higher quality scrub-shrub and forested wetlands located east and west of Fanno Creek. Using minimum 455ft. curve radii moves the railroad crossing 350ft. southwesterly from the desired crossing point, increases the road length approximately 400ft, and has a negative impact on land value because of the manner in which it bisects the large tracts of industrially zoned land located east and west of the railroad crossing to be served by the Wall Street extension. Based upon the City's initial discussions with the property owner of the industrial parcels, it is unlikely that the City would be able to purchase the necessary right-of-way for this alternative. Due to the need for this alternative to impact high quality wetlands, combined with the difficulty of obtaining the necessary right-of-way, this alternative was not selected.

**Alternative 9 (Proposed Project): Connect Wall Street to Hall Boulevard at the same location as the Preferred Alternative and shift the remaining roadway northerly to minimize impacts to Pinebrook Creek.**

This alignment is a combination of the previous Preferred Alternative (Alternative 2) and Alternative 7. This alternative keeps the intersection of Wall Street with Hall Boulevard at the same location as the previous Preferred Alternative, which has been approved by ODOT, and shifts the remaining roadway up to 70 feet north of the previous Preferred Alternative. The alignments of the previous Preferred Alternative 2 and the Proposed Project (Alternative 9) are shown in Figure A-9. The Proposed Project has several advantages over the previous Preferred Alternative. Alternative 9 would result in 0.27 acre of wetland impacts, which is 0.21 acre less than the previous Preferred Alternative 2. This alternative also results in less floodplain impact, 0.55 acre compared with 0.65 acre for the previous Preferred Alternative 2. Proposed wetland and floodplain impacts for Alternative 9 are shown in Figures A-10 and A-11.

Alternative 9 would allow Pinebrook Creek to remain on the south side of Wall Street, eliminating the need to relocate Pinebrook Creek as would have been required with the previous Preferred Alternative 2. Relocating Pinebrook Creek would have required one 90 to 100 foot culvert to take Pinebrook Creek to the north side of Wall Street and possibly a second 90 to 100 foot culvert to take Pinebrook Creek back to the south in order to connect with Fanno Creek in the event that Pinebrook Creek could not be routed underneath the westerly bridge span. Alternative 9 works better for realigning Pinebrook Creek with its historic channel and its confluence with Fanno Creek. The dry, historic lower section of the Pinebrook Creek channel was identified by Fishman Environmental Services biologists in the east portion of the Fanno Pointe site, and is within the portion of that property that is being deeded to the City of Tigard as an open space tract by the developer, Polygon NW. Reconnecting Pinebrook Creek to this historic channel and taking the East Pond off-line from Pinebrook Creek will eliminate overflows of warm, nutrient-rich water from the East Pond into Fanno Creek. Due to the bridge being moved 70 feet north from the previous Preferred Alternative location, the bridge would more completely span the East Pond, which will be reconfigured as wetland after taking it off-line from Pinebrook Creek. The Proposed Project will also allow for wetland restoration just south of the East Pond where an upland berm exists (probably material sidecast from excavation of the East Pond and placed in historic wetlands). The result of Alternative 9 will be less wetland impact and more on-site mitigation in the form of wetland restoration.

Alternative 9 also has engineering benefits over the previous Preferred Alternative 2, including requiring less fill to construct the roadway due to shifting the roadway further north from the higher elevation Fanno Pointe site (as compared to the elevation of the library site) and reducing the length of the new Wall Street roadway by 22 feet. This alternative has an advantage over the previous Preferred Alternative and Alternative 7 by allowing for future expansion of the parking lot for the Tigard Library. Alternative 9 will allow the Tigard Library and the Fanno Pointe development to close their accesses to Hall Boulevard and provide alternate accesses by connecting with the new alignment of Wall Street. Since Alternative 9 will keep Pinebrook Creek on the south side of Wall Street, the Fanno Pointe access to Wall Street will need to cross Pinebrook Creek, but the need for the library's Wall Street access to cross Pinebrook Creek will be eliminated. This alternative will require re-routing the outfall from the stormwater quality facility constructed for the library project. The outfall will be routed to the reconfigured East Pond wetland area, which would then overflow during larger storm events through restored wetlands to the south of the pond and would eventually reach Pinebrook Creek. This routing of treated stormwater through additional wetlands would provide a greater degree of treatment to runoff prior to its entering Fanno Creek.

**Road Right-of-Way Width**

Wall Street is considered a Collector road, and the City of Tigard Public Improvement Design Standards require the following on Collectors:

- Required ROW: 58-96 feet
- Pavement requirement: 34-56 feet curb to curb (including 6' bike lane)
- Sidewalks: 6 foot sidewalks
- Planter strips: 5 feet
- Street trees: Street trees are required; must be on the approved street tree list

The design of Wall Street includes a 48 foot wide paved roadway (two 11ft. travel lanes, a 14ft. median, and two 6ft. bike lanes). The street will have curbs, 5 4 foot wide planters (except where reduced to mitigate wetland encroachment), and 6 foot wide sidewalks on each side. Right-of-way (ROW) width will be 72 70 feet along with additional widths of up to 20 feet outside the ROW to accommodate 8 foot wide public utility easements and cut and fill slopes. At the bridge crossing, the paved width will be reduced to a 36 foot wide paved roadway ~~36 feet~~ (two 12ft. travel lanes and two 6ft. bike lanes) with curbs, sidewalks and handrails ~~for a total right-of-way width of 50 feet.~~ Note: R/W remains 72 feet.

The roadway width and improvements are nearly at the minimum required by the City. Construction of a retaining wall on the south side of the roadway in the west half of Phase I would result in a decrease in wetland impact to the West Pond of 195 sq. ft. (0.0045 acre) at a construction cost of approximately \$12,500. Construction of a retaining wall instead of a fill slope on the north side of the roadway in the east half of Phase I would result in a decrease in wetland impact to the East Pond of 660 sq. ft. (0.015 acre) at a construction cost of approximately \$24,100. Costs to construct wetland mitigation have been calculated by the Oregon Department of State Lands to be \$50,000 per acre. Using DSL's figure, the cost to mitigate for the 195 sq. ft. or 660 sq. ft. of wetland impact is much less than the cost to construct retaining walls in order to avoid these wetland impacts. It was determined that the cost to construct retaining walls was not justifiable when compared to the cost to construct wetland mitigation, especially considering the minor amount of wetland impact minimization that would be achieved by utilizing retaining walls.

### **Bridge Length Alternatives**

An OBEC Consulting Engineers/West Consultants/Pacific Water Resources team was retained by the City to evaluate hydraulic impacts caused by various bridge options under consideration for crossing Fanno Creek. The Preferred Alternative crosses Fanno Creek at a location where the 100-year floodplain is over 500 feet in width and the floodway is 300 feet wide. The team evaluated bridge options of 160 feet, 240 feet, 320 feet, 400 feet, and 560 feet to determine the impacts of each option on the floodplain and the floodway. They were further directed to contain water surface impacts below the bridge crossing Hall Boulevard and to consider the Tigard Library construction just upstream from the Wall Street extension. The City does not allow any floodplain encroachment that causes any rise in the 100-year floodplain elevation. For flood insurance purposes, FEMA shows a floodway width and elevation that typically accounts for rises of up to 1 foot in the base flood elevation, but does not allow any further encroachment that will cause a rise in the floodway elevation.

A 160 foot bridge estimated to cost \$635,000 was the initially preferred length due to budget projections. However, a bridge length of 320 feet was determined to be the minimum needed to meet FEMA requirements. A bridge shorter than 320 feet would require approval by FEMA and the local community and the project would need to be submitted to FEMA as a Conditional Letter of Map Revision. Such a process is lengthy, expensive and without assurance of success. Therefore, a 320 foot bridge spanning the floodway was the selected alternative. The cost to construct a 320 foot bridge is estimated at \$1,156,700; a longer bridge is cost prohibitive for the project.

<b>Alternative</b>	<b>Wetland Impact* (acres)</b>	<b>Floodplain Impact* (acres)</b>	<b>Floodway Distance (feet)</b>	<b>Reason for Rejection of Alternative</b>
1	0.16	0.48	250	Curve radius for road cannot be met due to location of intersection and stream crossing and railroad crossing requirements
2a	0.48	0.65	300	(previous Preferred Alternative)
2b	0.20	0.08	0	(Phase 1 of previous Preferred Alternative)
3	0.56	0.76	480	Greater wetland and floodplain impacts, impacts to higher quality wetlands, longer floodway span; bridge cost prohibitive
4	0.44	0.68	580	Impacts to higher quality wetlands, longer floodway span; bridge cost prohibitive
5	0.16	0.96	270	Greater floodplain impact; fails to meet ODOT requirements
6	0.66	1.13	655	Greater wetland and floodplain impacts; potential floodway impacts
7	0.29	0.36	320	Unlikely to receive approval of ODOT Major Deviation Request for intersection spacing
8	0.42	0.37	330	Impacts to higher quality wetlands; unable to acquire necessary right-of-way from owner of industrially zoned parcels
9	0.27	0.55	320	(Proposed Project)

\* Wetland and floodplain impacts for Alternatives 1 and 3 - 8 are very approximate and are for general comparison purposes only. Impacts for Alternatives 2 and 9 were based on the preliminary grading plan (final limits of grading not determined) and would therefore be slightly greater than shown. Impact areas for Alternatives 1 and 3 - 8 were calculated using ArcView based upon the approximate location of the road alignments, estimated width of road grading limits and natural resource mapping. Wetland and floodplain impacts exclude the area located within the limits of the floodway, since the floodway would likely be spanned by a bridge, as is the case for the proposed project.

### **3 IMPLICATIONS OF A NO BUILD ALTERNATIVE**

The No Build Alternative involves not constructing Phase 1 of Wall Street. The temporary accesses off of Hall Boulevard for the Tigard library and the Fanno Pointe Condominiums would remain in use, resulting in increased traffic congestion on Hall Boulevard and increased potential for accidents to occur.

If Phase 1 were not constructed, there would be no wetland impacts and therefore the proposed wetland mitigation would not be constructed. The two ponds on Pinebrook Creek would continue to adversely affect water quality in Fanno Creek due to thermal pollution, and the heavily eroded earthen berm on the downstream side of the East Pond would continue to have the potential to fail in the near future, resulting in a large sediment load entering Fanno Creek.

### **4 ECOLOGICAL SETTING AND FUNCTIONS**

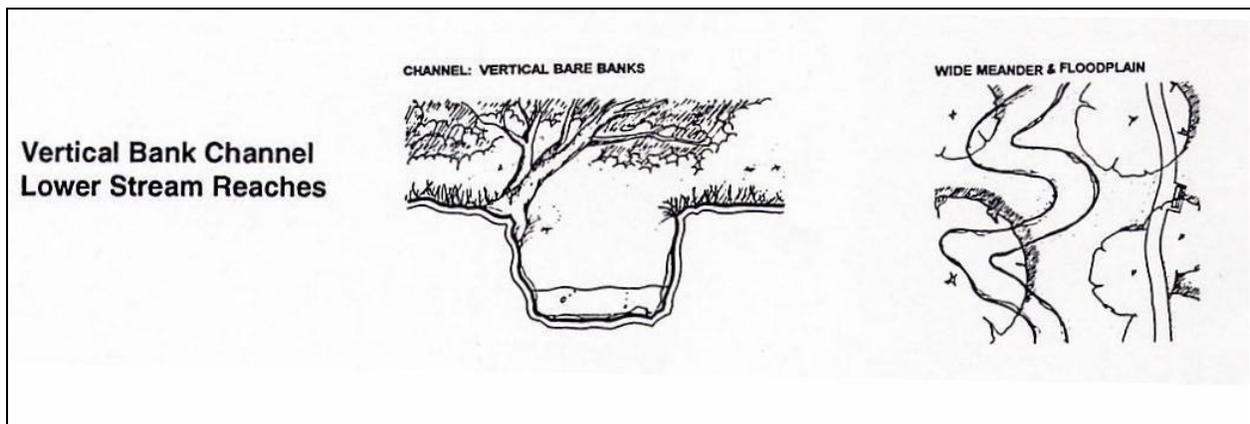
#### **4.1 Watershed Setting**

The Wall Street project area is within the lower reach of the Fanno Creek watershed, which consists of 20,500 acres (32 square miles) and includes 117 miles of streams (mainstem and tributaries). The lower reach of Fanno Creek is a low-gradient stream, <0.1 percent, that generally has a wide floodplain and a considerable amount of meandering.<sup>1</sup> Compared to historic

conditions, Fanno Creek, like most urban streams, has reduced stream health in terms of hydrology, water quality, channel stability and fish and wildlife habitat values.

An aerial photograph of the project area overlaid with existing natural resources in the project area, including Fanno Creek, the 100-year floodplain, floodway, and delineated wetland boundaries, is shown in Figure A-5. Two developments, the Tigard Library and the Fanno Pointe development, are currently being constructed adjacent to the project area and their building footprints along with existing sewerlines in the project area are shown in Figure A-6. The wildlife habitat patch identified in the project area in the Fanno Creek Watershed Management Plan and also identified by Metro in their Goal 5 Fish and Wildlife program is shown in Figure A-7.

The project area reach of Fanno Creek extends from Hall Boulevard downstream to the south boundary of the new Fanno Pointe Condominiums development and is a meandering channel that is deeply incised. It is typified by the following description and figure (Kurahashi 1997).



**Vertical Bank Channel – Lower Stream Reaches**

- Stream Order: Third and fourth order with less than 3% slope
- Hydrology: Perennial flows
- Soils: Erodible during high-flow (bankfull) events, but moderately stable in vertical position due to high clay content. May or may not have high soil phosphorous levels. Deposition of upstream soils occurs on the open floodplain.
- Typical Plant Community: Oregon ash, red alder, willow, black hawthorn, red-osier dogwood, Oregon white oak, nootka rose, snowberry, and Douglas spirea. Often dominated by non-native blackberry, reed canarygrass and common hawthorn.
- Fish and Wildlife Habitat: Continuous along the floodplain, but little upland habitat. Lack of large woody debris and loss of shade reduce fish habitat.
- Land Use: Moderate to extensive encroachment by residential and commercial properties. Floodplain may be extensive.

The stream channel in this reach is less complex than historically, due to channel straightening and incision. A large meander of the stream just downstream from Hall Boulevard, was cut-off in the 1970's, probably as part of a sewer construction project. Removal of that meander shortened Fanno Creek by about 450 feet. Stream channelization and shortening have deleterious local

effects, such as increased velocity, increased sediment transport, degradation, and bank instability, as well as effects to upstream and down stream reaches.<sup>2</sup>

Two Fanno Creek tributaries flow through the project area. A small tributary to Fanno Creek, Pinebrook Creek, flows west to east through the project area. This small stream has been highly altered from its historic condition. The channel has been re-routed, and two ponds (referred to as the East Pond and West Pond in this project) were constructed in the 1950's and 1960's. Red Rock Creek flows east to west into the study reach. This stream also appears to have been highly altered by past land use practices.

Wildlife habitat in the Fanno Creek watershed was evaluated in the Fanno Creek Watershed Management Plan on the basis of habitat value, contribution to watershed protection and water quality, unique features or rarity of species, size of habitat patch, restoration or enhancement potential, and linkage to other wildlife sites. The floodplain and upland wooded area that includes parts of the project reach on the southwest side of the railroad tracks was identified in the Watershed Management Plan as one of five significant habitat "blocks" for protection of water quality and wildlife in the watershed. "Reduction in the size of these areas, alteration of the vegetation layers, or other harmful disturbances will diminish the functions and values of the sites." (Kurahashi 1997). The Wall Street project area comprises the northern part of this habitat block or patch (assuming Hall Boulevard to be the northwestern limit of the patch). Forest canopy in the project area is less closed than in the remainder of the patch as a result of past land use disturbances. Areas where sewer lines were constructed, for example, are open meadows dominated by reed canarygrass.

The wildlife habitat patch in this area totals approximately 73 acres, including habitat areas on the east and west of the railroad tracks (see Figure A-7). We consider wooded areas on both sides of the tracks to be part of the same habitat patch because many wildlife species will cross the tracks to access both sides. Metro has also identified the wooded areas on both sides of the tracks as wildlife and riparian habitat in their on-going Goal 5 fish and wildlife project. Metro rates the wooded area northeast of the railroad as "wildlife habitat class b," or medium value; they rate the wooded area on the southwest of the railroad as "wildlife habitat class a" and "riparian habitat class 1," both the highest value. Limited field evaluation by consultant staff indicates that the wooded area on the northeast side of the railroad appears to be more disturbed than the area on the southwest side. The northeast side of the patch is approximately 24.2 acres; the southwest side is approximately 48.7 acres.

Stream channel and corridor conditions for numerous reaches of Fanno Creek and tributaries were summarized in the Watershed Management Plan; these are shown in the following table for the two reaches that constitute the Wall Street Project reach (Kurahashi 1997).

<b>Stream Reach</b>	<b>Fanno Cr. Drive to Red Rock Creek confluence (area of proposed impact)</b>	<b>Red Rock Confluence to Hall Boulevard (immediately upstream of project)</b>
Bank/bed erosion	Moderate	Severe
Soil phosphorous/erodibility*	3 / 1	3,2 / 1,3
Percent native plants	75	0-25
Percent shade	50-75	25
Amount of woody debris	Moderate	low
Habitat value	High	low
Overall condition	Good	poor
Comments	Excel. Upland forest near creek to northeast	---

\* Soil phosphorous: 2 = low availability; 5 = high availability;  
Soil erodibility: 1 = low, 5 = high erosion potential.

The 100-year floodplain in the project reach varies from about 325 ft to about 800 ft wide; the regulatory floodway ranges from about 150 ft to 300 ft wide.

Fish surveys by ODFW in 1994-95<sup>3</sup> found the following fish present (number captured) in lower Fanno Creek (100 meters within the reach from the mouth to Durham Road): western brook lamprey (1), Pacific lamprey (1), cutthroat trout (11), coho salmon (9), speckled dace (1), largescale sucker (5), brown bullhead (1), mosquitofish (3), threespine stickleback (7), pumpkinseed (1), largemouth bass (2), reticulate sculpin (dominant, 534), prickly sculpin (115) and crayfish (25). No rainbow trout were captured in any reaches of Fanno Creek in the 1993-94 fish sampling surveys. The lower Fanno Creek fish sampling area was within 2.5 river miles of the project site.

Aquatic surveys of the same areas of Fanno Creek as the 1994-1995 ODFW study were conducted in the summer, fall, winter, and spring of 1999-2000.<sup>4</sup> Lower Fanno Creek was not surveyed for fish or water quality in the winter of 2000. Survey results found the following fish present (number captured and season) in lower Fanno Creek: western brook lamprey (8 su, 1 f, 5 sp), Pacific lamprey (0 su, 0 f, 1 sp), redbelt shiner (5 su, 0 f, 1 sp), speckled dace (2 su, 0 f, 0 sp), largescale sucker (1 su, 0 f, 0 sp), brown bullhead (1 su, 0 f, 0 sp), bluegill (0 su, 2 f, 0 sp), largemouth bass (15 su, 2 f, 0 sp), reticulate sculpin (86 su, 53 f, 76 sp) and crayfish (2 su, 8 f, 2 sp). Three rainbow trout were captured at the upper Fanno Creek site in winter of 2000. No coho were captured and stocking of hatchery coho in the Tualatin Basin was recently discontinued.

Endangered Species Act listings of anadromous fish include the Upper Willamette River steelhead trout, and Fanno Creek is included as potential habitat for this species. The likelihood of UWR steelhead using Fanno Creek, however, is low, based on poor habitat conditions, including water temperature, substrate, channel conditions, and food resources (see Biological Assessment prepared for this project).

Recent benthic invertebrate sampling in Fanno Creek was used to calculate benthic index of biological integrity (B-IBI) values.<sup>5</sup> Fanno Creek in the vicinity of the Wall Street area was considered to be “severely impaired, conditions indicate a high level of disturbance” for the Oregon Dept. of Environmental Quality criteria, and at the lowest end of the “poor” category (18-26) for Puget Sound criteria.

#### **4.2 Ecological Function and Impact Assessment**

Ecological habitat types in the project area include stream, wetland, riparian and upland resources. Each of these types has subcategories:

- Streams
  - Third-order tributary (Fanno Creek) to Tualatin River
  - First-order tributary (Pinebrook Creek) to Fanno Creek
- Wetlands
  - Emergent/wet meadow
  - Shrub-scrub
  - Forested
  - Open water – constructed ponds
- Riparian
  - Forested bottomland/floodplain
  - Shrub wetland
  - Wet meadow
- Upland
  - Woodland
  - Meadow – agricultural and disturbed soil
  - Shrub - disturbed soil

Ecological functions provided, or potentially provided by these habitat types include:

- Habitat for aquatic and semi-aquatic fauna
- Habitat for upland fauna
- Stream hydrology moderation and water storage
- Microclimate
- Streambank stabilization and stream channel structure/dynamics
- Sediment, water temperature, and water pollution control
- Organic matter input, including large wood (stream and woodland)

These functions are used to assess project environmental impacts in following sections of this report. An analysis of impacts to these functions will also be used to develop mitigation actions for project impacts that cannot be avoided.

#### **4.3 Ecological Guidelines for Land Use Decisions**

The Ecological Society of America lists eight guidelines for making land use decisions within an ecological framework.<sup>6</sup> These guidelines are most appropriate for large planning areas; however, they are useful at the project scale. The proposed Wall Street project is discussed below in the context of each guideline. Ideally, these guidelines would have been used during the initial planning stages of the Tigard TSP and other planning processes; however, their use is instructive and important at this time.

Examine the impacts of local decisions in a regional context. Regional data (i.e. GIS, aerial photography, fish and wildlife data, watershed plan) were examined in order to establish the regional context of the Wall Street project. The regional importance of the wildlife habitat block

in the project area, and regional continuity of the Fanno Creek corridor were identified and used for project assessment.

A number of metrics have been developed and tested to assess the condition of streams and their associated riparian corridors in the Pacific Northwest. One easily implemented metric tested and recommended by May et al. (1997)<sup>7</sup> is the density of road crossings. The investigators concluded that a road crossing density of less than 2 per kilometer maintains a desired condition of riparian continuity. They also found a good correlation between road density and urbanization (expressed as total impervious area) within sub-basins.

We calculated the road density for the Lower Fanno Creek Sub-basin, which extends from the confluence of Summer Creek to the mouth of Fanno Creek at the Tualatin River, a stream length of 9.60 km (5.97 miles). There are presently 9 road crossings in this reach of Fanno Creek, or 0.94 crossings per km. The addition of a Wall Street crossing of Fanno Creek would increase the road crossing density to 1.04 per km, well within the density of less than 2 per km recommended in the May et al. report.

Plan for long-term change and unexpected events. Long-term change is anticipated in land development around the project area, particularly on vacant land zoned for industrial uses on the east side of Fanno Creek. The fact that most of the Fanno Creek corridor land is in public ownership allows forecasting of relatively minor changes to land use on these properties. Long-term changes in landscape parameters are anticipated as site vegetation in the stream corridor and associated uplands matures, and invasive plant species become more established if not controlled. Unexpected events could include very large flood events (100+-year events) that would interact with the proposed road and stream crossing. The proposed bridge design that spans the floodway would minimize impacts of the road crossing during these events.

Preserve rare landscape elements, critical habitats, and associated species. None of the landscape elements or habitats in the project area is considered rare in a regional context; however, riparian, floodplain and upland woodlands are less abundant and widespread in the urban area than they were historically. Fanno Creek aquatic and riparian habitats are considered part of the critical habitat for ESA-listed steelhead. Assessment of project alternatives, and the selection of the proposed project were largely based on preservation of these habitats.

Avoid land uses that deplete natural resources over a broad area. The proposed project would have limited and mostly local effects on natural resources. Project design elements, such as the bridge spanning the entire floodway, and reconfiguration of Pinebrook Creek, protect or improve natural resource functions, such as water quality protection, that may have more far-reaching effects. A project design goal is to limit ecological effects to the project area through design and mitigation.

Retain large contiguous or connected areas that contain critical habitats. The proposed project would fragment the existing habitat patch along the Fanno Creek corridor, resulting in impacts to wildlife use of the habitat. The road crossing is in the northern part of the patch, where existing habitat is more disturbed than in the larger, wider portion to the south. Some of these impacts are lessened by the retention of connectivity along the stream corridor within the floodway. The

effects of the project on critical habitat for ESA-listed fish (steelhead) are considered minimal as a result of avoiding impacts to the stream channel and floodway (see the Biological Assessment prepared for this project).

Minimize the introduction and spread of non-native species. Landscape design and use of best management practices during project construction will minimize the introduction of non-native species. In addition, we anticipate that mitigation actions for the project will include removal of existing invasive or noxious plants, such as purple loosestrife and Himalayan blackberry. We will also evaluate mechanisms for funding on-going native landscape maintenance after the project is completed.

Avoid or compensate for effects of development on ecological processes. We have identified and assessed ecological functions in the project area, and have incorporated this information into the project planning and design. Mitigation for unavoidable impacts to habitat and functions will be based on replacing or improving impacted functions.

Implement land-use and –management practices that are compatible with the natural potential of the area. The project design will allow stream channel processes to function at existing levels of performance and to their potential. The proposed re-configuration of Pinebrook Creek will improve functions of this tributary for fish and wildlife and protection of Fanno Creek water quality. The natural potential of urban stream corridors such as Fanno Creek has been greatly compromised by patterns and activities of urban growth and development. A design goal of this project is to avoid and minimize ecological impacts to the extent practicable, and to implement mitigation and enhancement activities that are function-based in order to achieve a measure of natural potential.

## **5 ECOLOGICAL IMPACTS OF ALTERNATIVES**

Two types of impacts have been evaluated for project alternatives: 1) disturbance or removal of habitat, and 2) disruption or elimination of ecological functions. Under the first impact type, the amount of wetland and wildlife habitat<sup>2</sup> removed or disturbed has been calculated using GIS tools<sup>3</sup>. These numbers are shown in Table 1. The following paragraphs discuss the effects of project alternatives on the ecological functions introduced in Section 3.

Each of the ecological functions listed earlier in this report is discussed below in regards to the project alternatives.

### Habitat for aquatic and semi-aquatic fauna

Fanno and Pinebrook Creek, and their associated stream corridors (riparian and upland) provide habitat for a variety of animals that are strictly aquatic (such as fish and some aquatic invertebrates), aquatic during one life stage (such as some aquatic insects and amphibians), or

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<sup>2</sup> Wetland area impact is based on the wetland delineations conducted for the project. Wildlife habitat area impact is based on identification of a “habitat patch,” as shown in report figures. In some cases, an impact might include wetland and wildlife habitat if the wetland is within the boundaries of the wildlife habitat patch. In these cases, the area of impact is counted twice, once as wetland, once as wildlife habitat patch. It should be noted that wetlands outside the wildlife habitat patch also provide wildlife habitat.

<sup>3</sup> For purposes of impact assessment, we have assumed an average disturbed area width of 90 feet for the road corridor. The real width varies along each alignment, sometimes being greater or less than 90 feet.

highly dependent on the stream for life requisites (such as turtles, beaver, waterfowl and wading birds). Direct effects to aquatic habitat are actions such as filling or excavating the stream channel, armoring the bank, or placing bridge supports in the stream. Indirect effects are discussed below for water quality, temperature, wood debris and other functions.

No direct effects to Fanno Creek aquatic habitat would result from any of the project alternatives. The proposed bridge for all alternatives would span the stream channel and floodway, and no fill, excavation, or streambank armoring are proposed. The presence of a bridge might increase shading of the stream during a small portion of the day compared to existing conditions; this is not seen as a significant effect.

Alternatives 2, 7, 8 and 9 would impact one or both of the human-made ponds along Pinebrook Creek. The ponds have non-native mosquito fish (*Gambusia affinis*), a variety of typical aquatic invertebrates, vascular aquatic plants and large amounts of algae (in the summer). Alternatives 2 and 8 would each fill a small portion of the northern edge of the west pond; alternatives 2, 7 and 9 would each fill a portion of the west end of the east pond and span (bridge) a portion of the pond. These impacts would reduce available habitat for aquatic invertebrates, frogs, water fowl, wading birds, and possibly turtles (although turtles have not been documented in either pond). The presence of the completed road would introduce human activities that would have a disturbance effect on wildlife, resulting in reduced presence or activity of some wildlife species.

#### Habitat for upland fauna

Although the areas described below are not regulated by the City as protected areas, the following information was prepared to address public comments received on the wetland permit application.

A wildlife habitat patch has been identified in the project area in the Fanno Creek Watershed Management Plan and by Metro in their Goal 5 Fish and Wildlife program. For this project, we have established a boundary for this wildlife habitat patch based on aerial photography interpretation and field evaluation (see Figure A-7). The wildlife habitat patch includes riparian and upland habitat along Fanno Creek, as well as a large upland wooded area northeast of the railroad but otherwise contiguous with the Fanno Creek corridor habitat. A more detailed description of the habitat is presented in Attachment E of the wetland permit application. Although not included in any of the mapping referenced in this report, we also consider upland meadow areas, primarily non-active agricultural fields on the west side of Fanno Creek, to be potential nesting habitat for native turtles that might be present in the area. Stream-associated habitat also can provide a movement or migration corridor for a variety of wildlife species along the Fanno Creek corridor.

All of the project alternatives cross the wildlife habitat patch (and Fanno Creek; except for Alternative 6) in the northwestern lobe of the patch. The patch width along Fanno Creek in this northwestern portion ranges from 50 to about 400 feet wide (total width, both sides of stream), and is the most disturbed area of the wildlife habitat patch. Past land use activities, including agriculture, filling, and sewer construction have fragmented habitat continuity, removed vegetation, and introduced non-native invasive plant species such as reed canarygrass and Himalayan blackberry. The existence of the project will fragment the habitat patch generally

east-west. The northern alternatives would result in a smaller, and generally less usable (for wildlife) fragment at the north end of the patch. This fragmentation will create a potential barrier to movement of wildlife that travel on land, and a potential area, the roadway, where wildlife can be killed or injured by motor vehicles. Construction of the roadway is anticipated to have only a minimal effect on wildlife movement along the Fanno Creek corridor. Existing east-west travel corridors across Fanno Creek are currently present immediately north of the project area on the Fanno Creek Park site and south of the project area on the Fanno Pointe open space tract to be deeded to the City. These east-west corridors will be under City ownership and are located in areas that are not planned to be developed; therefore, east-west travel across Fanno Creek will be preserved both north and south of Wall Street. The project will not prevent north-south travel along Fanno Creek. A travel corridor along Fanno Creek will be present underneath the 320 foot wide bridge spanning Fanno Creek and its floodway.

Table 2 shows the amount of wildlife habitat patch affected by each alternative, by linear feet and acres of disturbance. Alternatives 3 and 4 affect the greatest amount of wildlife habitat based on length of disturbance. Alternatives 3, 4 and 8 each have the greatest amount of disturbance based on acreage. Alternative 8 is the only one that also would affect a portion of the habitat patch on the northeast side of the railroad. It is important to note that these calculations included the bridge sections of each alternative, where vegetation will be removed, but no fill will be placed. Construction of the bridge will require larger shrubs and some trees to be removed, although herbaceous vegetation and small shrubs will remain underneath the bridge. In some important ways, the bridge has less disturbance to wildlife habitat than the road fill sections of the project; a large area of habitat will remain under the bridge because it will span the floodway; wildlife movement can continue within the floodway under the bridge, and the bridge height, 6-8 feet above ground level, will allow light penetration to support vegetation underneath.

<b>Project Alternative</b>	<b>Disturbance (linear feet)</b>	<b>Disturbance (acres)</b>	<b>Acres as % of total patch</b>
1	370	0.52	0.7
2	540	0.86	1.2
3	770	1.14	1.6
4	830	1.16	1.6
5	300	0.45	0.6
6	530	0.86	1.2
7	590	0.87	1.2
8	490	1.33	1.8
9	590	0.85	1.2

Stream hydrology moderation and water storage

Riparian, floodplain and upland areas play a role in stream hydrology and floodwater storage. Rainfall intercepted by vegetation and stored in soil can add to shallow groundwater in areas of groundwater recharge, and stream “flashiness” is reduced if rainfall is intercepted. A functional floodplain can store floodwater over a short period and reduce flood peaks downstream. The riparian and stream-side upland undeveloped areas in the project reach provide rainfall interception and storage; however, Fanno Creek is so deeply incised, the floodplain is generally not connected to the stream except during the highest flows.

The impacts of the proposed project on this function will result from the removal of vegetation (trees, shrubs, groundcover) and the construction of impervious surfaces (roadway and sidewalks). Table 3 shows the estimated amounts of ground disturbance (i.e. clearing, filling) for each alternative. Alternatives 1, 3, 4, 5, 6, 7 and 9 each would impact between 2.5 and 3.2 acres. Alternative 8 has the largest amount of ground disturbance at 6.15 acres. These calculations do not include the area underneath the bridge section of each alternative since herbaceous vegetation and small shrubs will remain underneath the bridge and therefore, this area will continue to provide water storage function.

The impact of the project on the hydrology and water storage function will be mitigated by capturing and treating stormwater runoff from the project paved surfaces and directing the treated runoff into wetland or floodplain areas within the project site.

<b>Project Alternative</b>	<b>Total Estimated Disturbed Area (acres)</b>
1	2.52
2	3.28
3	2.76
4	2.49
5	2.63
6	2.15
7	3.15
8	6.15
9	3.07

Microclimate

Shrub and wooded portions of streamside and upland habitat, if large enough, can alter climate conditions on a small scale (i.e. microclimate), providing a different set of temperature, light, sound and humidity parameters that are important for some species of wildlife. This function can also affect conditions within adjacent human development. The impact levels of project alternatives on microclimate are similar to those discussed above in the section on habitat for upland fauna. In general, the alternatives that are further north will leave larger patches of woodland, and thus more opportunity for microclimate differences.

Streambank stabilization and stream channel structure/dynamics

The roots of riparian vegetation provide structural stability to streambank soils, reducing erosion. The above-ground parts of plants provide water velocity protection to soils. Woody vegetation along streams can influence the meander dynamics of the channel by providing this erosion protection. Large wood pieces (i.e. trees and large branches) that fall into the stream channel also influence channel structure, meander pattern and hydraulic dynamics, as well as physical habitat parameters for aquatic fauna.

Fanno Creek in the project area is very incised due to historic and present land uses that have altered the channel and stream hydrology. Stream banks are generally very steep (many are vertical) and high (8+ feet) through most of the project reach of Fanno Creek. While existing

trees and shrubs provide some bank stability in the reach, banks are undercut below the root depth of some of this vegetation. The function of streambank stability is compromised by this altered channel condition and hydrology.

Every project alternative would result in the removal of vegetation from the project right-of-way. However, because each alternative includes a bridge that would span the floodway, impacts to vegetation on and adjacent to the banks of Fanno Creek would be minimized.

Mitigation for impacts to this function will be to retain shrubs under the bridge, and to cut, rather than remove trees in the bridge path to leave lower trunk and roots intact; however, short-term construction-related impacts are likely to occur.

#### Sediment, water temperature, and water pollution control

Floodplain and riparian areas along streams can intercept and filter out sediment carried by stormwater runoff. Vegetation, soil and soil microorganisms can remove many urban or agricultural contaminants from stormwater runoff before they reach the stream. Streamside shrubs and trees provide shade that can maintain cooler water temperatures in the stream. Large in-stream wood pieces can trap and retain sediments to some extent.

Fanno and Pinebrook Creeks are presently in degraded condition relative to sediment load, temperature and water quality due to urban development and past land use practices. Most of the project reach of Fanno Creek and adjacent land is in public ownership (City of Tigard, Metro), so much of the existing vegetated area will remain intact, and future sediment and contaminant sources will be minimized and controlled.

All of the project alternatives would result in removal of or disturbance to soil and vegetation in the project right-of-way (see Table 3 for estimated acreages). There will be a potential for increased sediment and contaminants in stormwater runoff during project construction. Following construction, the paved roadway will be a source of sediment, contaminants and increased stormwater temperature.

Mitigation of impacts to this function will include the use of sediment and contaminant control BMPs during construction, and construction of water quality facilities to treat roadway runoff. Treated runoff will be directed to wetland or floodplain areas on the site instead of directly to a stream, increasing the potential for these areas to provide the sediment, temperature and water pollution control function.

#### Organic matter input, including large wood

Organic materials, living and dead, produced in riparian, floodplain and upland areas along streams provide critical support for biological processes. Leaves, twigs and large wood that fall into the stream or onto soil surfaces support a variety of food webs in these habitats. Living material, in the form of plants and animals, are also parts of these food webs. Many food webs have branches in aquatic and terrestrial habitats; for example, terrestrial insects living in streamside vegetation fall into the stream and become food for fish and other aquatic fauna.

All of the project alternatives would result in the removal of organic material (living and dead plants, organic litter, etc.) from the project right-of-way. The extent of this removal is shown in Table 3. This removal of organic material and its sources could have a small localized effect on this function; however, this impact is not considered to be significant.

G:\2003\03071\_Tig\Permit\AlternativesAnalysis.doc

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<sup>1</sup> Kurahashi and Associates. 1997. Fanno Creek Watershed Management Plan. Prep. For Unified Sewerage Agency, Hillsboro, OR.

<sup>2</sup> Bolton, S and J. Shellberg. 2001. Ecological Issues in Floodplains and Riparian Corridors. White Paper prep. For WA Dept. Fish & Wildlife, WA Dept. Ecology, WA Dept. Transp.

<sup>3</sup> Ward, D. L. 1995. Distribution of Fish and Crayfish, and Measurement of Available Habitat in the Tualatin River Basin. Final Report of Research. OR Dept. Fish & Wildlife.

<sup>4</sup> Hughes, M. L. and K. A. Leader. 2000. Distribution of Fish and Crayfish, and Measurement of Available Habitat in the Tualatin River Basin. OR Dept. of Fish & Wildlife.

<sup>5</sup> Frady, C., B. Gerth, J. Li and L. Hennings. 2003. Portland Metro Benthic Invertebrate Analysis. Draft Version: May 13, 2003. Prep. For Metro Regional Services.

<sup>6</sup> Ecological Society of America. 2000. Ecological Principles for Managing Land Use. Brochure produced by ESA Committee on Land Use. Washington, D.C.

<sup>7</sup> May, C. W., R. R. Horner, J. R. Karr, B. W. Mar, and E. B. Welch. 1997. Effects of Urbanization on Small Streams in the Puget Sound Lowland Ecoregion. *Watershed Protection Techniques*. 2(4):483-494.



## Appendix A: Project Context: Tigard Transportation System Plan

The Tigard Transportation System Plan (TSP) was prepared by DKS Associates in October 2001 and adopted by the City in January 2002 to guide the City's twenty year vision of transportation system needs. The TSP is intended to replace transportation related goals and policies in the Tigard Comprehensive Plan and builds upon material developed in the visioning process from January 1998. The TSP evaluated existing conditions and deficiencies for several modes of transportation including pedestrian, bicycle, public transit, and motor vehicle. Numerous transportation improvements were recommended to address future deficiencies throughout the City based upon the City's goals and policies, future demand and land use, funding and implementation. Tigard's east side was identified as one of four primary locations where future connectivity/circulation problems were determined to be significant. The need to improve east-west circulation in this area was identified and is discussed below. Several options for improving east-west circulation and capacity, including the proposed Wall Street extension, were evaluated in the TSP and are described below.

Due to Tigard's location at the junction of Interstate-5 and Highway 217 and the fact that the City is divided by Highway 99W, its arterial street system is impacted by the performance of these regional facilities. Accidents on I-5 or Highway 217 result in traffic detouring through Tigard, snarling local circulation on a regular basis. Highway 99W is the primary arterial through Tigard, and much of the east-west motor vehicle travel is served by that highway. The segment of Highway 99W between Hall Boulevard and Highway 217 is one of four areas of Tigard with the highest automobile accident rates. Between 1999 and 2002, there were 136 accidents on this segment of Highway 99W.

Hall Boulevard (arterial) and Highway 99W (principal arterial) are both classified by the City as arterials. Recent traffic counts (1999) indicate that Hall Boulevard carries approximately 12,000 to 23,000 ADT (Average Daily Traffic) while Highway 99W carries approximately 45,900 ADT near downtown Tigard. The Highway 99W/Hall Boulevard intersection was evaluated in the TSP using the 1994 Highway Capacity Manual and was determined to be operating at a level of service D in 1999. This is generally considered to be acceptable operating performance for a signalized intersection. The TSP concludes that future demand for the Highway 99W corridor will result in level of service F conditions, even with significant improvements including road widening and addition of turn lanes at intersections.

The data provided in the TSP regarding accident rates and traffic volumes on Highway 99W and Hall Boulevard illustrate why an alternate east-west route to bypass Highway 99W, particularly the segment from Hall Boulevard to Highway 217, is necessary. Several options for improving east-west circulation and capacity were evaluated in the TSP and are shown on Figure A-1. Two alternatives that were discussed in Chapter 8 of the TSP included the Bonita/McDonald alternative and the Carman/Durham alternative. These two alternatives would use existing routes to improve east-west connectivity. The Bonita/McDonald alternative included widening Bonita Road and McDonald Street to five lanes each. Because Bonita does not connect to the I-5 freeway ramps, it was determined that increasing this corridor to 5 lanes would provide limited benefit. The Carman/Durham alternative would widen Carman Drive at I-5 to 5 lanes and connect it directly to Durham Road. This option would eliminate the level of service F conditions of Carman Drive and provide safer operation for the majority of vehicular traffic.

Two additional alternatives for improving east-west circulation and capacity were identified in several figures in Chapter 8 (included as Figures A-2, A-3 and A-4) and are also listed in tables of future street improvements in the TSP. A third option for improving east-west circulation and capacity is the Wall Street Extension, which was included in Table 11-6 of the TSP that listed future street improvements. A fourth option for improving east-west circulation and capacity is the extension of Walnut Street from its intersection with Highway 99W to Hunziker Street. Both of these new alternative routes are recommended for implementation in the TSP. The Wall Street Extension was proposed for construction in line with development as it occurs in the undeveloped area between Hall Boulevard and Hunziker Street.

The Wall Street Extension and the Walnut Street Extension are designated as preferred new alternative routes to Highway 99W and Hall Boulevard. The Bonita/McDonald alternative would overload the already congested 72<sup>nd</sup> Avenue requiring widening of 72<sup>nd</sup> to a 5-lane configuration sooner rather than later. In addition, that alternative does not provide access to I-5 and provides a limited benefit. Furthermore, widening of McDonald Street would be extremely difficult because of the steep terrain immediately adjacent to the street for about half of its length and the proximity of homes on the other half. The TSP recommends that McDonald Street remain as a 3-lane road. The Carman/Durham alternative is feasible and provides direct access to I-5. However, it is located in south Tigard. East-west connectivity midway between Highway 99W and Durham road is desirable for enhanced intra-city circulation. The Walnut Street and Wall Street extensions provide that connectivity.

The Hall Boulevard/Hunziker Street/Scoffins Street dogleg north of the railroad tracks creates a congestion point for traffic desiring to access the Tigard Triangle (the area bounded by Highway 99W, Interstate-5, and Highway 217). This dogleg would have to be realigned to allow for enhanced traffic flow north to Highway 99W or east to the Tigard Triangle and for the Walnut Street Extension to work properly. However, any traffic that can be diverted south of that dogleg would alleviate existing and future congestion at this intersection. The proposed Wall Street extension connects Hunziker Street and Hall Boulevard south of the Hunziker/Hall/Scoffins dogleg intersection. The new roadway is projected to carry about 5,000 to 7,000 vehicles per day and would reduce the level of traffic at two key intersections (Hall/Hunziker and 72<sup>nd</sup>/Bonita Road). The new street would allow northbound traffic from south Tigard to bypass Hall Boulevard north of O'Mara Street and proceed directly to Hunziker Street, then north to the Tigard Triangle via 72<sup>nd</sup>. A proposed future overcrossing of Highway 217 connecting Hunziker with Hampton Street would allow traffic from south Tigard to connect directly from Hall Boulevard to the Tigard Triangle then to Highway 99W.

Without the Wall Street connection, traffic is forced to use Highway 99W, Hall Boulevard and 72<sup>nd</sup> Avenue where capacity is not available and can only be provided by further widening of existing facilities. Based on traffic modeling conducted for the Tigard TSP, this new Wall Street connector produces adequate capacity at those two intersections and relieves Hall Boulevard sufficiently to allow that street to function adequately at 3 instead of 5 lanes for the next 15 to 20 years. The long-term projections of the TSP requires full widening of Hall Boulevard and 72<sup>nd</sup> Avenue to 5-lane configurations, completion of the Wall Street Extension from Hall to Hunziker, and completion of the Walnut Street Extension connecting Walnut Street to Hunziker Street and

from there to the Tigard Triangle. The two new east-west connectors provide the alternate routes needed for intra-city traffic by connecting east Tigard (Walnut Street Extension) and south Tigard (Wall Street Extension) to north Tigard without traversing Hall Boulevard all the way north to the Highway 99W/Hall Boulevard intersection.

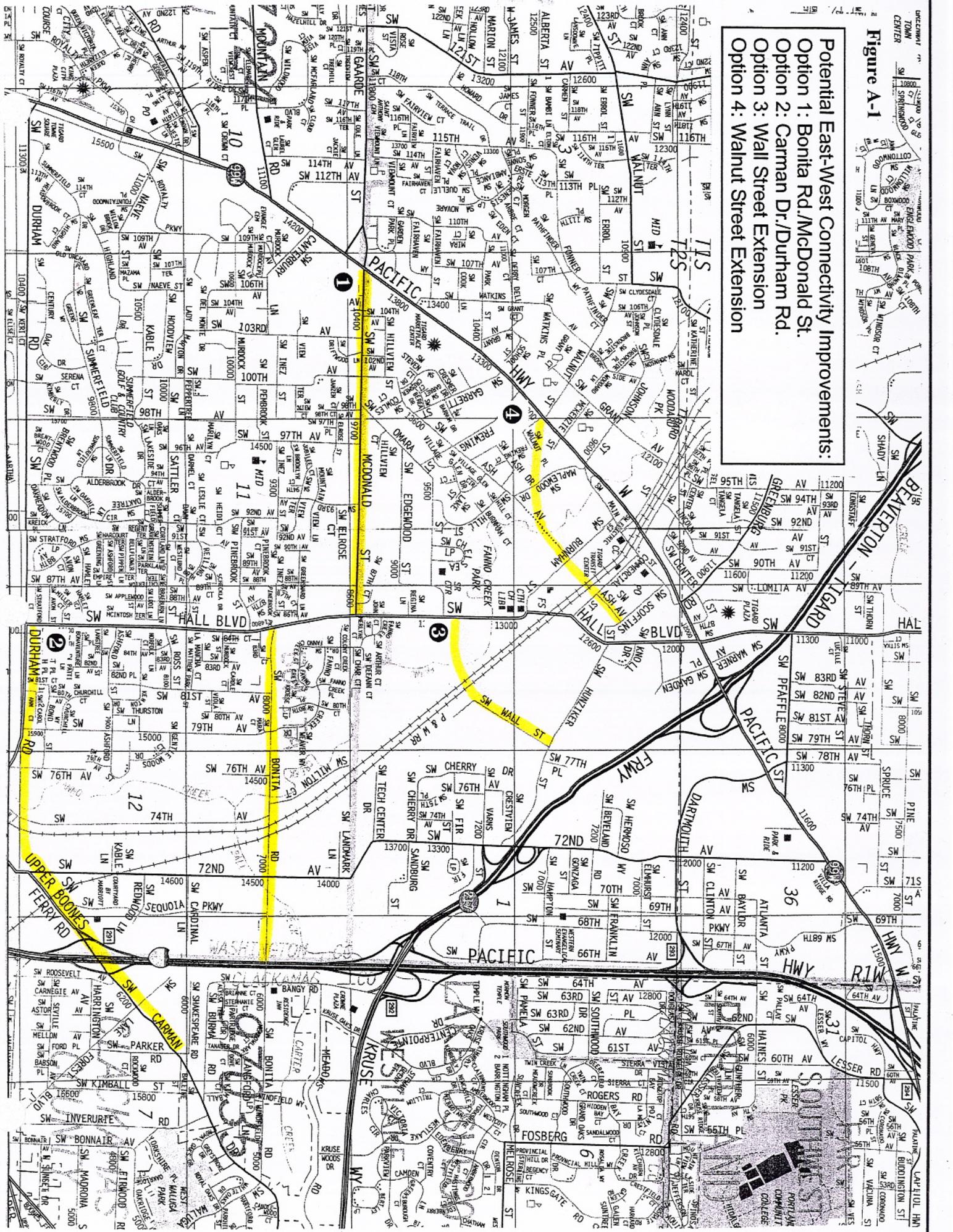
The widening of Hall Boulevard has been suggested as a potential alternative to the Wall Street Extension. The TSP recommends the widening of Hall Boulevard, the widening of 72<sup>nd</sup> Avenue, and the construction of the two new east-west alternatives (Walnut Street and Wall Street extensions) as all being necessary over the long term. The widening of Hall Boulevard is not a suitable alternative to the Wall Street Extension because it does not provide the east-west connectivity needed in this area of the City. However, the construction of the Wall Street Extension would delay the inevitable widening of Hall and 72<sup>nd</sup> for at least 15 years or more.

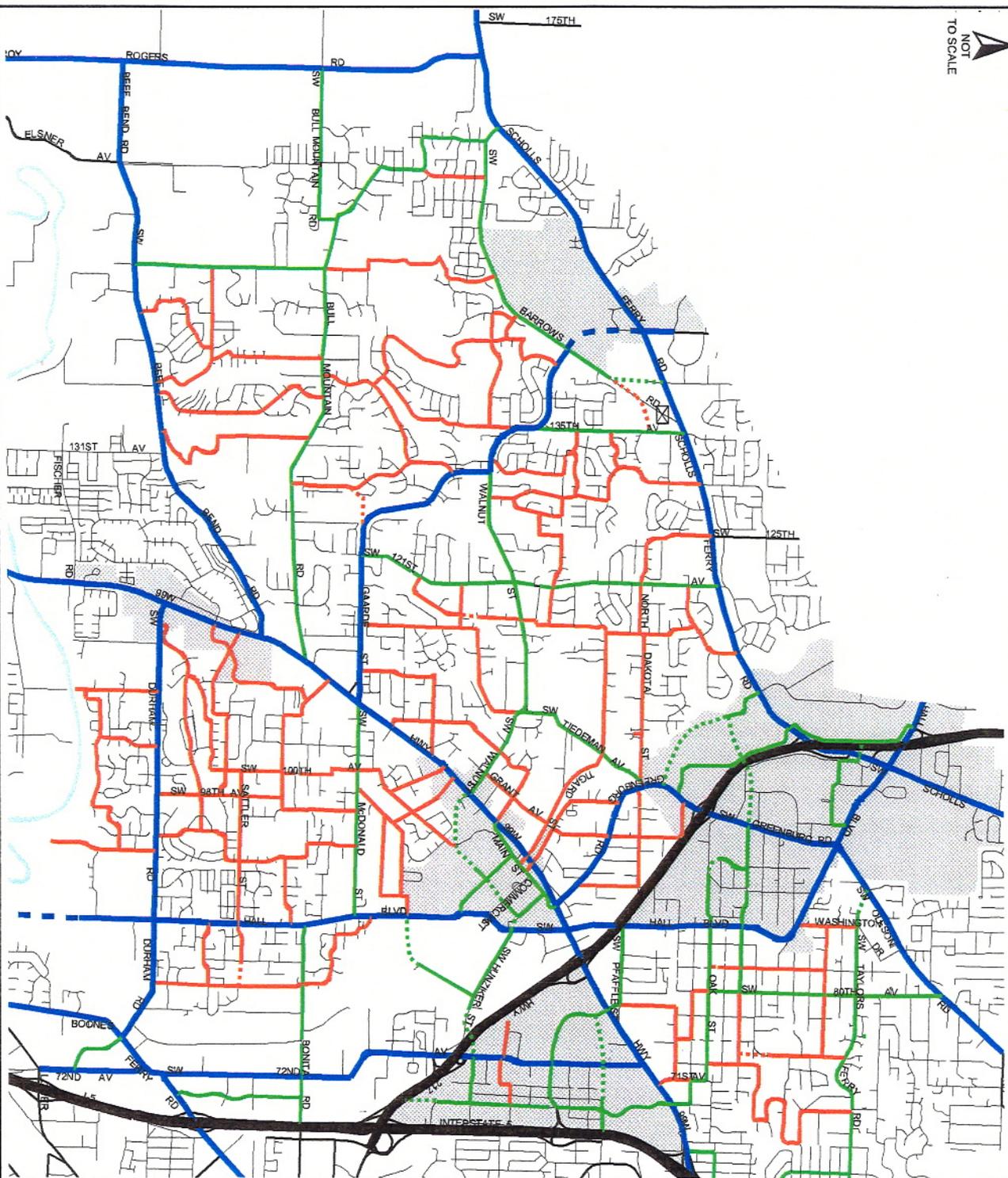
The Wall Street extension includes an at-grade crossing of the Southern Pacific railroad tracks. The at-grade crossing at Wall Street will enhance the movement of northbound traffic by providing another route across the rail lines. The two options for northbound traffic, aside from Highway 99W, are Hall Boulevard and 72<sup>nd</sup> Avenue. Hall Boulevard northbound is already congested at the Hunziker Street/Scoffins Street/Hall Boulevard dogleg. In addition, traffic is often stopped at the railroad crossings just north of Burnham Street whenever trains perform their switching maneuvers. Likewise, 72<sup>nd</sup> Avenue is also congested south of the Hunziker intersection during the peak travel hours. By providing an east-west connection south of the existing crossing on Hall Boulevard, Wall Street allows motorists to connect to Hunziker, then to 72<sup>nd</sup> Avenue north of the business and industrial strip. The options on 72<sup>nd</sup> Avenue at the Hunziker/72<sup>nd</sup> intersection include entry onto Highway 217 or direct access northbound to the Tigard Triangle. Wall Street, therefore, allows traffic to bypass the problematic Hunziker/Scoffins/Hall intersection, introduces a second crossing of the railroad tracks as an alternative to Hall Boulevard, and reduces traffic congestion on 72<sup>nd</sup> Avenue between Bonita Road and Hunziker Street.

A commuter rail system, linking Beaverton/Hillsboro and Wilsonville, has been discussed, and preliminary analysis has been conducted to determine possible alignments and station locations. The Beaverton-Wilsonville commuter rail will likely be constructed along the railroad right-of-way and would have one or two stops in downtown Tigard. The commuter rail will impact the traffic flow on both Wall Street and Hall Boulevard during the commute hours. However, unlike the freight train switching maneuvers, which can stop traffic up to 10 minutes, the commuter rail train delays are expected to be 30 to 45 seconds at most because the trains merely pass through and do not stop at the crossings. These relatively short delays are acceptable and should not pose any problems for traffic movements in general. The benefit provided by two routes across the tracks outweighs any impact the commuter rail train runs would have on the traffic flow.

Figure A-1

- Potential East-West Connectivity Improvements:
- Option 1: Bonita Rd./McDonald St.
- Option 2: Carman Dr./Durham Rd.
- Option 3: Wall Street Extension
- Option 4: Walnut Street Extension





# CITY OF TIGARD OREGON

## Transportation Systems Plan

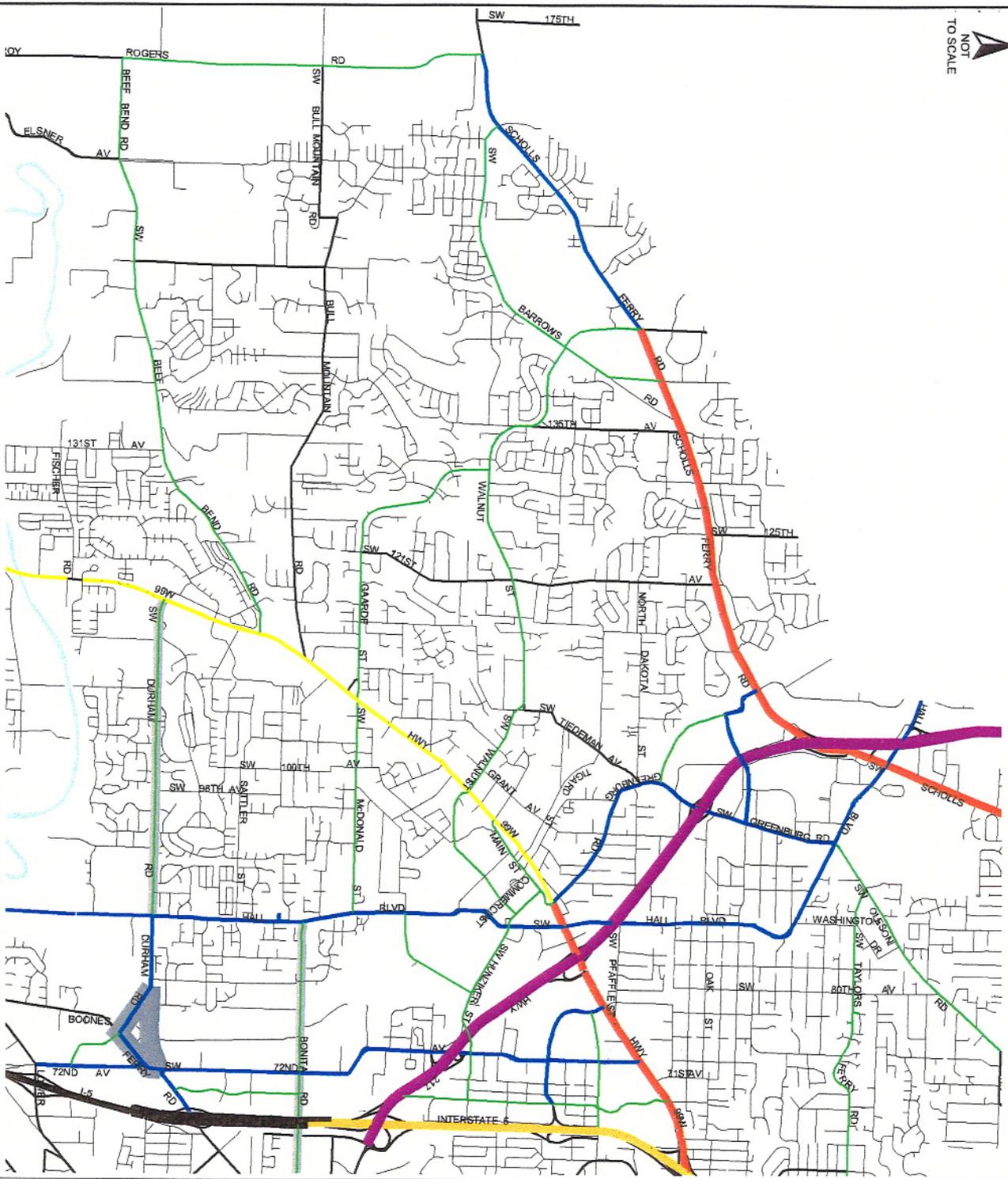
### Legend

-  Road Closure
-  Proposed Freeway
-  Proposed Arterial
-  Proposed Collector
-  Planned Arterial
-  Planned Collector
-  Planned Neighborhood Route
-  Regional Center, Town Center, or Sub Area

\*Transportation facilities in the Tigard Triangle and Washington Square planning areas have specific design regulations and classifications that may slightly differ from those in the TSP for consistency purposes. In these overlay areas, there are specific planning overlay documents for transportation design regulations.

Note: The exact alignment of dashed lines to address physical, access control, right-of-way and environmental constraints in alignment development.

**Figure 8-3**  
**Proposed Functional**  
**Classification System**



**CITY OF TIGARD**  
**OREGON**

# Transportation Systems Plan

**Legend**

-  Planned Right of Way
-  8 Lanes
-  Added Person Capacity Corridor\*
-  7 Lanes
-  6 Lanes
-  5 Lanes
-  4/5 Lanes
-  2/3 Lanes
-  SP\*\*
-  Corridor Alignment Study Area

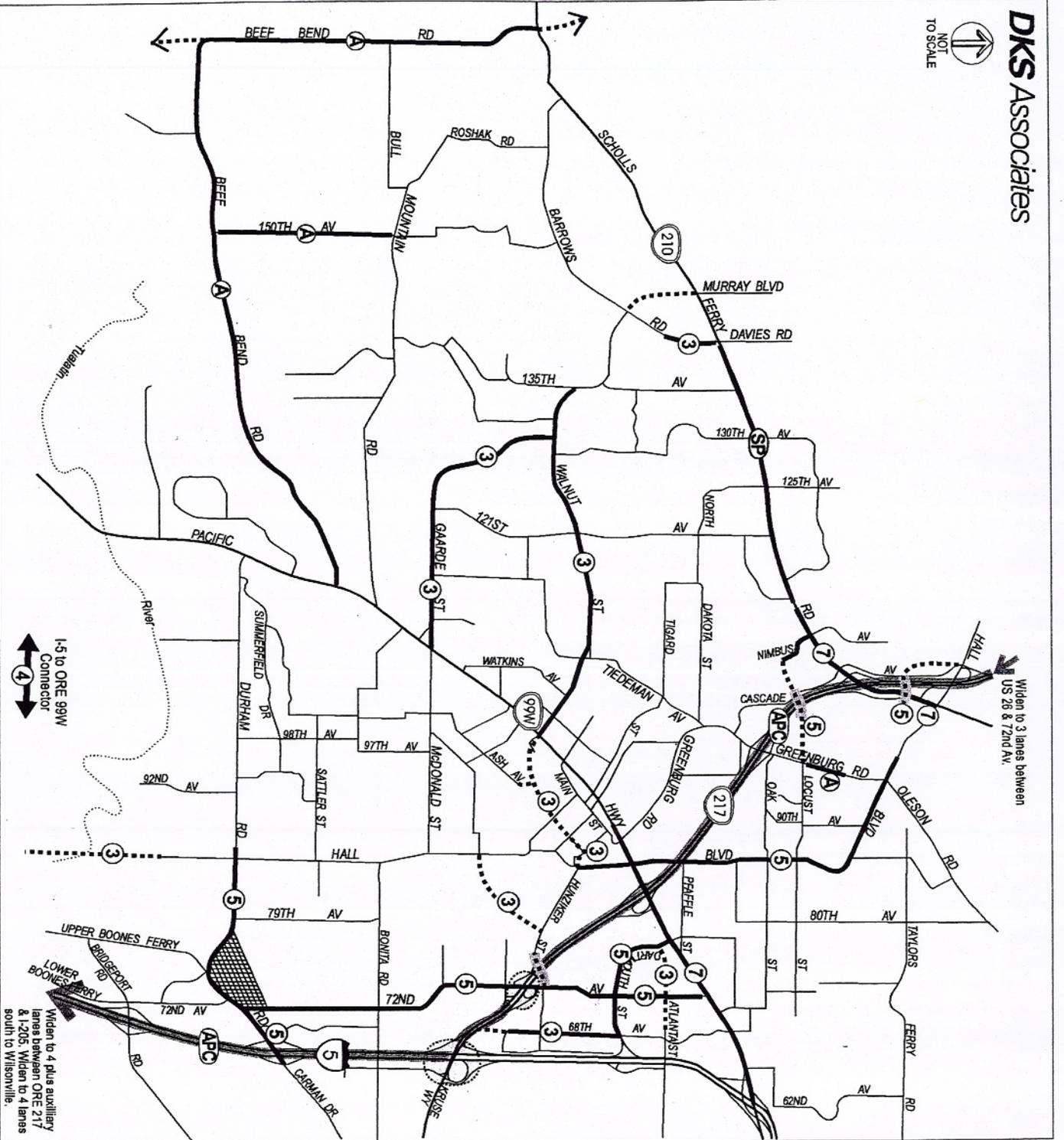
\* Assume eight lanes for setbacks

\*\* Preserve ROW for 5 lanes in Future

Note: All Arterial/Arterial, Arterial/Collector and Collector/Collector intersections should plan for needed ROW for turn lanes within 500 feet of the intersection.

2/3 and 4/5:  
 Two or four lanes may be used for segments where environmental constraints limit roadway and access is controlled to eliminate left turn lane need.

**Figure 8-11**  
**Future Streets Where ROW is Planned for More Than Two Lanes**

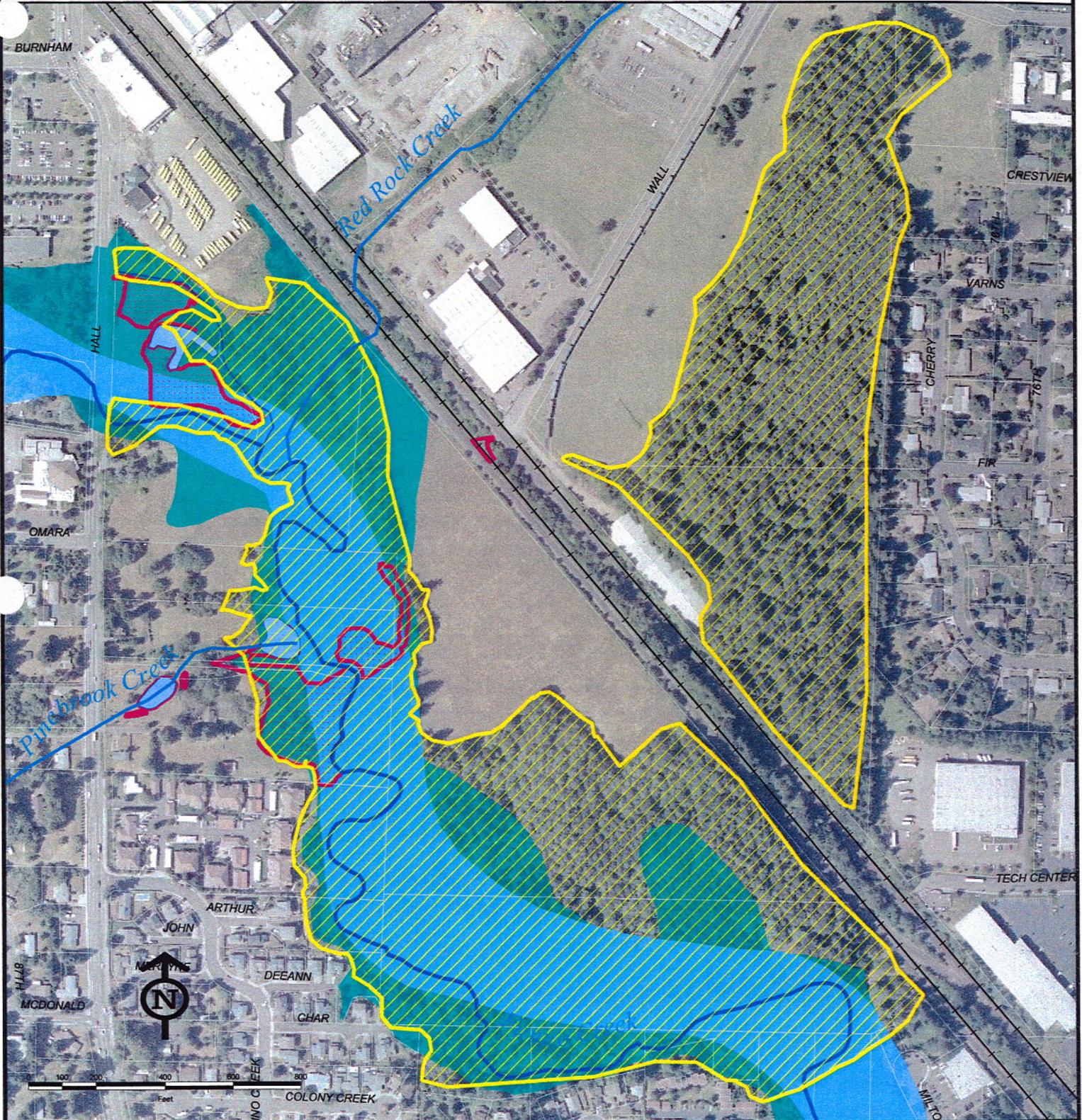


**CITY OF TIGARD**  
**Transportation Systems Plan**

- Legend**
- ⑤ - Number of Lanes
  - ▬ - Freeway Widening
  - ▬ - Roadway Widening
  - ▬ - Proposed Roadway
  - ▬ - Proposed Overcrossing
  - ▬ - Interchange Improvement
  - - Access Control
  - - Added Person Capacity (APC)
  - ▬ - Preserve Right-of-Way for 7 Lanes (SP)
  - ▨ - Corridor Alignment Study Area

**Figure 8-19**  
**20 YEAR STREET IMPROVEMENT PLAN**

# Proposed Wall Street Extension



**Key to Features**

 Floodway (FIRM)

 Floodplain (METRO)

 Open Water (FES Approx.)

 Surveyed Project Site Wetlands (DeHaas)\*

 Wildlife Habitat Patch (METRO; modified by FES; based on aerial photo)

 Streams (CWS; modified by FES along project site area; based on topographic survey)

 Taxlots

 Railroad

Photo source: METRO, JULY 2001

Figure A-5. Existing Natural Resources

Date: 10-15-2003

GIS: R. Gutierrez

Location: G:\2003\03071\_Tig\gis\lapr

\* Unmapped wetlands may be present east of Fanno Creek and have not been delineated.

# Proposed Wall Street Extension



## Key to Features

- New Tigard Library and Fanno Pointe Developments
- - - Storm and Sewer Lines

- Streams (CWS; modified by FES along project site area; based on topographic survey)
- Taxlots

Figure A-6. Existing Site Developments

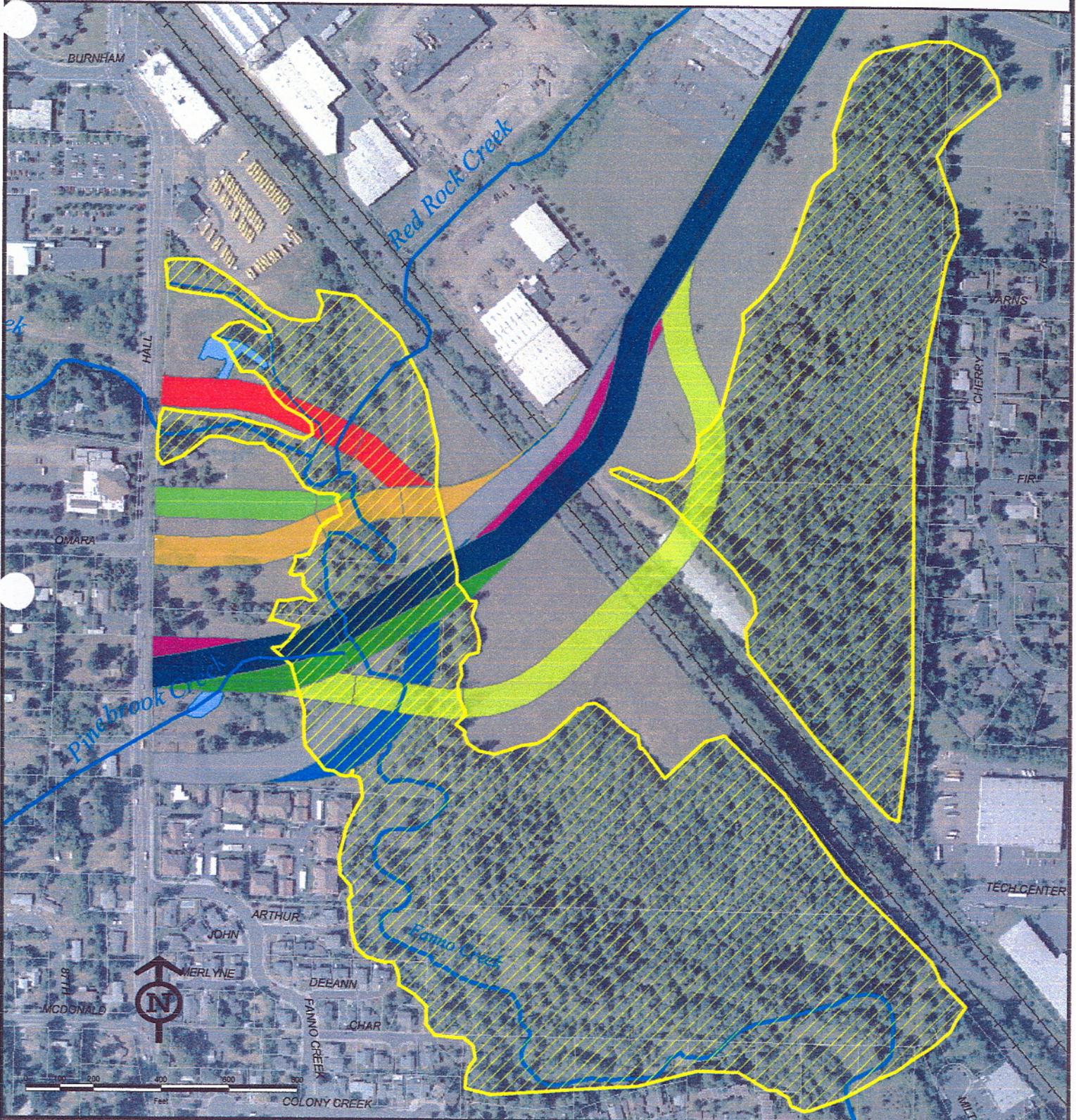
Date: 12-09-2003

GIS: R. Gutierrez

Location: G:\2003\03071\_Tig\gislapr

Photo Source: METRO, July 2001

# Proposed Wall Street Extension



### Key to Features

-  Wildlife Habitat Patch (modified from METRO RLIS, based on aerial photo)
-  Streams (CWS; modified by FES along project site area; based on topographic survey)

-  Open Water (FES Approx.)
  -  Taxlots
  -  Railroad
- Photo source: METRO, JULY 2001*

### Alternatives

- |  |   |  |
|--|---|--|
|  1  |  4 |  7  |
|  2* |  5 |  8  |
|  3  |  6 |  9* |

\* 2 = Previous preferred alternative; 9 = proposed project

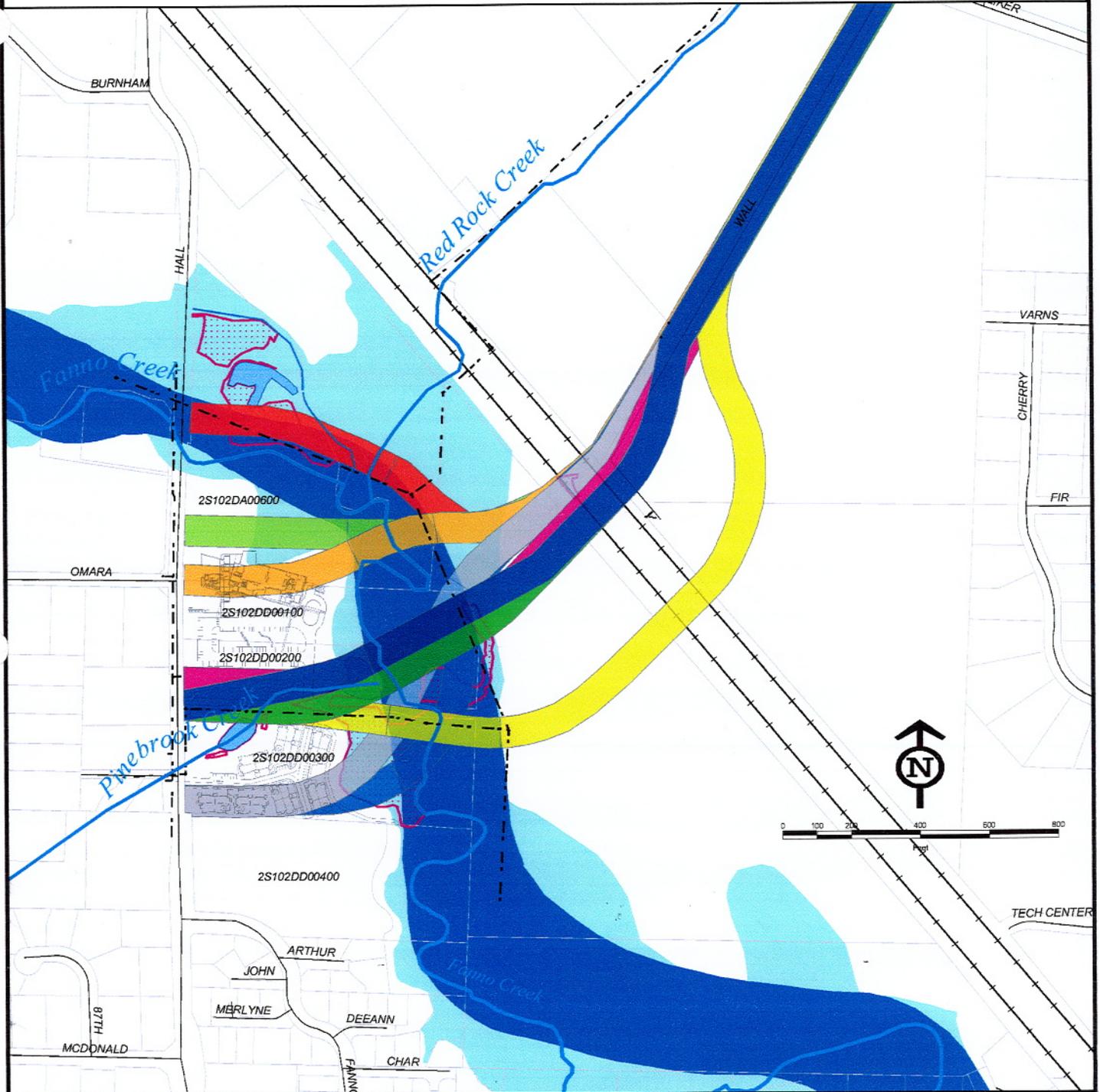
Figure A-7. Wildlife Habitat Patch

Date: 12-09-2003

GIS: R. Gutierrez

Location: G:\2003\03071\_Tig\gislapr

# Proposed Wall Street Extension



### Key to Features

-  Streams (CWS; modified by FES along project site area based on topographic survey)
-  Open Water (FES Approx.)
-  Floodway (FIRM)
-  Floodplain (METRO)
-  Surveyed Project Site Wetlands (DeHaas) \*\*
-  New Tigard Library and Fanno Pointe Developments
-  Streets
-  Railroad

### Alternatives

- |  |  |  |
|--|--|--|
|  1  |  4 |  7  |
|  2* |  5 |  8  |
|  3  |  6 |  9* |

\* 2 = Previous preferred alternative  
9 = proposed project

Figure A-8. Alternatives Analysis

Date: 12-09-2003

GIS: R. Gutierrez

Location: G:\2003\03071\_Tig\gis\lapr

\*\* Unmapped wetlands may be present east of Fanno Creek and have not been delineated.

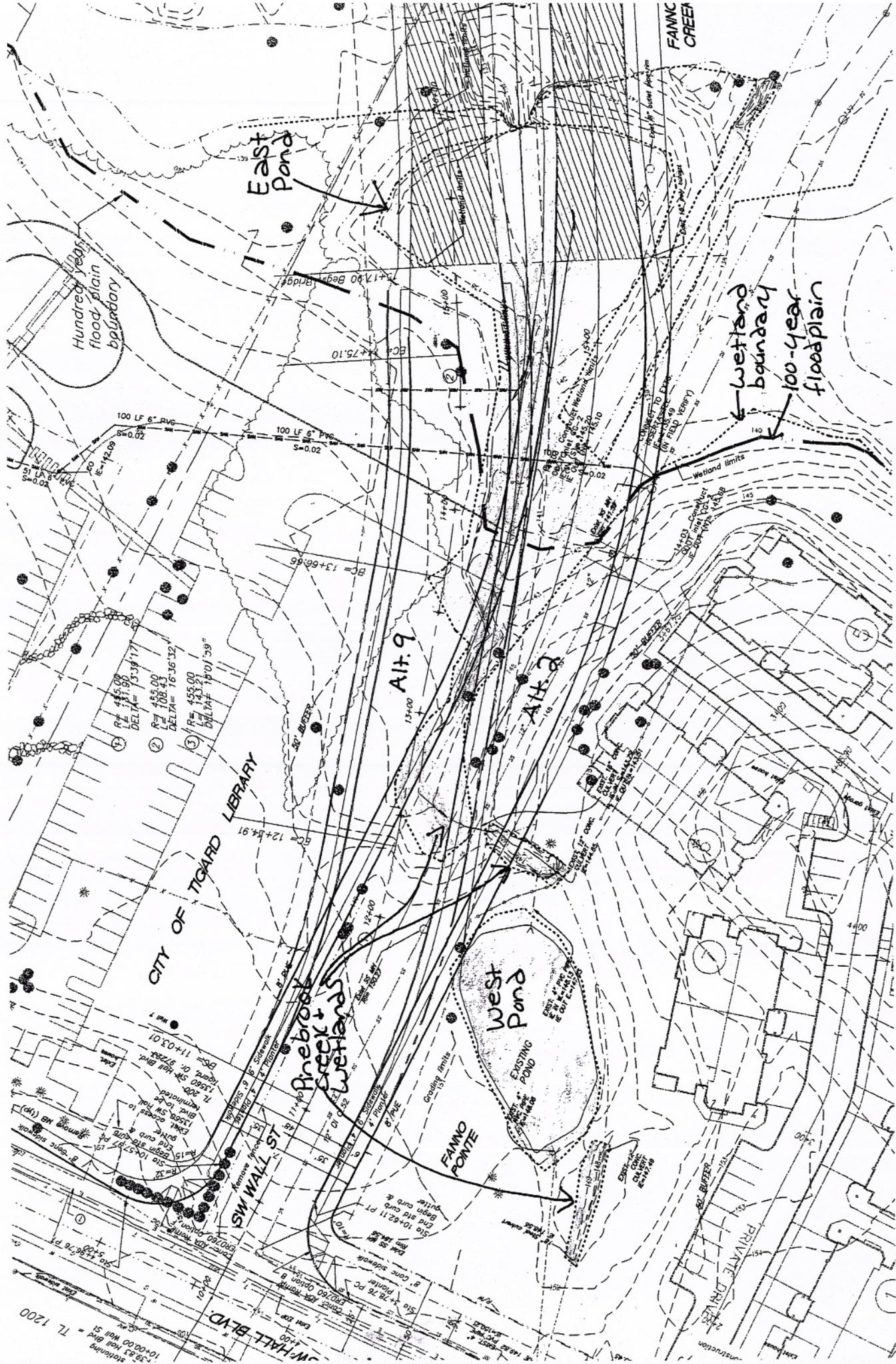
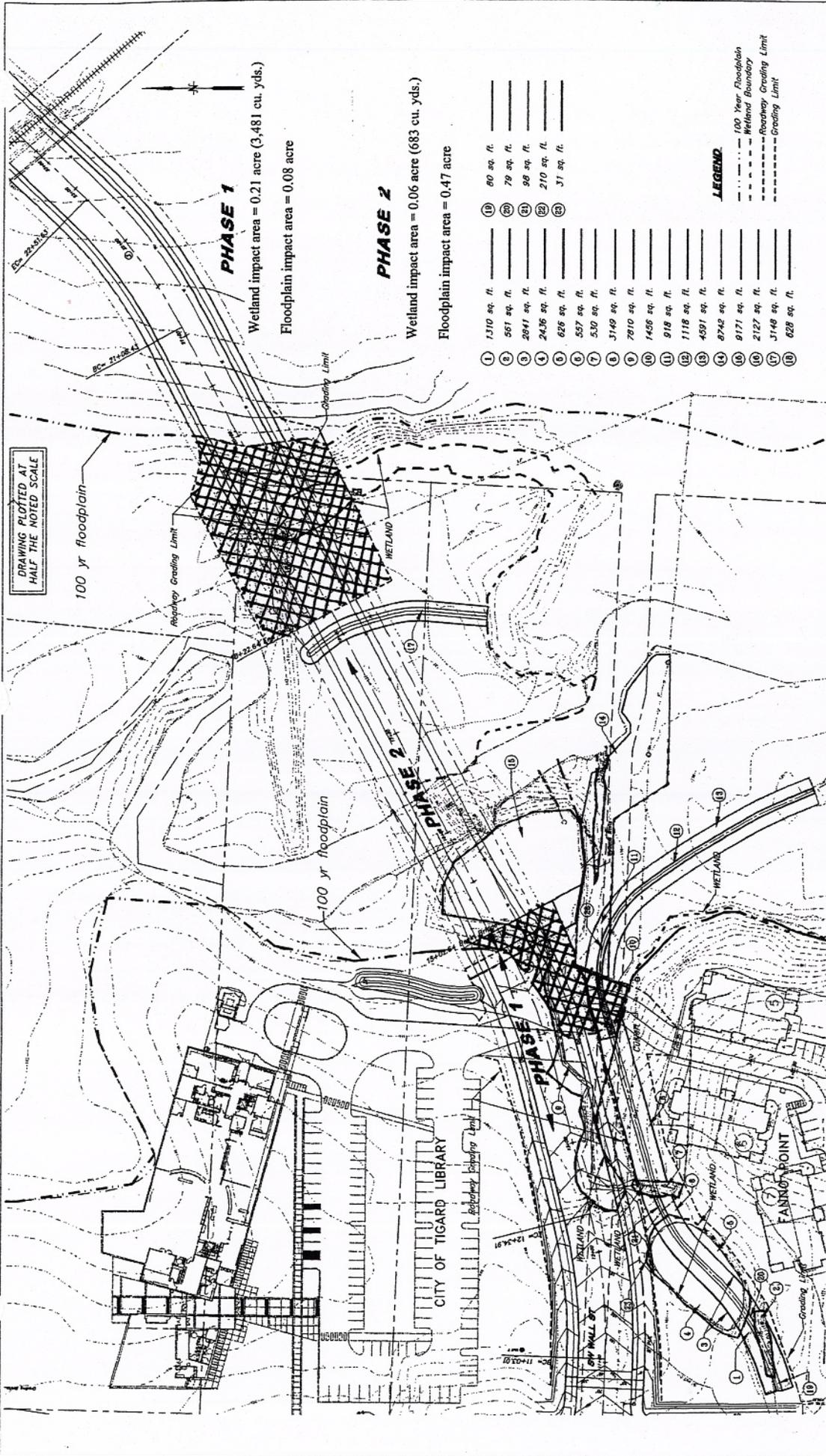


Figure A-9

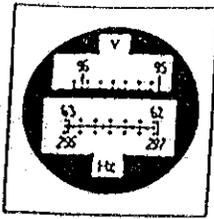
Alternative 2 = Previous Preferred Alternative  
 Alternative 9 = Proposed Project





DATE		NO.		BY		DESIGNED BY: LM		DRAWN BY: LM		CHECKED BY: MAD		DATE: 12/20/03		SCALE: AS SHOWN		PROJECT NO.: 839	
FILE LOCATION: \\S:\PROJECTS\03 WALL ST - LID\03 WALL ST - LID\03 WALL ST - LID\03 WALL ST - LID.dwg																	
 DEHAAS ASSOCIATES, Inc. Consulting Engineers & Surveyors 5405 SW ACC Center Milwaukie, Oregon 97130 Phone: (503) 482-2100 Fax: (503) 482-0118 DATE: December 17, 2002 FILE: 02.644.118																	
 CITY OF TIGARD ENGINEERING DEPARTMENT																	
<b>WALL STREET - LID</b> <b>STREET &amp; UTILITY IMPROVEMENTS</b> STREET																	
SHEET																	
1 OF 1																	

Figure A-11. Proposed Floodplain Impacts for Alternative 9



**DE HAAS**  
&  
**Associates, Inc.**  
Consulting Engineers & Surveyors

Suite 300 - AGC Center  
9450 SW Commerce Circle  
Wilsonville, OR. 97070  
(503) 682-2450  
(503) 682-4018 Fax

March 4, 2005

18.775.070.D.3

Memorandum to File  
Wall Street Improvements - Phase 1  
Investigation regarding "no-rise" criteria

18.775.070.D.5

This memorandum relates to the requirement that Phase 1 construction in the 100-year floodplain will not cause an increase in flood levels during the base flood discharge.

During a previous study in July of 2003 by our Subconsultant, Oregon Bridge Engineering Company (OBEC), related to costs of varying bridge lengths and approval requirements of FEMA, OBEC retained West Consultants (West) to prepare a Hydraulic Analysis Report related to the various bridge lengths. West performed extensive modeling of Fanno Creek extending above and below the proposed Wall Street alignment.

Inasmuch as West had the extensive modeling resources available, we retained them to evaluate the flood level effect of the proposed Wall Street Phase 1 improvements and to provide certification of their findings.

The resulting scope of work procedure and findings are attached.

As indicated in the Scope of Work Phase 1 construction earthwork in the floodplain consists of 135 yd<sup>3</sup> of fill and 1,076 yd<sup>3</sup> of excavation for a net total of 941 yd<sup>3</sup> excavation. Accordingly, the Phase 1 construction enhances the floodplain storage function.

As certified by Christopher R. Goodell, P.E., Phase 1 construction as shown on the attached drawings would cause no-rise in Fanno Creek during a 100-year flood event.

*Marlin J. DeHaas*  
Marlin J. DeHaas, P.E., P.L.S.  
President

cc: 02.629.118 ✓  
Vannie Nguyen - City of Tigard  
Geraldene Moyle - Group Mackenzie  
Chris Goodell - West Consultants

Exp. 12/31/05



## SCOPE OF WORK, PROCEDURE AND FINDINGS

### WALL STREET EXTENSION IMPROVEMENTS (PHASE 1)

#### Scope of Work:

Preliminary construction plans have been prepared for Wall Street Extension Improvements (Phase 1) which includes the 1<sup>st</sup> 425ft from Hall Blvd. easterly. The general grading improvements in the floodplain illustrated by the attached plan excerpts (Sheet 22) consist of 135yd<sup>3</sup> of fill for the street construction (Area A), 217yd<sup>3</sup> excavation of a berm (Area B), 167yd<sup>3</sup> excavation of a berm (Area C), and 692yd<sup>3</sup> excavation in a wetland restoration area (Area D). A centerline profile is also attached showing Phase 1 grading.

The purpose of this assignment was to address Tigard Code 18.755.070 Sensitive Lands Permits (attached), particularly items B.1. and B.3., which follow, relative to Phase 1 construction.

- B.1. Land form alterations shall preserve to enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;
- B.3. Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;

Accordingly, our tasks were as follow:

1. Analyze the effect of the proposed Phase 1 construction to determine if or not such construction will meet the no-rise requirements of B.1. and B.3.
2. If the Phase 1 construction as proposed does not meet the no-rise requirements, advise what design revisions are necessary to meet the no-rise criteria.
3. As stipulated in B.1., certify (PE) that the encroachment of the construction as currently proposed, or as revised if necessary (task 2), will not result in any increase in flood levels during the base flood discharge.

#### Procedure:

The existing model (prepared for OBEC in the bridge-length study) was run for 2 plans:

1. The existing model with insertion of an additional original ground cross section at the proposed Wall Street alignment.
2. The existing model with insertion of an additional finish grade cross section at the proposed Wall Street alignment.

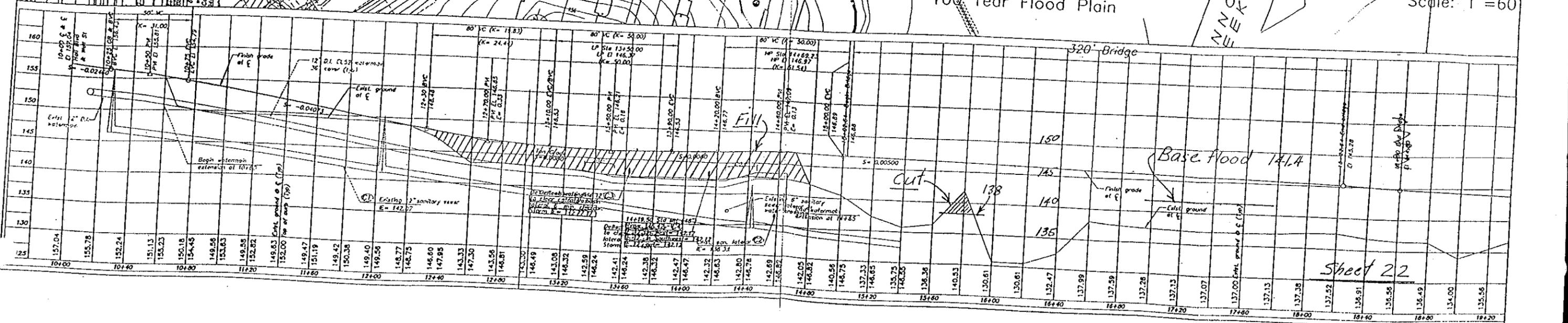
**Findings:**

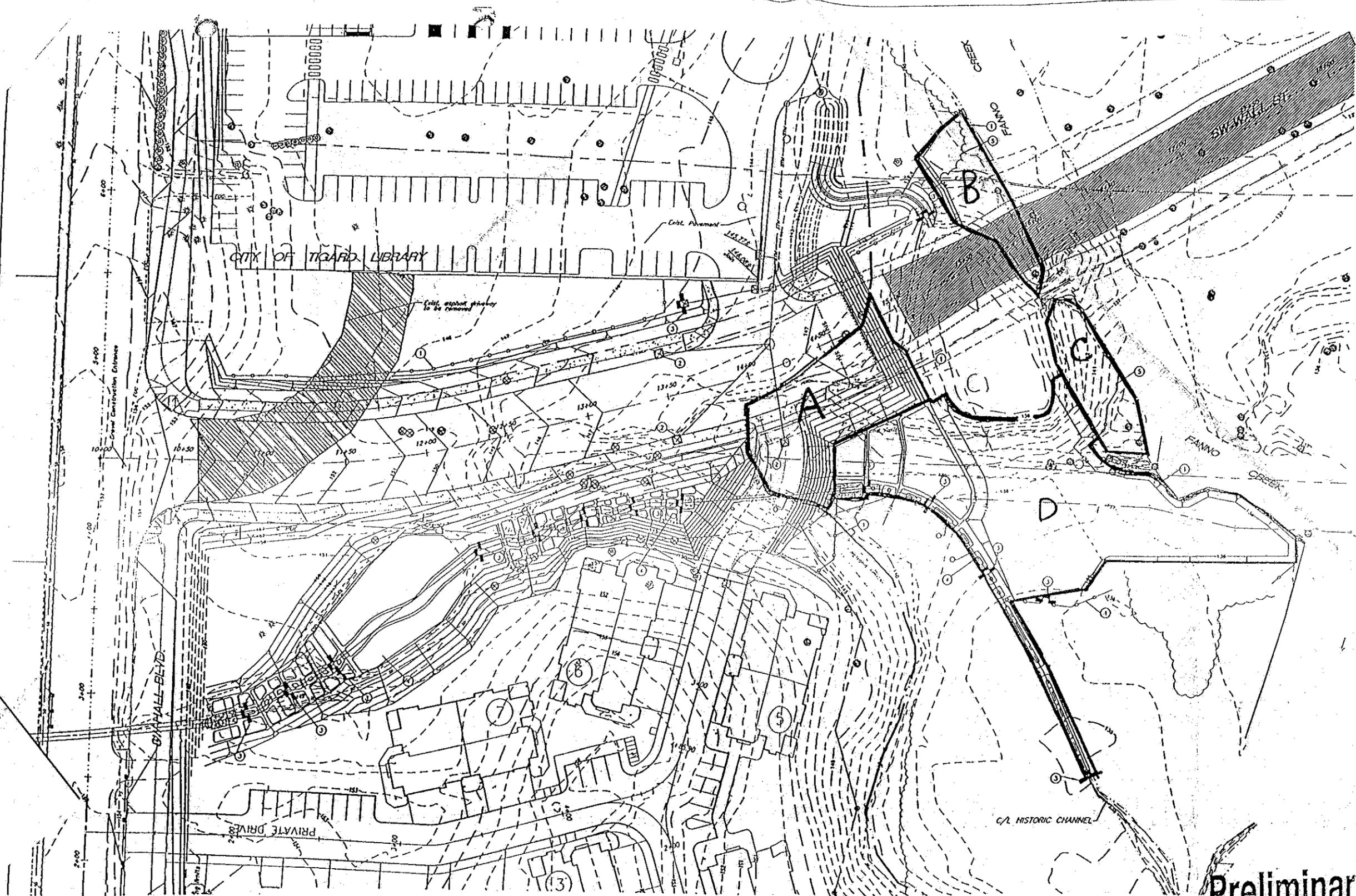
1. Insertion of the additional original ground cross section (1 above) did not affect the base flood level.
2. The Phase 1 construction (2 above) lowers the water surface elevation by 0.12ft. at the additional Wall Street alignment cross section (2 above) and 0.30ft. at cross section AG, located approximately 1,000ft. upstream. Accordingly, the no-rise condition is met.

**Certification:**

Phase 1 construction as shown on the attached drawings would cause no-rise in Fanno Creek during a 100-year flood event.







**PLAN**  
Scale: 1"=30'

- LEGEND**
- Check dam
  - Bio filter bag
  - Sediment fence
  - Inlet protection
  - Proposed inlet
  - Exist. manhole
  - Exist. storm drain
  - Proposed storm drain
  - Proposed monhole
  - Exist. sanitary sewer
  - Remove exist. tree

- ① Construct sediment fence
- ② Construct inlet protection
- ③ Construct check dam  
Bio filter bag
- ④ See sheet R2, R3 & R4 for  
grading outside of roadway
- ⑤ Cut to elev. 138

Note  
Erosion control measures shall  
comply with:  
Erosion Prevention and Sediment  
Control Planning and Design  
Manual, Revised December 2000.  
Developed in partnership with:  
Clean Water Services (CWS),  
(formerly USA) of Washington  
County, Oregon  
Water Environment Services (WES)  
of Clackamas County, Oregon  
City of West Linn, Oregon  
AND  
Field Manual  
Erosion & Sediment Control,  
November 2000.  
Prepared by:  
ODOT  
CEO/HYDRO UNIT  
HARZA ENGINEERING

**Preliminary** **SCHEDULE G**

DATE	REVISION	NO.	BY	DESIGNED BY: MJD			<b>DEHAAS</b> & <b>associates, Inc.</b> Consulting Engineers & Surveyors Suite 300 - AOC Center 9450 S.W. Commerce Circle Wilsonville, Oregon 97070 PHONE: (503) 682-2450 FAX: 682-4018		<b>WALL STEET EXTENSION (PH. 1)</b> <b>STREET &amp; UTILITIES IMPROVEMENTS</b> GRADING AND EROSION CONTROL	<b>SHEET</b> R2 22 OF 34
				DRAWN BY: BPD, LM						
				CHECKED BY: MJD						
				DATE: X						
				SCALE: AS SHOWN						
03/05/03	per ODOT & City	1	HAI	PROJECT NO. 629	DATE MARCH, 2004	FILE 02.629.118				

7/30/04

**HYDRAULIC ANALYSIS REPORT**  
**for**  
**PROPOSED BRIDGE FOR**  
**SW WALL STREET OVER FANNO CREEK**

**WASHINGTON COUNTY, OREGON**

**Prepared for:**

**OBEC Consulting Engineers**  
**920 County Club Road, Suite 100B**  
**Eugene, OR 97401**

**Prepared by:**

**WEST Consultants, Inc.**  
**2601 26<sup>th</sup> Street, Suite 450**  
**Salem, OR 97302**  
**(503) 485-5490**

**July 9, 2003**

## TABLE OF CONTENTS

1. INTRODUCTION .....	1
2. HYDRAULIC ANALYSIS .....	1
3. RESULTS .....	3
4. CONCLUSIONS.....	8

## LIST OF TABLES

Table 1 – Results for the Base Flood Event.....	4
Table 2 – Results for the Floodway Event.....	5
Table 3 – Floodway Results for the Various Bridge Alternatives.....	6

## APPENDIX 1: FIGURES

FIGURE 1 Bridge Location Map	
FIGURE 2 Cross Section Layout	
FIGURE 3 Cross Section Plots	
FIGURE 4 100-year Water Surface Profile for Plan 3	
FIGURE 5 100-year Water Surface Profile for Plan 4	
FIGURE 6 100-year Water Surface Profile for Plan 5	
FIGURE 7 100-year Water Surface Profile for Plan 5b	
FIGURE 8 Floodway Water Surface Profile for Plan 3	
FIGURE 9 Floodway Water Surface Profile for Plan 4	
FIGURE 10 Floodway Water Surface Profile for Plan 5	
FIGURE 11 Floodway Water Surface Profile for Plan 5b	
FIGURE 12 Comparison of 100-year Inundation Boundaries	
FIGURE 13 100-year Inundation Boundaries for Plan 5	

## 1. INTRODUCTION

1. OBEC Consulting Engineers is currently working on the design of a proposed bridge for SW Wall Street over Fanno Creek. The proposed bridge would be located within a regulated floodway. Therefore, the local community and Federal Emergency Management Agency (FEMA) must be involved in the approval process for this project. The project would have to be submitted to FEMA as a Conditional Letter of Map Revision (CLOMR). Mr. Gayle Harley of OBEC Consulting Engineers requested that WEST Consultants, Inc. conduct a hydraulic analysis of various bridge configurations for the proposed structure to assist OBEC with this process. Information about the hydraulic analysis and the results of the analysis are documented in the following paragraphs of this brief report.

2. The location of the proposed bridge is shown in Figure 1. The proposed bridge will be located within the City of Tigard, Oregon, approximately 3.8 miles upstream of the confluence with Tualatin River and about 1,430 feet downstream of the existing bridge for Hall Boulevard, which is labeled as SW 85<sup>th</sup> Avenue in Figure 1.

## 2. HYDRAULIC ANALYSIS

3. A revised Flood Insurance Study (FIS) of Fanno Creek has recently been completed by Pacific Water Resources, Inc. as part of a watershed assessment study of the Tualatin Basin. The study reach for the FIS extended approximately 13.5 miles upstream from the confluence with Tualatin River. The hydraulics for the FIS were computed using the US Army Corps of Engineers HEC-2 Computer Program, Version 4.6.2, dated May 1991. The HEC-2 model and all of the supporting data for the FIS are currently available from FEMA's Contractor, Michael Baker Jr., Inc. Unfortunately, it would take several months to obtain this information from Michael Baker Jr., Inc. Therefore, WEST Consultants, Inc. contacted Pacific Water Resources, Inc., who did the FIS, and obtained a copy of all the data submitted to FEMA for their final submittal. Their submittal included base maps, work maps, report, hydraulic model, ground TIN, and other supporting data. It should be noted that as the FEMA contractor, Michael Baker Jr. Inc., may have modified the submittal and certainly completed the final mapping. This data would have to be obtained from FEMA for the final CLOMR submittal. WEST Consultants, Inc. has contacted Michael Baker Jr., Inc. and initiated the process of obtaining the effective data for Fanno Creek.

4. The HEC-2 model developed for the FIS was utilized to create a Duplicate Effective Model (DEM) required for the CLOMR. The DEM is a copy of the hydraulic analysis used in the effective FIS. The DEM was developed using the US Army Corps of Engineers HEC-RAS Computer Program, Version 3.1, dated November 2002 since this program has more advanced and improved bridge routines for evaluating the proposed SW Wall Street bridge. The model was developed by importing the HEC-2 model developed for the FIS into HEC-RAS for the reach from the upstream side of the Bonita

Road bridge to the downstream side of Main Street. This reach and the cross sections located within the reach are shown in Figure 2. Plots of the cross sections are provided in Figure 3. For the DEM, the default setting (At Breaks in n Values Only) for the Conveyance Calculation Option within HEC-RAS was changed to the same method used for HEC-2 program (Between Every Coordinate Point) to obtain the same results as the current effective FIS model. The starting water surface elevation for the DEM was based on the HEC-2 model results for the cross section just upstream of Bonita Road bridge, and the elevations for the various flood frequencies are provided as follows:

Return Period	Starting WS Elevation (ft)
10-yr	136.84
50-yr	138.02
100-yr	138.45
100-yr Floodway	138.84
500-yr	139.57

5. In addition to the DEM, a Corrected Effective Model (CEM) is required for the CLOMR. The CEM is a model that corrects any errors that occur in the DEM, adds any additional cross sections to the DEM, or incorporates more detailed topographic information than what was used in the current effective model. The CEM was developed by incorporating the cross sections at the downstream and upstream side of the proposed bridge. These cross sections were provided by DeHaas & Associates, Inc., who performed all of the survey work for this project. The cross sections were developed by extracting the cross section from the digital terrain model (DTM) of the area and incorporating the data obtained from the field survey of the main channel into the cross section. Plots of these cross sections are also included in Figure 3. As shown in the plots, these cross sections have ineffective flow boundaries to account for the sudden expansion of flow caused by a berm located upstream at Cross Section AF. This berm is shown in Figure 2 and reflected in the cross section plot of Cross Section AF in Figure 3. The ineffective flow boundaries within the left overbank were set to become effective when the berm was overtopped. The contraction and expansion coefficients for the two new cross sections and for Cross Section AF were increased from 0.2 and 0.4 to 0.3 and 0.5, respectively. The stations for the floodway encroachment at these cross sections were originally defined using the workmaps provided by Pacific Water Resources, Inc. However for the reach immediately upstream of the proposed bridge, the boundaries needed to be revised to ensure that the rise associated with the floodway would be equal to or less than 1.0 foot. The revised boundaries are provided in the following table, and they were used in the hydraulic analysis of the various bridge plans:

Cross Section	Original Floodway Boundaries <sup>1</sup>		Revised Floodway Boundaries <sup>2</sup>	
	Station of Left Encroachment	Station of Right Encroachment	Station of Left Encroachment	Station of Right Encroachment
D/S side of Proposed Bridge	213.45	504.7	199	521
U/S side of Proposed Bridge	206.3	484.1	195	525
Cross Section AF	567	868	565	870

Notes:

1. Original Floodway Boundaries corresponds to the boundaries established in the FIS conducted by Pacific Water Resources, Inc.
2. Revised Floodway Boundaries corresponds to the boundaries established for the Corrective Effective Model.

6. As directed by Mr. Harley, the following plans were considered for the proposed bridge: (1) Plan 1 – Bridge with a total span of 560 ft; (2) Plan 2 – Bridge with a total span of 400 ft; (3) Plan 3 – Bridge with a total span of 320 ft; (4) Plan 4 – Bridge with a total span of 240 ft; and (5) Plan 5 – Bridge with a total span of 160 ft. A hydraulic model was developed for each of the plans by incorporating the bridge configuration into the CEM. Generally, the bridge configuration was the same for each of the plans. The only difference between the various plans was the total span length. For each of the plans, the high chord of the bridge deck was defined using the top of road profile provided in the AutoCAD file (WALLST051603.dwg) provided by Mr. Harley on May 19, 2003; the low chord of the bridge deck was set at 40 inches below the high chord; the span lengths were assumed to be 80 feet; and the piers were assumed to be 16-inches-wide.

7. Mr. Harley indicated that the preferred alternative would be the bridge with the shortest span length, i.e., Plan 5. As discussed below, the backwater from this plan would extend upstream of Hall Blvd, which is undesirable. Thus, a modification to this plan was considered to make it a viable option. The modification involved excavating the berm at Cross Section AF from elevation 142 ft to 140 ft, and it is presented in this report as Plan 5b. Mr. Harley also indicated that a library would soon be constructed on right hand side of the creek immediately upstream of the proposed bridge (near Cross Section AF). Thus, the water surface elevation upstream of the proposed bridge at Cross Section AF must be below the design base floor elevation of 143.5 feet.

### 3. RESULTS

8. The results of the hydraulic analysis are summarized in Tables 1 through 3 and depicted in Figures 4 through 11. The results for the base flood event, which corresponds to the 100-year flood event, are provided in Table 1. The shaded area provided in this table reflects the reach of the creek where the base flood elevations would be increased, and it represents the extent of the backwater associated with the proposed bridge plan. The results for the floodway event are provided in Table 2, and the results of the floodway analysis for the various bridge alternatives are provided in Table 3. The water surface profile for the base flood event for Plans 3, 4, 5, and 5b are provided in Figures 4 through 7, respectively; and the floodway water surface profile for Plans 3, 4, 5, and 5b are provided in Figures 8 through 11, respectively. Profiles were not provided for Plans 1 and 2 since they would not be noticeably different than the profile for the CEM shown in Figures 4 through 11.

**Table 1 – Results for the Base Flood Event.**

Cross Section	Station	WS EI for Without-Project (ft)	Plan 1 (Span of 560 ft)		Plan 2 (Span of 400 ft)		Plan 3 (Span of 320 ft)		Plan 4 (Span of 240 ft)		Plan 5 (Span of 160 ft)		Plan 5b (Span of 160 ft)		
			WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)
AB	15320	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0
AC	16224	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0
AD	18358	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0
AE	19928	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.3	0.1	141.3	0.1	141.3	0.1
	20123	141.4	0.0	141.4	0.0	141.5	0.1	141.5	0.1	141.6	0.2	141.6	0.2	141.6	0.2
	20175	141.4	0.0	141.4	0.0	141.6	0.2	141.7	0.2	141.8	0.4	141.8	0.4	142.0	0.5
AF <sup>1</sup>	20298	141.4	0.1	141.5	0.1	141.7	0.2	141.8	0.4	142.0	0.6	142.0	0.5	142.0	0.5
AG	21352	143.8	0.0	143.8	0.0	143.8	0.0	143.9	0.1	144.0	0.2	144.1	0.3	144.1	0.3
AH	21597	144.0	0.0	144.0	0.0	144.0	0.0	144.1	0.1	144.1	0.2	144.2	0.3	144.2	0.3
AI	21716	144.1	0.0	144.1	0.0	144.1	0.0	144.2	0.1	144.3	0.2	144.4	0.3	144.4	0.3
AJ	21717	143.9	0.0	143.9	0.0	144.0	0.0	144.1	0.1	144.1	0.2	144.2	0.3	143.9	0.0
Hall Blvd.															
AK	21791	144.5	0.0	144.5	0.0	144.5	0.0	144.5	0.0	144.6	0.1	144.6	0.1	144.5	0.0
AL	21966	145.1	0.0	145.1	0.0	145.1	0.0	145.2	0.0	145.2	0.0	145.2	0.0	145.1	0.0
AM	22485	145.5	0.0	145.5	0.0	145.5	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.5	0.0
AN	22609	145.6	0.0	145.6	0.0	145.6	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.6	0.0
AO	22618	145.6	0.0	145.6	0.0	145.6	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.6	0.0
AP	22684	145.7	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.8	0.1	145.7	0.0
AQ	23473	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0
AR	23562	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.1	0.1	146.0	0.0
AS	23563	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.1	0.1	146.0	0.0
AT	23571	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.1	0.1	146.0	0.0
AU	23669	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.1	146.0	0.0
AV	24821	146.8	0.0	146.8	0.0	146.8	0.0	146.9	0.0	146.9	0.0	146.9	0.0	146.1	0.0
AW	24957	147.2	0.0	147.2	0.0	147.2	0.0	147.2	0.0	146.9	0.0	146.9	0.0	146.8	0.0
AX	24966	147.3	0.0	147.3	0.0	147.3	0.0	147.3	0.0	147.2	0.0	147.3	0.0	147.2	0.0
AY	25025	147.4	0.0	147.4	0.0	147.3	0.0	147.3	0.0	147.3	0.0	147.3	0.0	147.3	0.0
AZ	26008	151.2	0.0	151.2	0.0	147.4	0.0	147.4	0.0	147.4	0.0	147.5	0.0	147.4	0.0
				151.2	0.0	151.1	0.0	151.1	0.0	151.1	0.0	151.1	0.0	151.2	0.0

Notes:

1. The proposed library near Cross Section AF was designed with a base floor elevation of 1 foot above the effective floodway elevation of 142.5 ft, i.e., 143.5 ft.
2. The shaded area above corresponds to where the 100-year water surface elevations would be increased as a result of the proposed bridge plan.

**Table 2 – Results for the Floodway Event.**

Cross Section	Station	WS EI for Without-Project (ft)	Plan 1 (Span of 560 ft)		Plan 2 (Span of 400 ft)		Plan 3 (Span of 320 ft)		Plan 4 (Span of 240 ft)		Plan 5 (Span of 160 ft)		Plan 5b (Span of 160 ft)		
			WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)
AB	15320	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0
AC	16224	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0
AD	18358	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0
AE	19928	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0
	20123	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0
	20175	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0
AF	20298	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0
AG	21352	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0
AH	21597	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0
AI	21716	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0
AJ	21717	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0
Hall Blvd.															
AK	21791	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0
AL	21966	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0
AM	22485	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0
AN	22609	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0
AO	22618	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0
AP	22684	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0
AQ	23473	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0
AR	23562	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0
AS	23563	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0
AT	23571	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0
AU	23669	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0
AV	24821	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0
AW	24957	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0
AX	24966	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0
AY	25025	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0
AZ	26008	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0

Notes:

1. The proposed library near Cross Section AF was designed with a base floor elevation of 1 foot above the effective floodway elevation of 142.5 ft, i.e., 143.5 ft.
2. The above results are based on the floodway boundaries established for the Corrective Effective Model that are based on the boundaries established for the FIS completed by Pacific Water Resources, Inc. with some minor revisions as discussed in Paragraph 5.

**Table 3 – Floodway Results for the Various Bridge Alternatives.**

Cross Section	Station	Increase in the Water Surface Elevation above the Base Flood (ft) <sup>1</sup>						
		CEM	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 5b
AB	15320	0.4	0.4	0.4	0.4	0.4	0.4	0.4
AC	16224	0.5	0.5	0.5	0.5	0.5	0.5	0.5
AD	18358	0.9	0.9	0.9	0.9	0.9	0.9	0.9
AE	19928	1.0	1.0	0.9	0.9	0.9	0.9	0.9
	20123	1.0	1.0	0.9	0.9	0.8	0.8	0.8
	20175	1.0	1.0	0.9	0.8	0.8	0.7	0.7
AF	20298	1.0	1.0	0.8	0.6	0.7	0.6	0.6
AG	21352	0.9	0.9	0.9	0.8	0.8	0.8	0.7
AH	21597	0.9	0.9	0.9	0.8	0.8	0.8	0.7
AI	21716	0.9	0.9	0.9	0.8	0.8	0.8	0.7
AJ	21717	1.0	1.0	1.0	0.9	0.9	0.9	0.8
AK	21791	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AL	21966	0.5	0.5	0.5	0.4	0.5	0.4	0.4
AM	22485	0.5	0.5	0.5	0.4	0.5	0.5	0.4
AN	22609	0.5	0.5	0.5	0.4	0.5	0.5	0.4
AO	22618	0.5	0.5	0.5	0.5	0.5	0.5	0.4
AP	22684	0.5	0.5	0.5	0.4	0.5	0.5	0.4
AQ	23473	0.6	0.6	0.6	0.5	0.6	0.6	0.5
AR	23562	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AS	23563	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AT	23571	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AU	23669	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AV	24821	1.0	1.0	1.0	1.0	1.0	1.0	1.0
AW	24957	0.9	0.9	0.9	0.9	0.9	0.9	0.9
AX	24966	0.9	0.9	0.9	0.9	0.9	0.9	0.8
AY	25025	0.8	0.8	0.8	0.8	0.8	0.8	0.8
AZ	26008	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Notes:

1. The increases provided above are based on the Base Flood Elevations (100-yr) associated with the proposed bridge plan and not the BFEs from the FIS completed by Pacific Water Resources, Inc.
2. The above results are based on the floodway boundaries established for the Corrective Effective Model that are based on the boundaries established for the FIS completed by Pacific Water Resources, Inc. with some minor revisions as discussed in Paragraph 5.

9. The results provided in Tables 1 through 3 indicate the following: (1) the water surface elevation for the base flood event increases as the bridge opening decreases and the largest increase is associated with the smallest bridge opening (Table 1); (2) the increase in water surface elevations caused by the proposed bridge decreases when including the effective floodway boundaries (Table 1 and 2); (3) for the base flood event, the backwater from the proposed bridge would extend upstream of Hall Blvd. for Plans 4 and 5 (Table 1); (4) the water surface elevation near the proposed library site, Cross Section AF, for the base flood event would be less than the base floor elevation of the library (143.5 ft) for all of the alternatives (Table 1); (5) the floodway water surface elevation near the proposed library site would also be less than the base floor elevation of the library for all of the alternatives (Table 2); (6) excavation of the berm at Cross Section AF would offset the backwater associated with the proposed bridge and prevent the backwater from extending upstream of Hall Blvd. (Table 1); and, (7) the increase associated with the floodway would be less than 1.0 foot for all of the proposed bridge plans (Table 3).

10. The results also indicate that the base flood event would impact the left side of the bridge for all of the proposed bridge plans except for Plan 5. Thus, the increase in the water surface associated with these plans can be reduced by raising the bridge deck near the left side to be above the base flood. Also, the increase in water surface elevations for Plans 1 through 3 could be offset by excavating the high ground between the main channel and the natural pond west of the channel (Figure 3) for the reach near the proposed bridge (between Cross Sections AF and AE).

11. To show the maximum impact the proposed bridge structure would have on the 100-year flood boundaries, the 100-year flood boundaries were delineated for without project conditions and for Plan 5. Spatial analysis within ArcView 3.0 was used to delineate the boundaries. Briefly, a surface was created for both the water surface profile and the existing ground. The surface for the ground was developed using the AutoCAD file of the TIN included in the FIS submittal by Pacific Water Resources, Inc. The surfaces were then converted to a grid and the map calculator was used to define the areas where the difference between the two grids would be greater than 0. The map calculator results were then converted to a shape file.

12. The inundation boundaries defined using the procedure above with the effective BFEs (based on the FIS submitted by Pacific Water Resources, Inc.) were compared to the boundaries developed by Pacific Water Resources, Inc. This comparison is shown in Figure 12. As shown in this figure, there are some noticeable differences between the two boundaries. The FIS submittal by Pacific Water Resources, Inc. does not contain any discussions or information on how the boundaries were delineated. It is, however, suspected that they were established manually since there are some locations where the width of the delineated boundaries is different than the width from the hydraulic results and there are no noticeable difference in the cross section extracted from the TIN and the cross section that was used in the hydraulic model. The difference in the two boundaries at the upstream end just downstream of Main Street is related to the difference in the cross section extracted from the TIN and the cross section reflected in the hydraulic model.

13. The 100-year flood boundaries for the without-project condition and Plan 5 are provided in Figure 13. As shown in this figure, Plan 5 would not significantly impact the 100-year flood boundaries upstream of the structure, and the difference between the two boundaries exists is only noticeable for the reach between the proposed bridge and Hall Blvd.

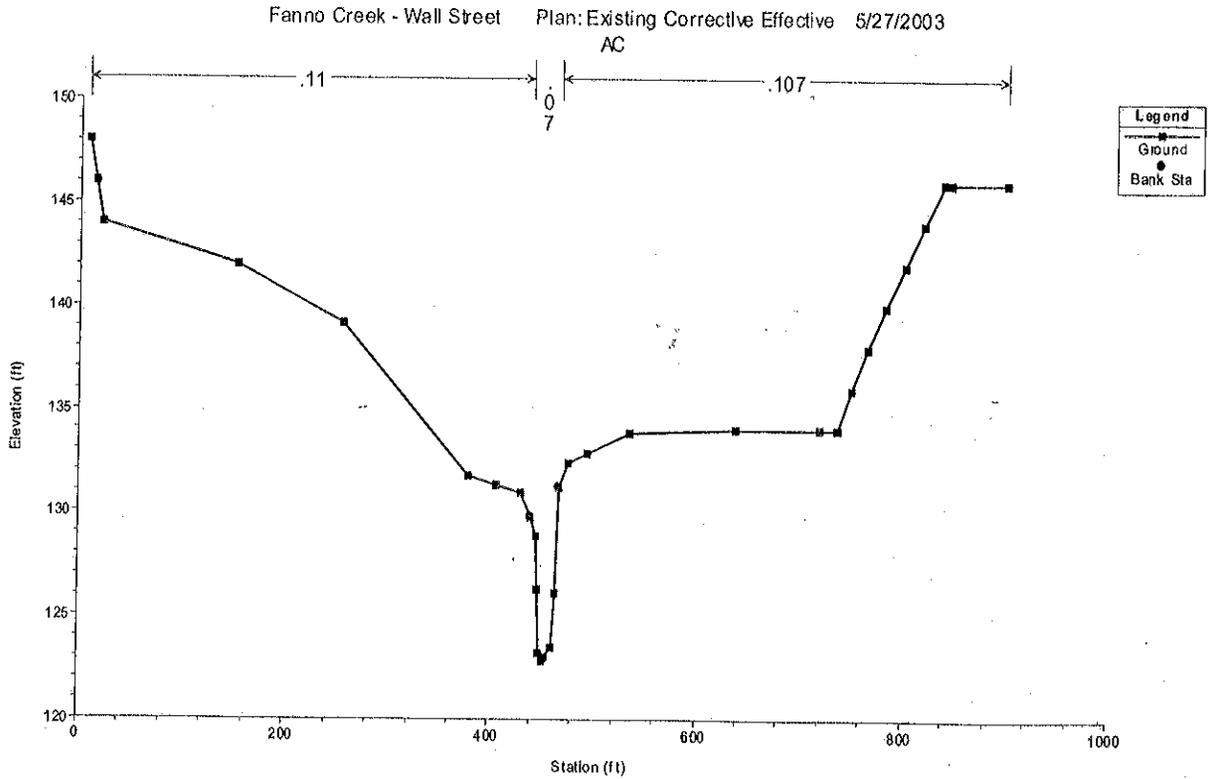
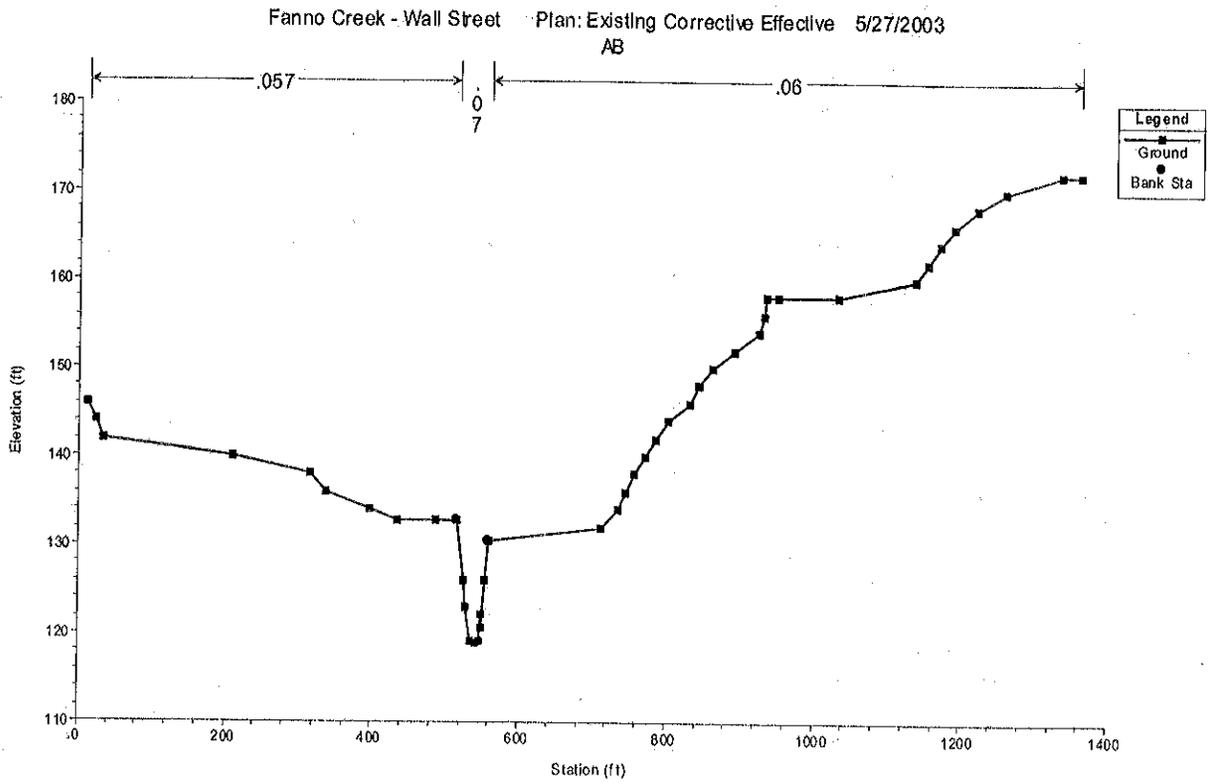
#### 4. CONCLUSIONS

14. A hydraulic analysis was performed on various bridge plans for a new proposed bridge over Fanno Creek. The results of the analysis indicate that for all of the plans the base flood and floodway water surface elevations upstream of the proposed bridge would be less than the design base floor elevation of the library that will be constructed in the near future. The results also indicate that the proposed bridge would have to have a span length of 320 feet to prevent the increase in the base flood elevations (backwater from the structure) to extend upstream of Hall Blvd, and a 160-foot long structure could be used if the berm at Cross Section AF was excavated from an elevation of 142 to 140 feet. Finally, as shown in the delineation of the 100-year flood boundaries for Plan 5, the proposed bridge structure would not cause a significant increase in the 100-year flood boundaries upstream of the structure and the only noticeable difference would exist within the reach from the proposed bridge and Hall Blvd.



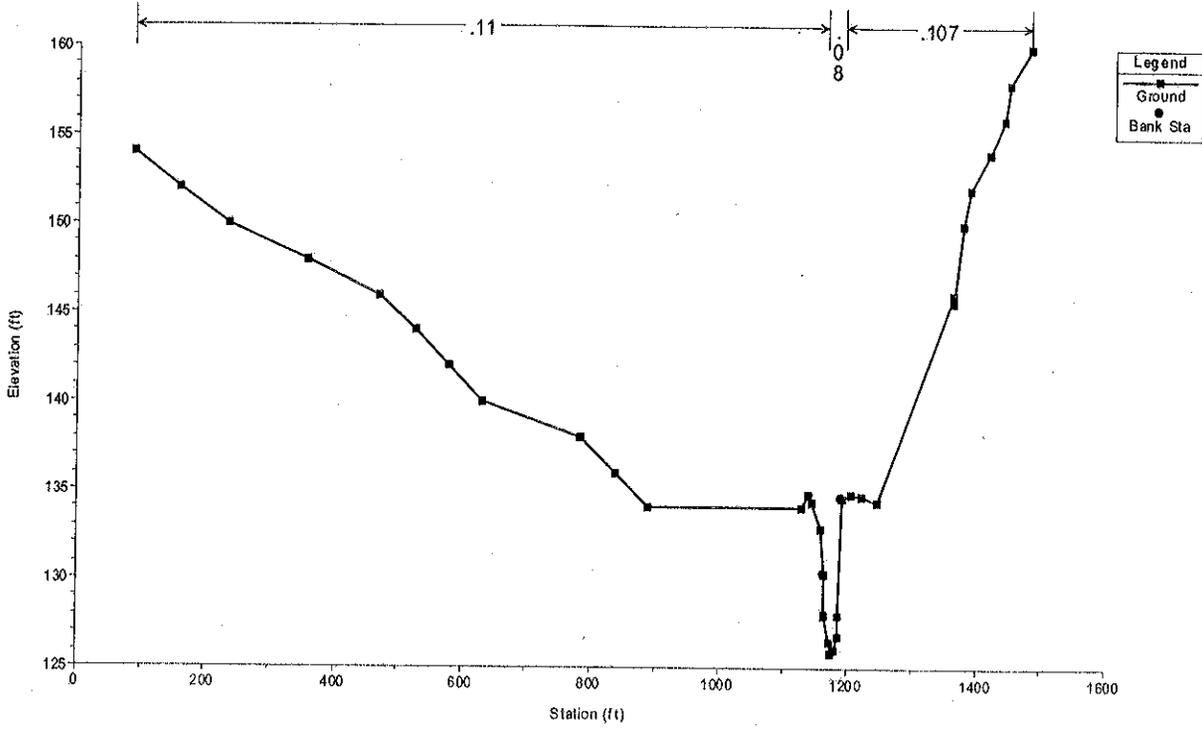


### FIGURE 3 – Cross Section Plots

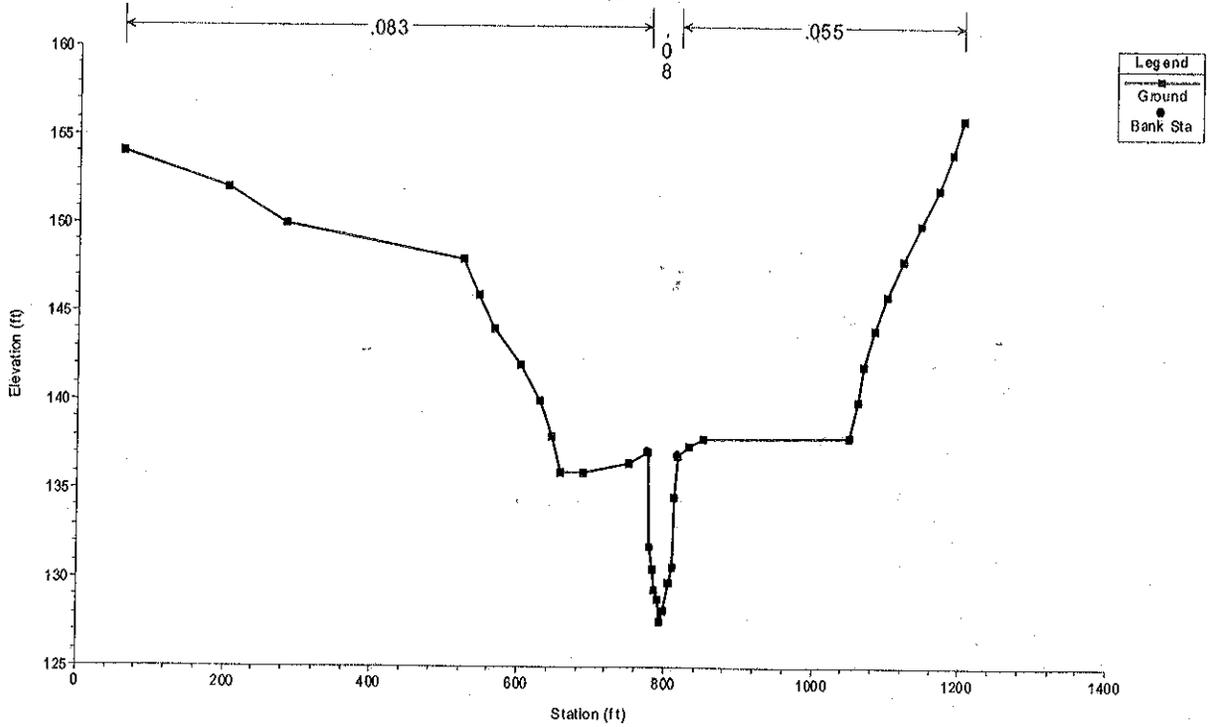


### FIGURE 3 – Cross Section Plots (Cont.)

Fanno Creek - Wall Street Plan: Existing Corrective Effective 5/27/2003  
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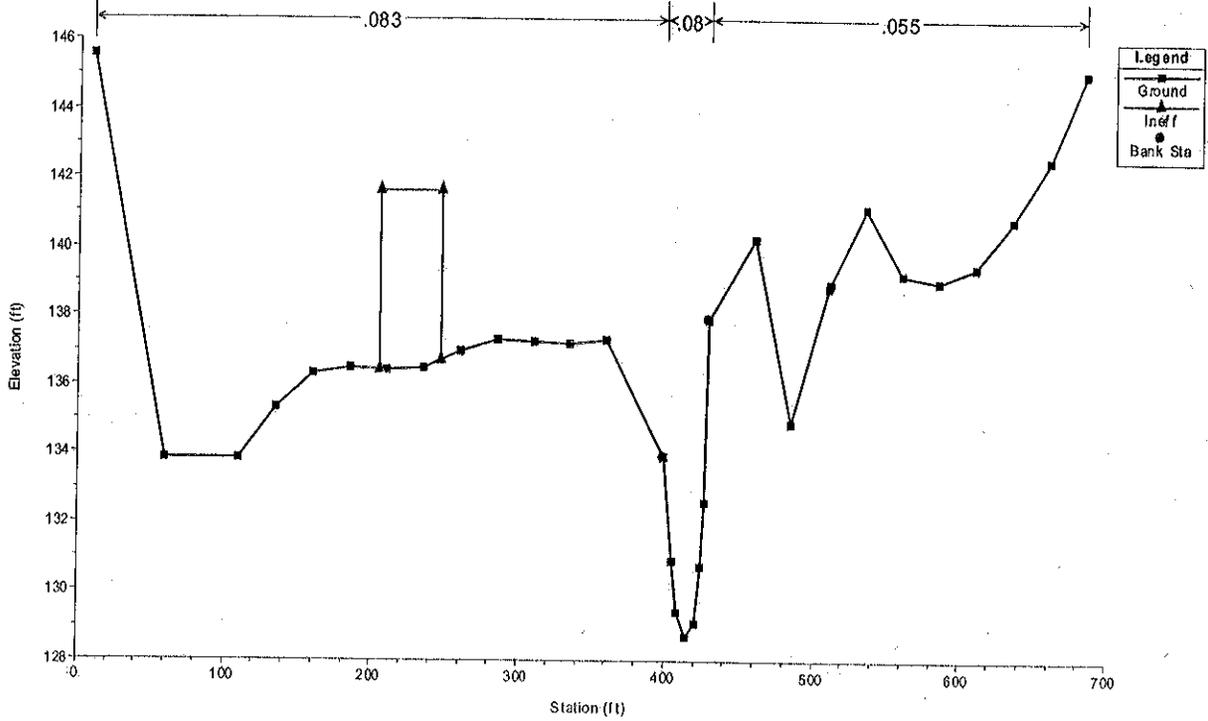


Fanno Creek - Wall Street Plan: Existing Corrective Effective 5/27/2003  
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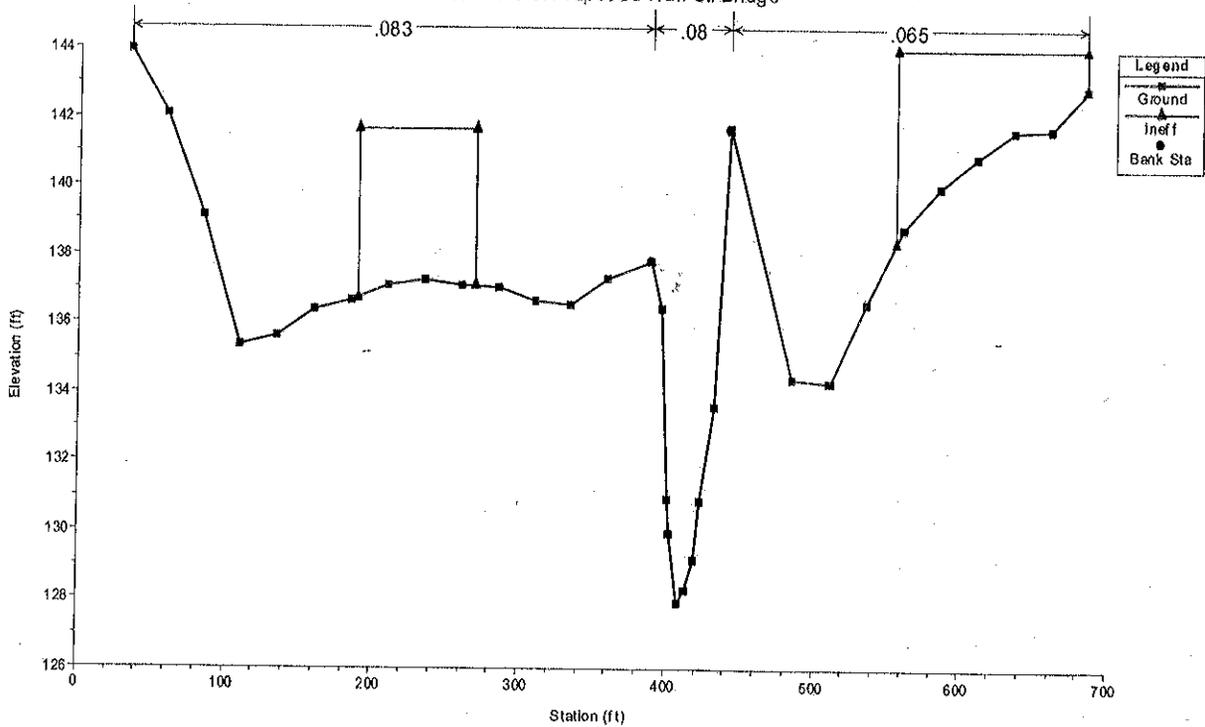


### FIGURE 3 – Cross Section Plots (Cont.)

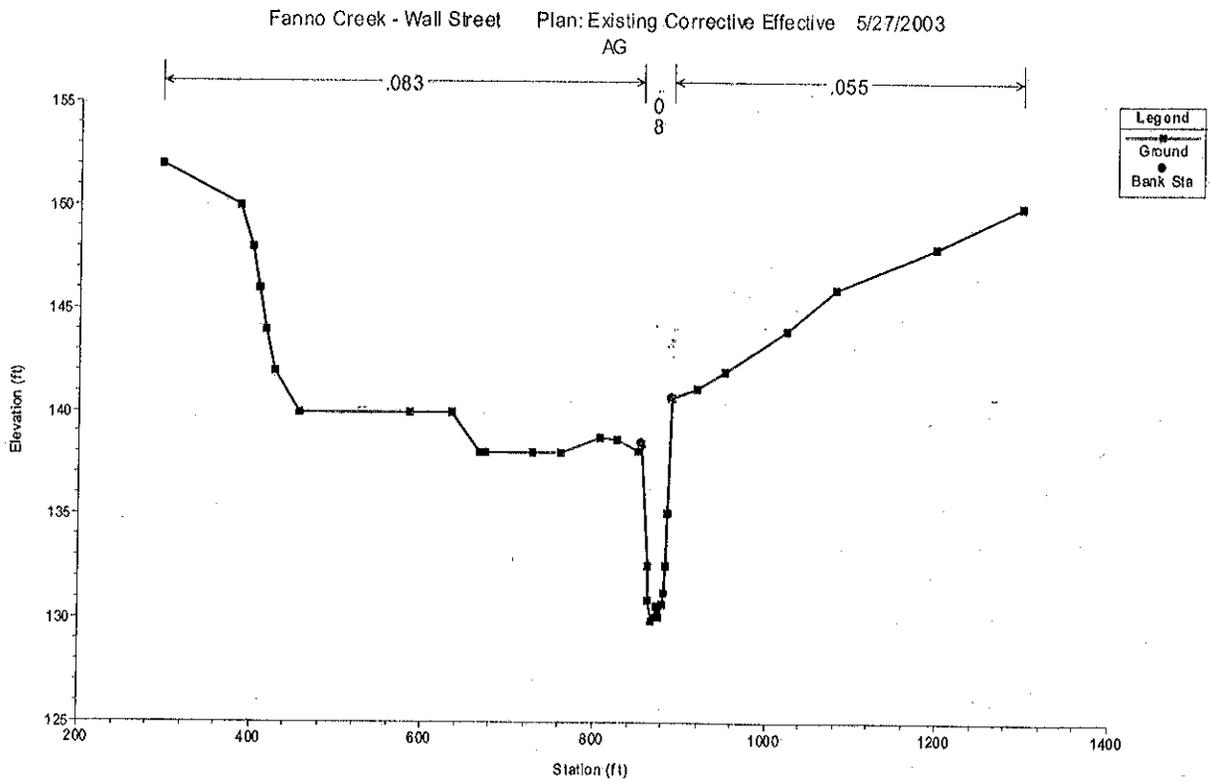
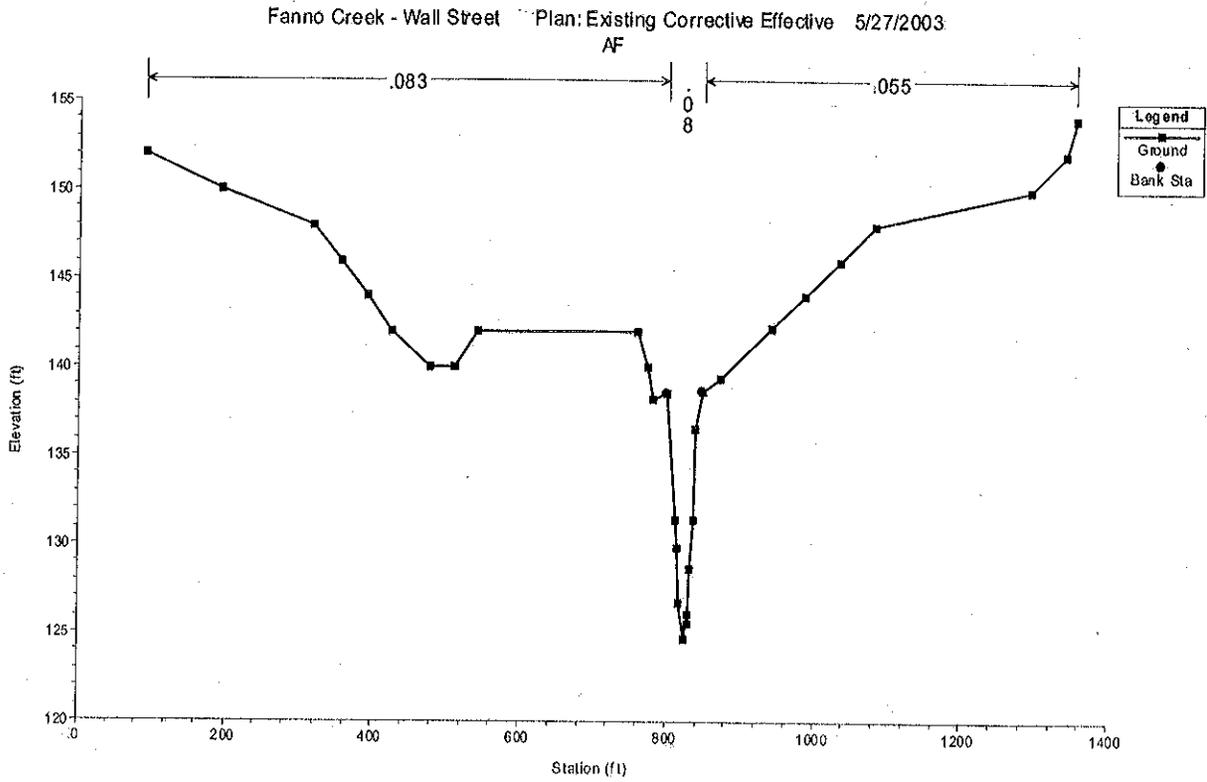
Fanno Creek - Wall Street Plan: Existing Corrective Effective 5/27/2003  
D/S side of Proposed Wall St. Bridge



Fanno Creek - Wall Street Plan: Existing Corrective Effective 5/27/2003  
U/S side of Proposed Wall St. Bridge

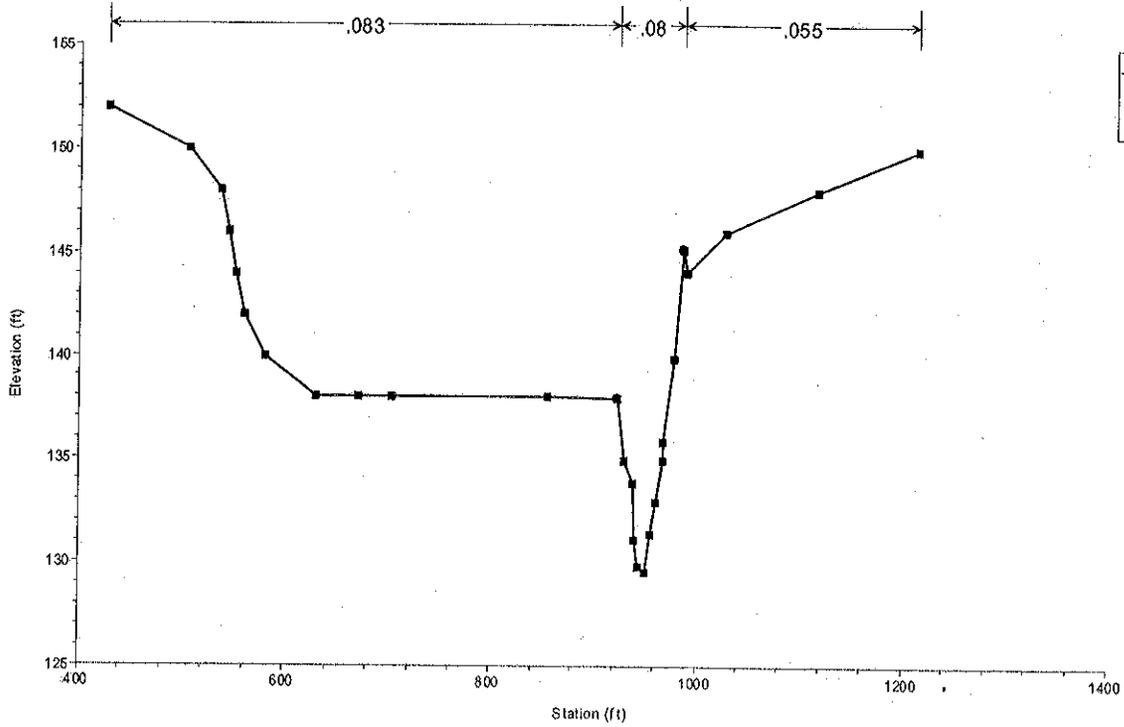


# FIGURE 3 – Cross Section Plots (Cont.)

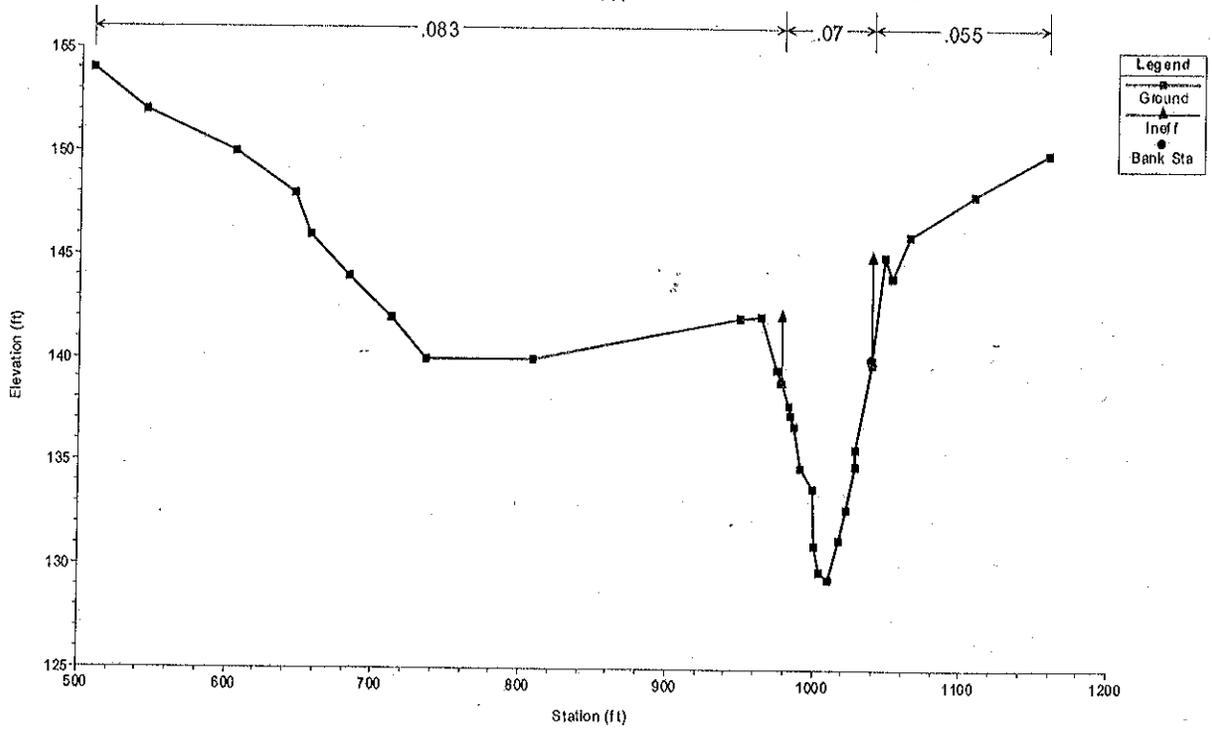


### FIGURE 3 – Cross Section Plots (Cont.)

Fanno Creek - Wall Street Plan: Existing Corrective Effective 5/27/2003  
AH

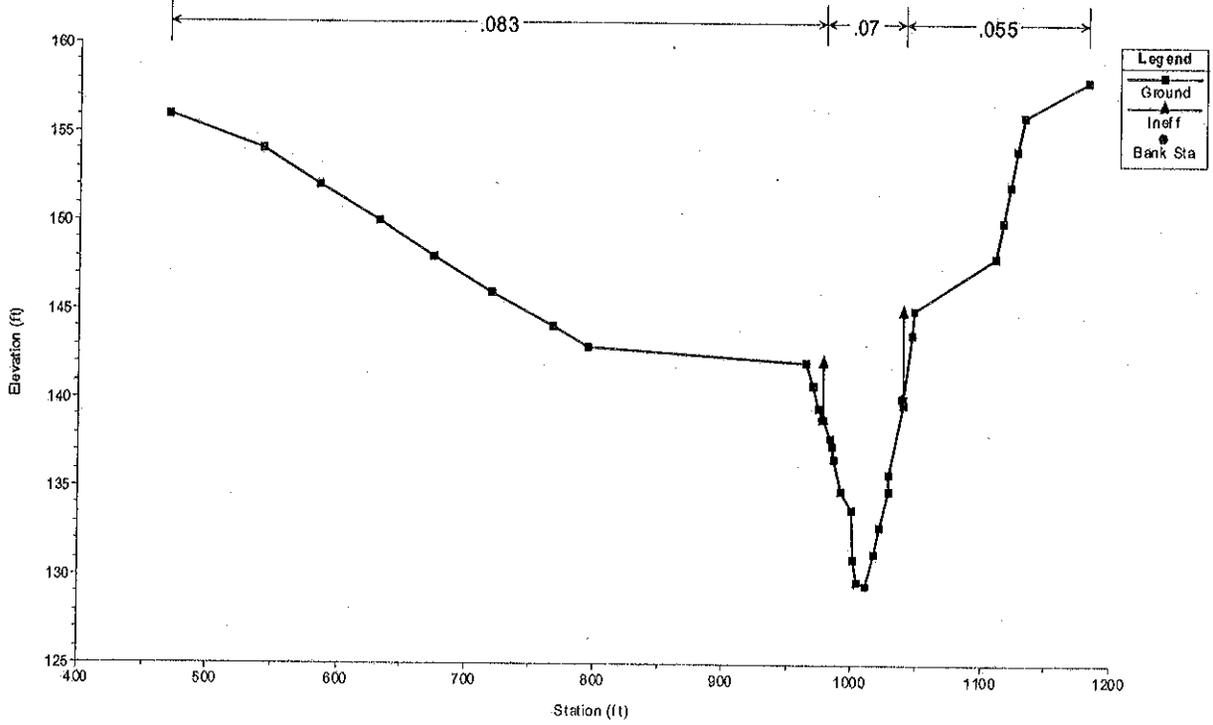


Fanno Creek - Wall Street Plan: Existing Duplicate Effective 5/27/2003  
AH

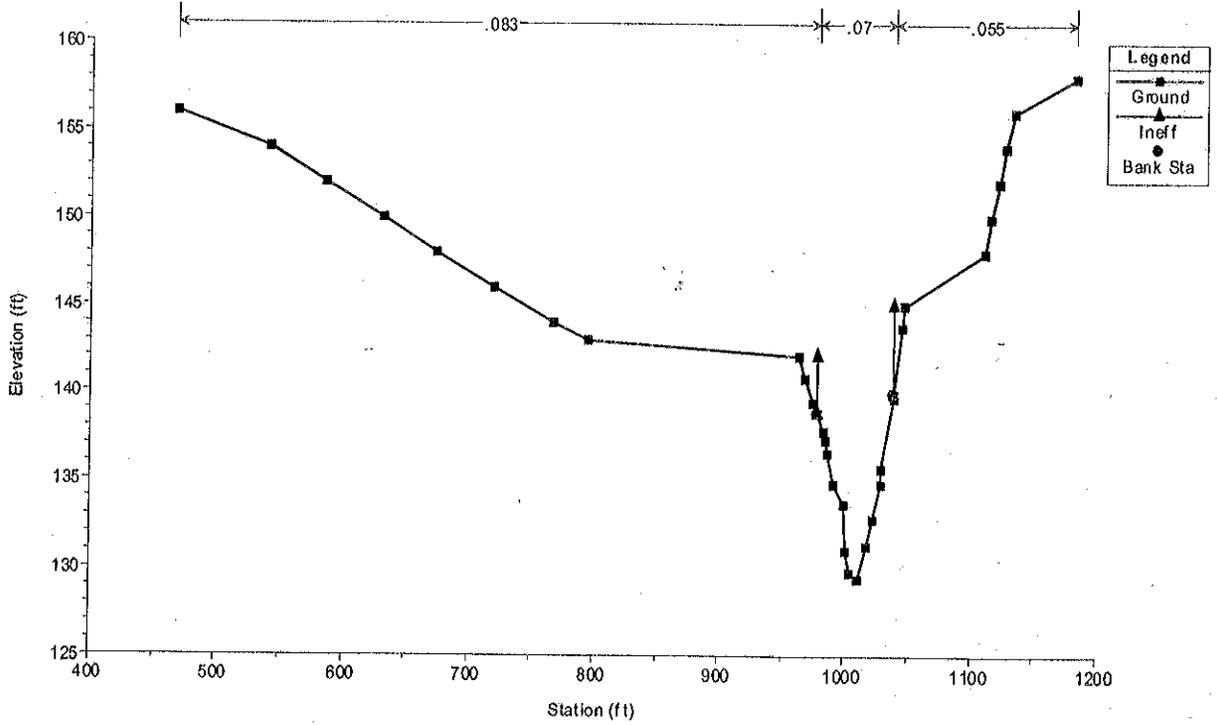


### FIGURE 3 – Cross Section Plots (Cont.)

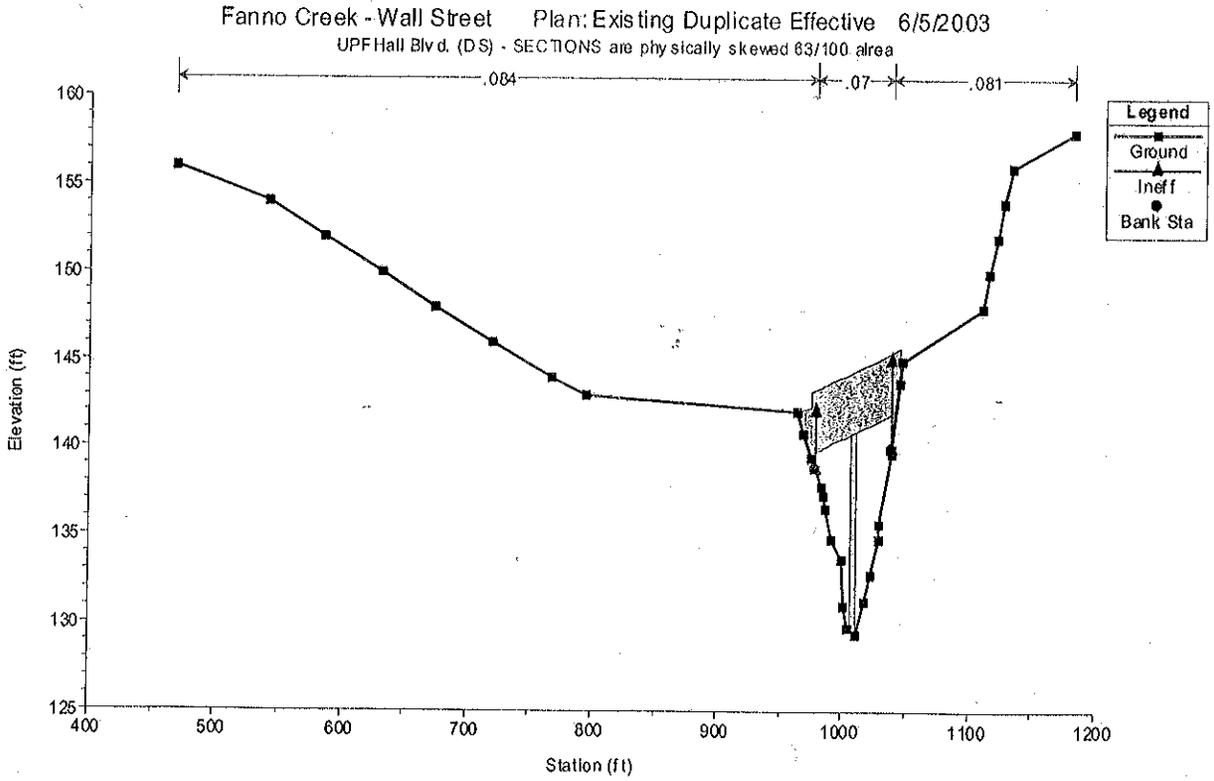
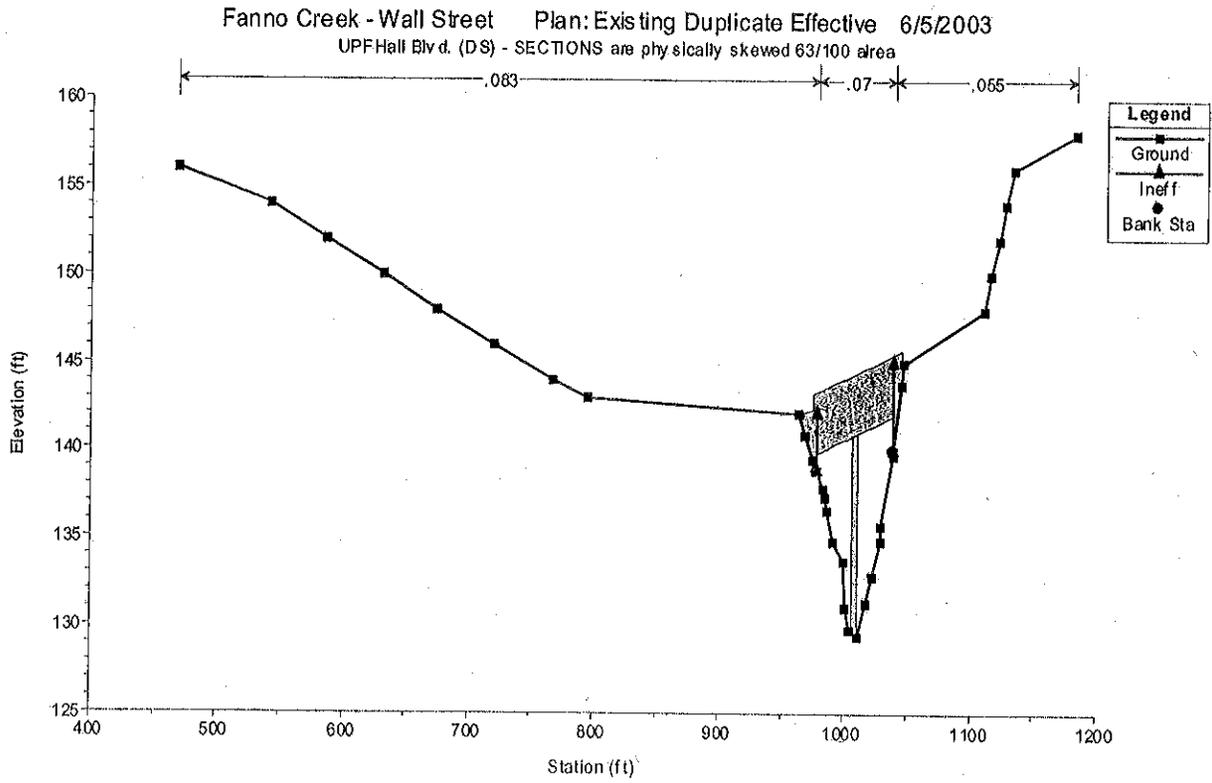
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AI



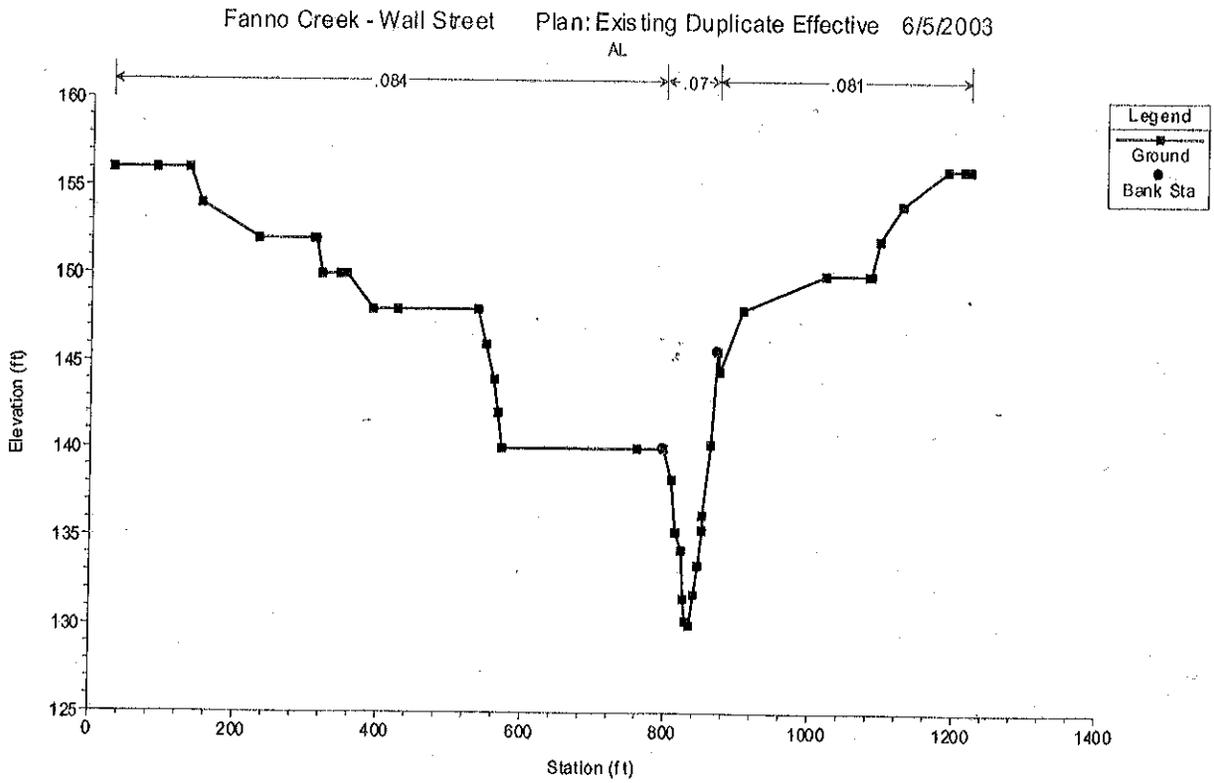
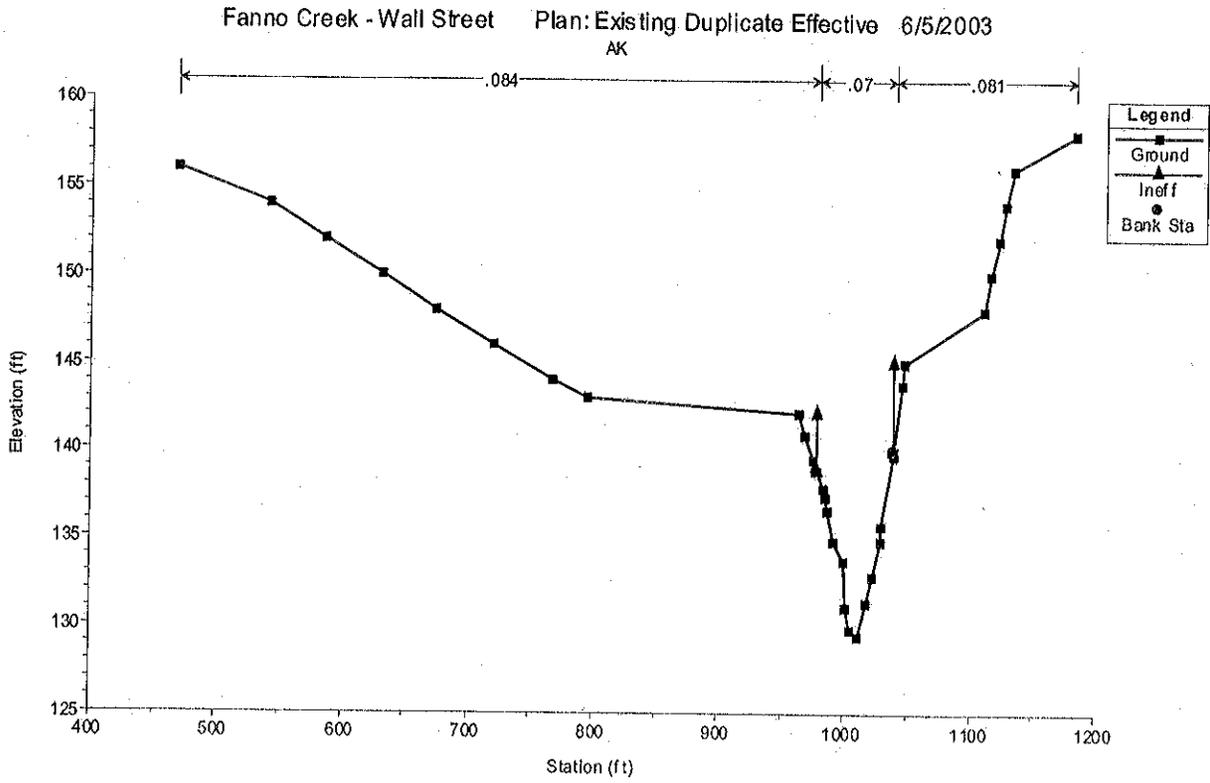
Fanno Creek - Wall Street Plan: Existing Duplicate Effective 6/5/2003  
AJ



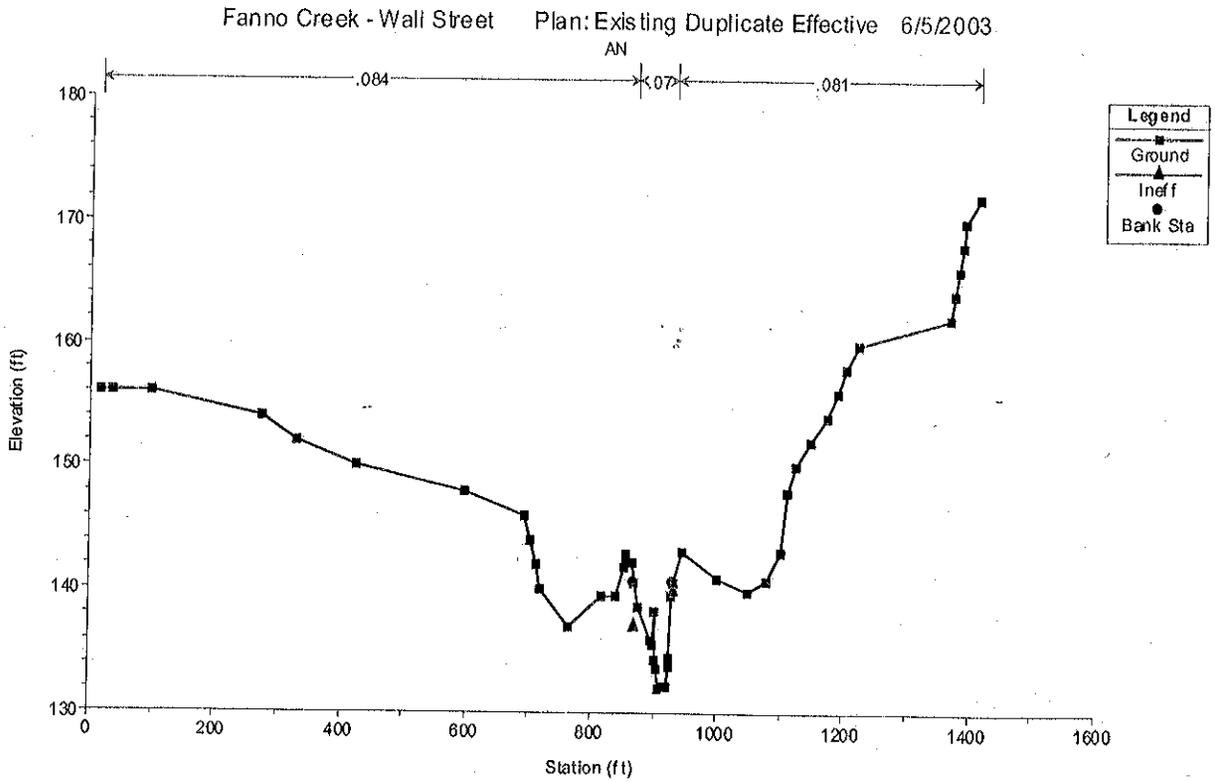
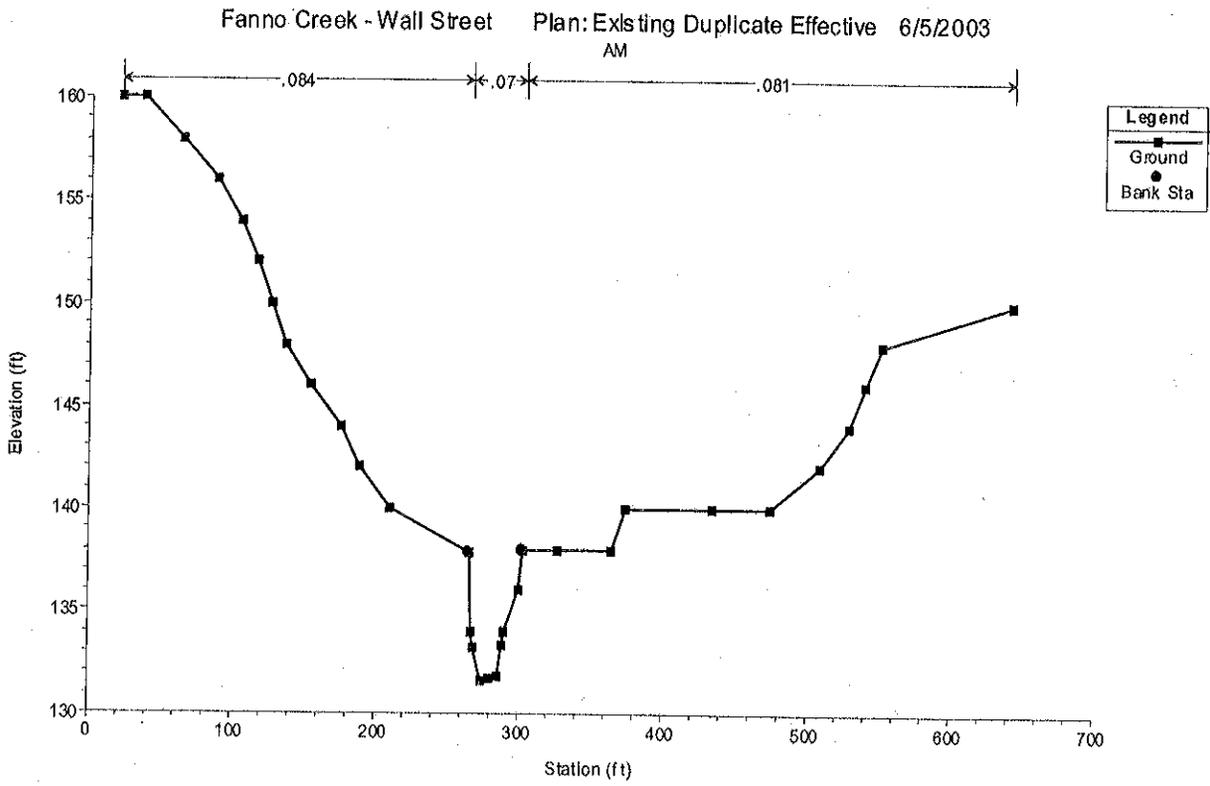
**FIGURE 3 – Cross Section Plots (Cont.)**



**FIGURE 3 – Cross Section Plots (Cont.)**

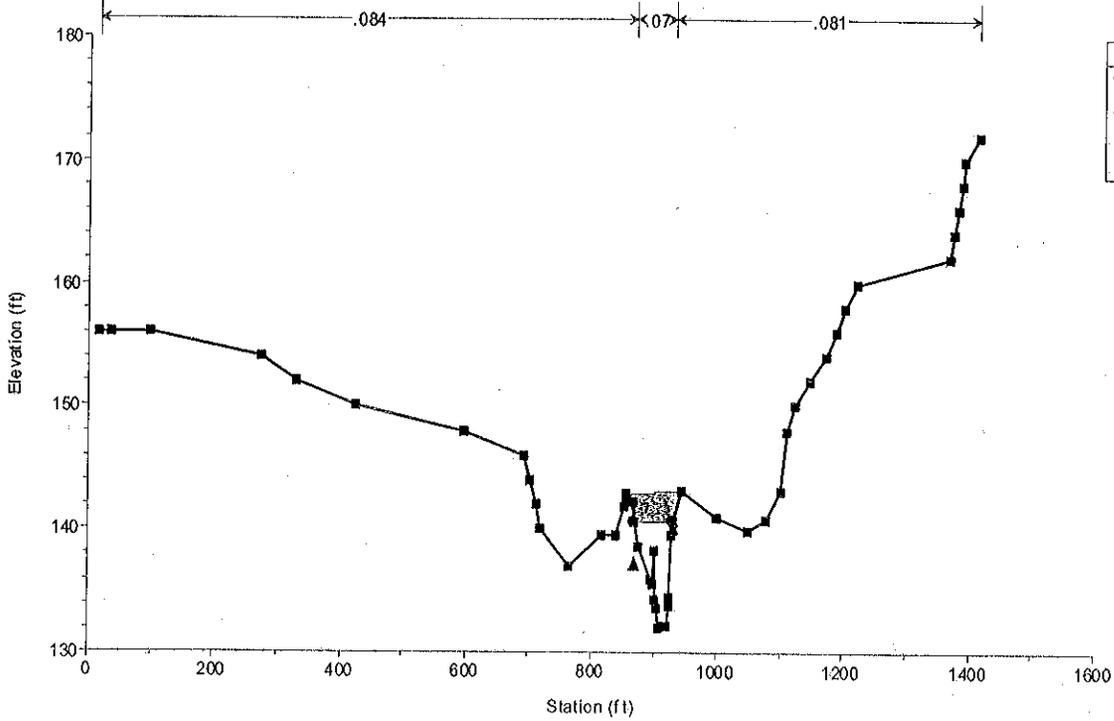


### FIGURE 3 – Cross Section Plots (Cont.)

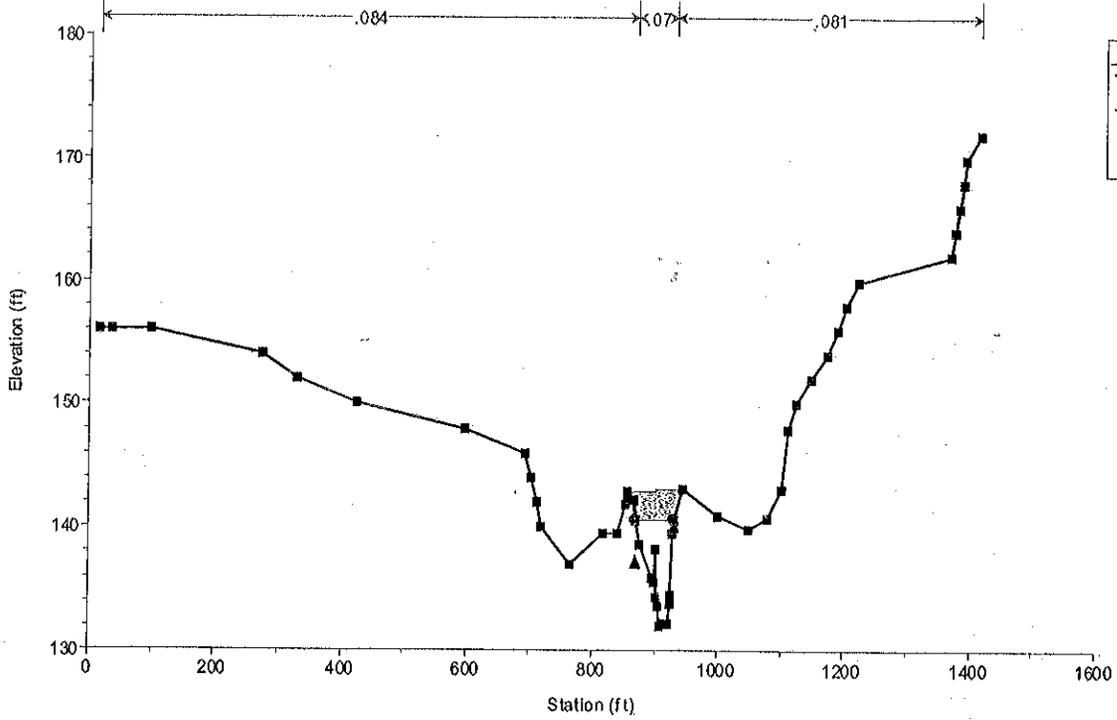


# FIGURE 3 – Cross Section Plots (Cont.)

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UPFPath - FC Park - Tigard

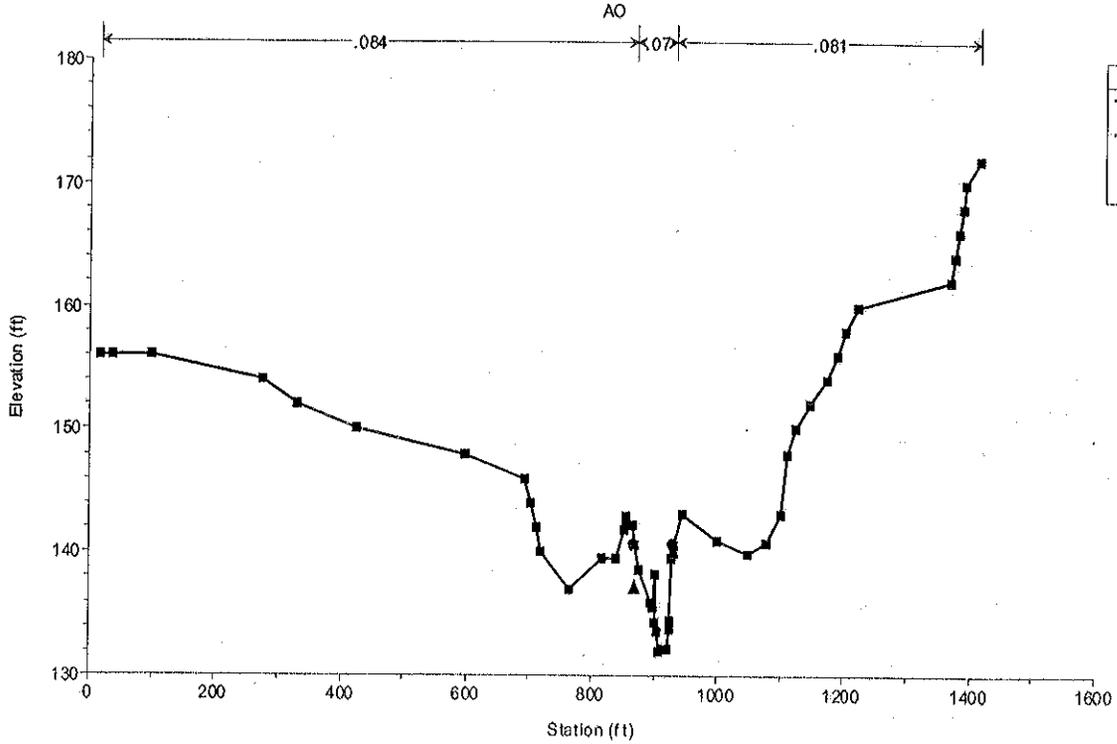


Fanno Creek - Wall Street Plan: Existing Duplicate Effective 6/5/2003  
UPFPath - FC Park - Tigard

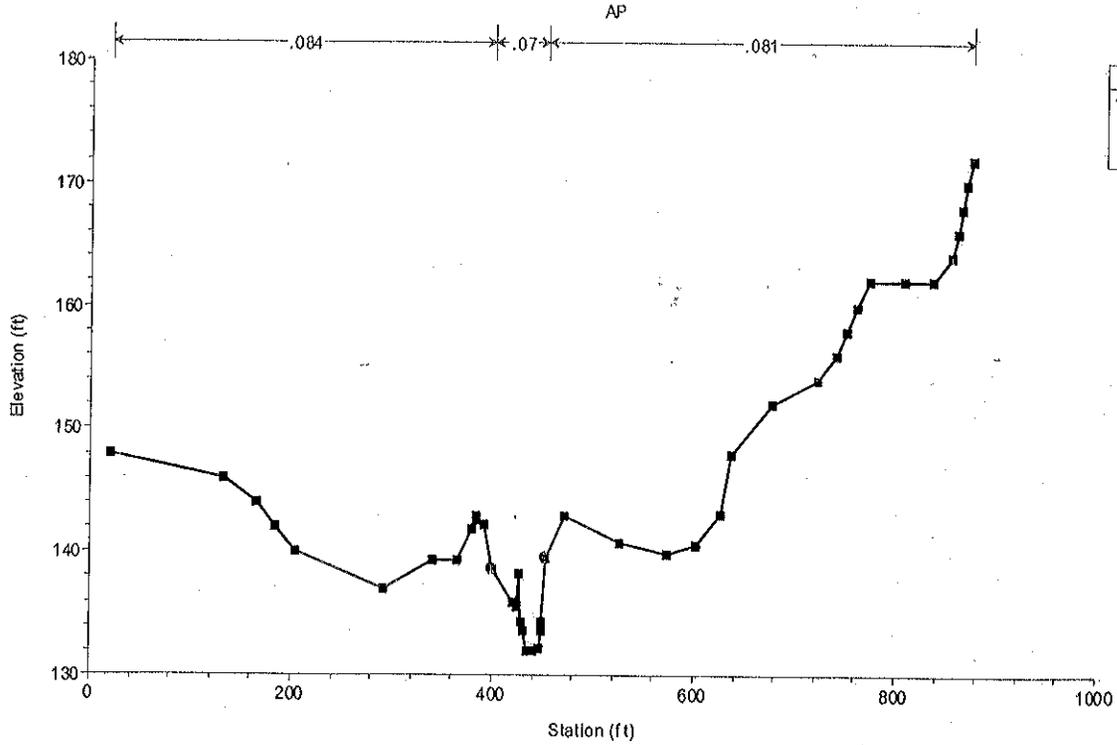


### FIGURE 3 – Cross Section Plots (Cont.)

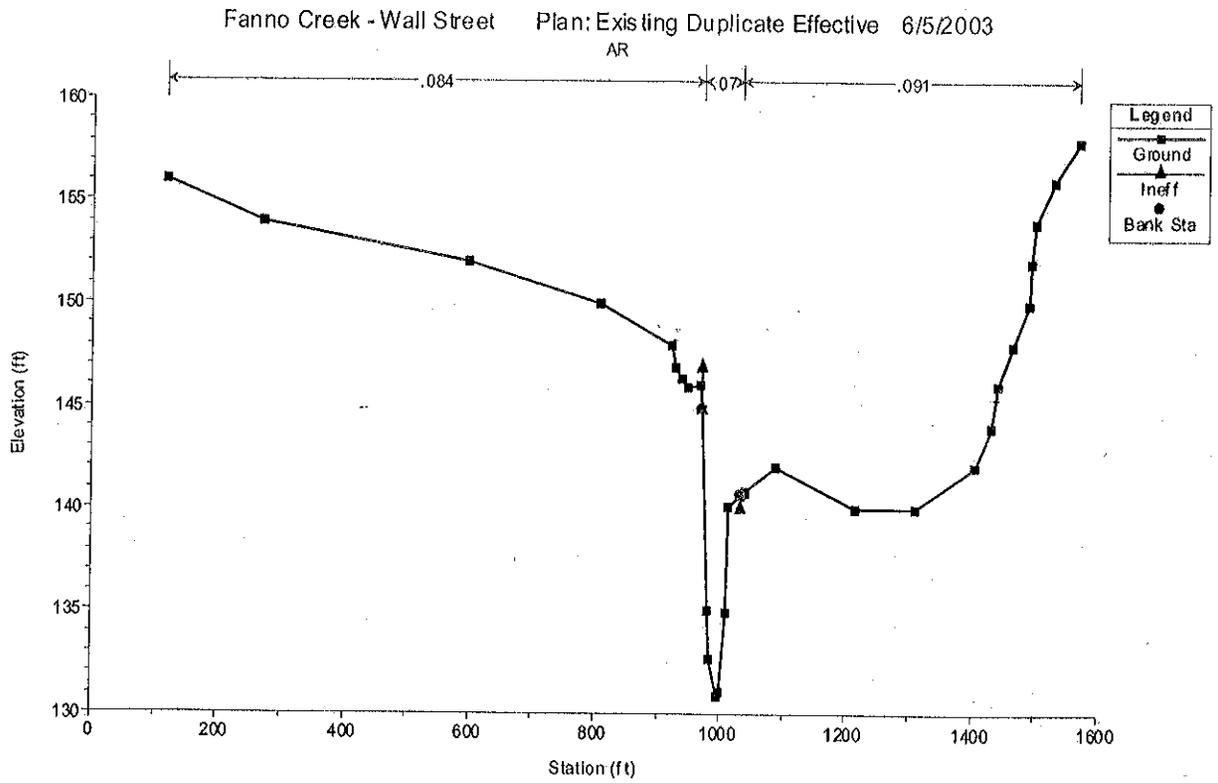
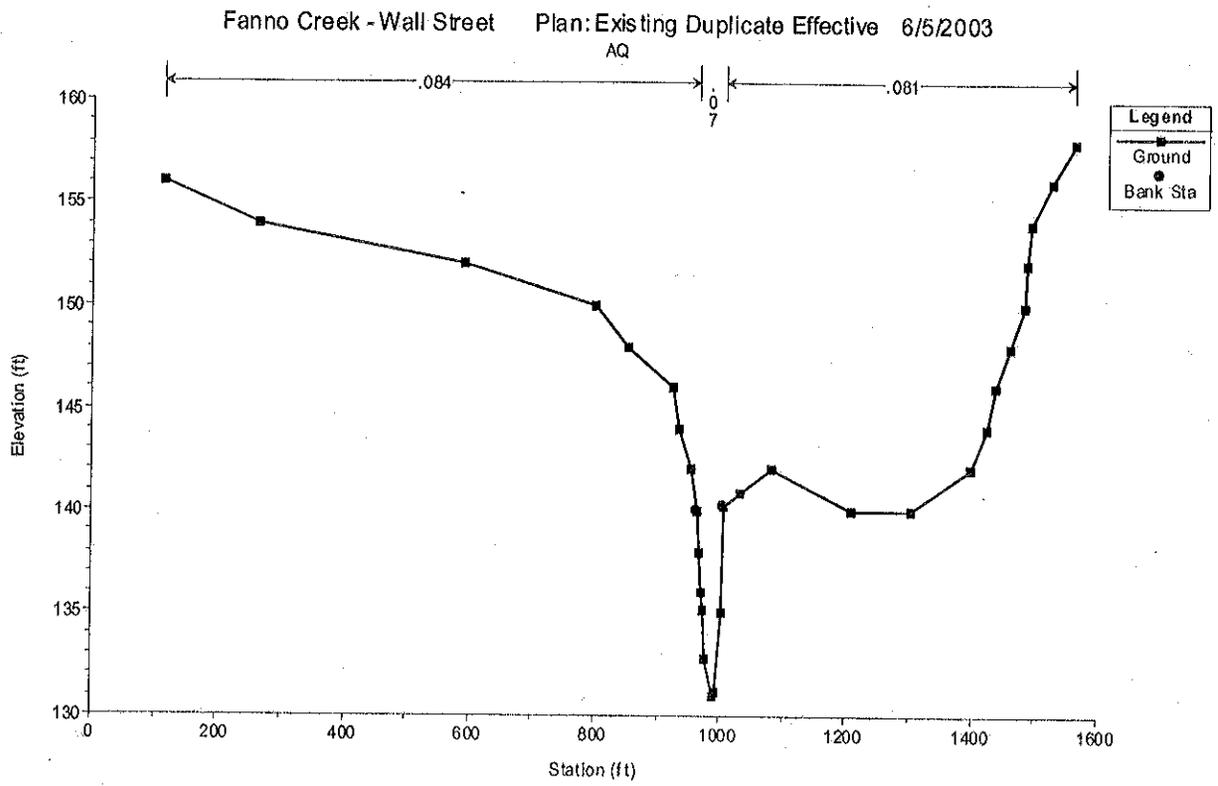
Fanno Creek - Wall Street Plan: Existing Duplicate Effective 6/5/2003



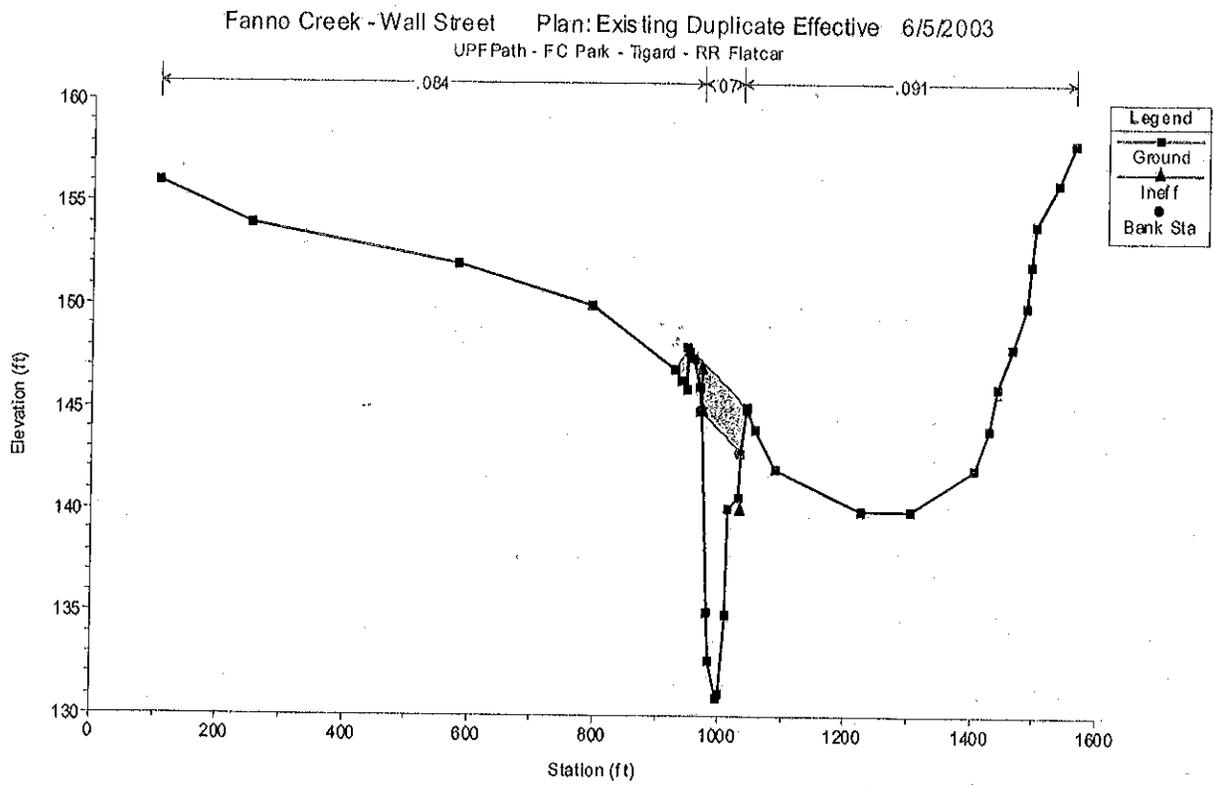
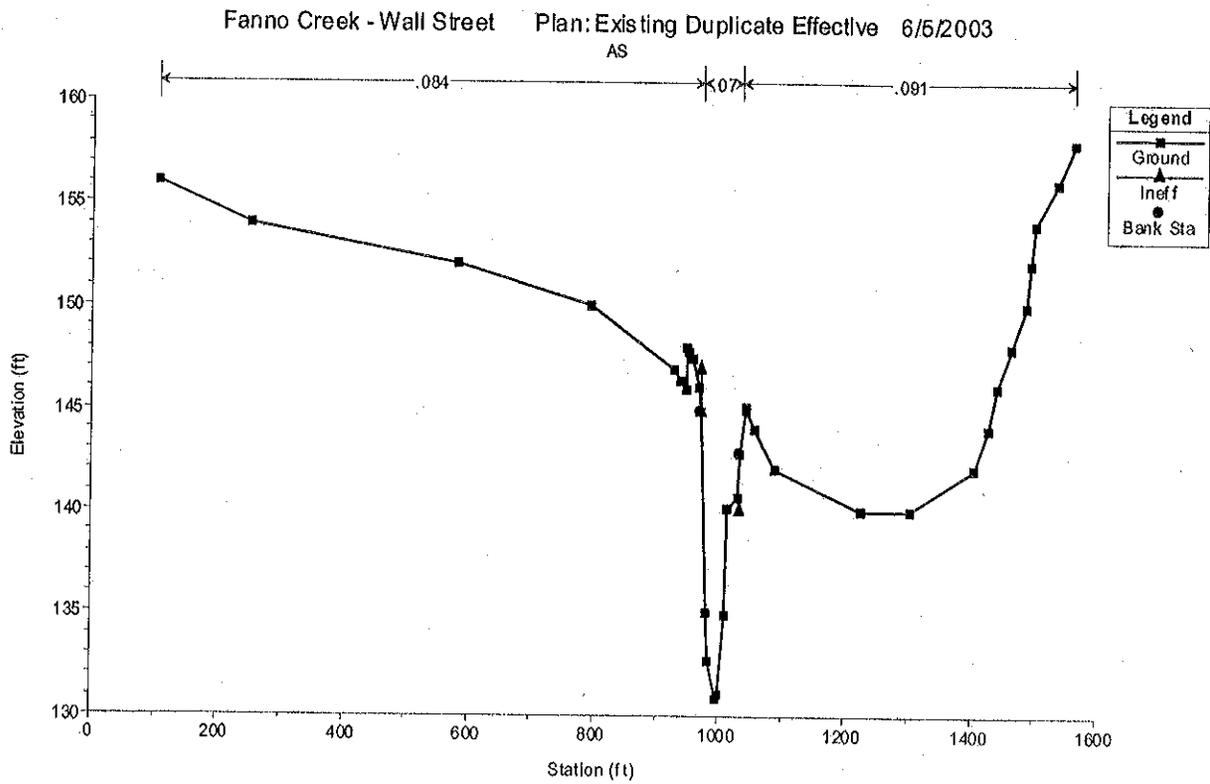
Fanno Creek - Wall Street Plan: Existing Duplicate Effective 6/5/2003



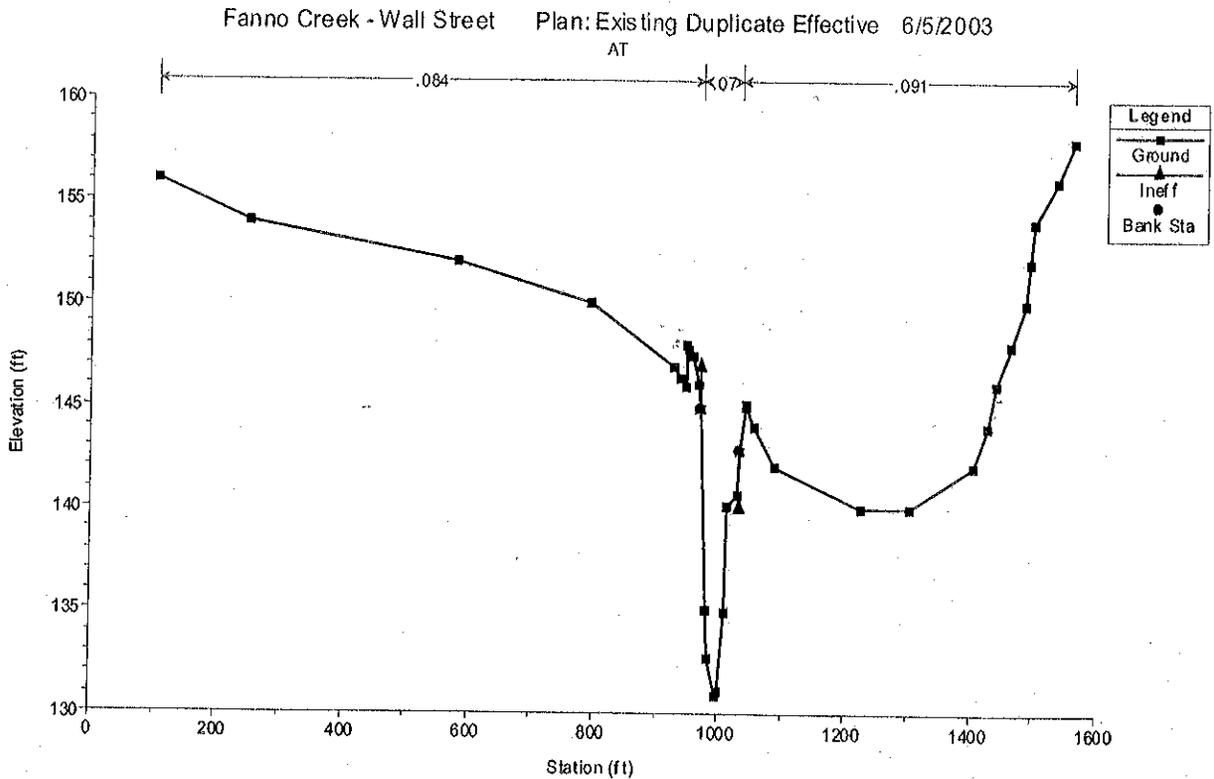
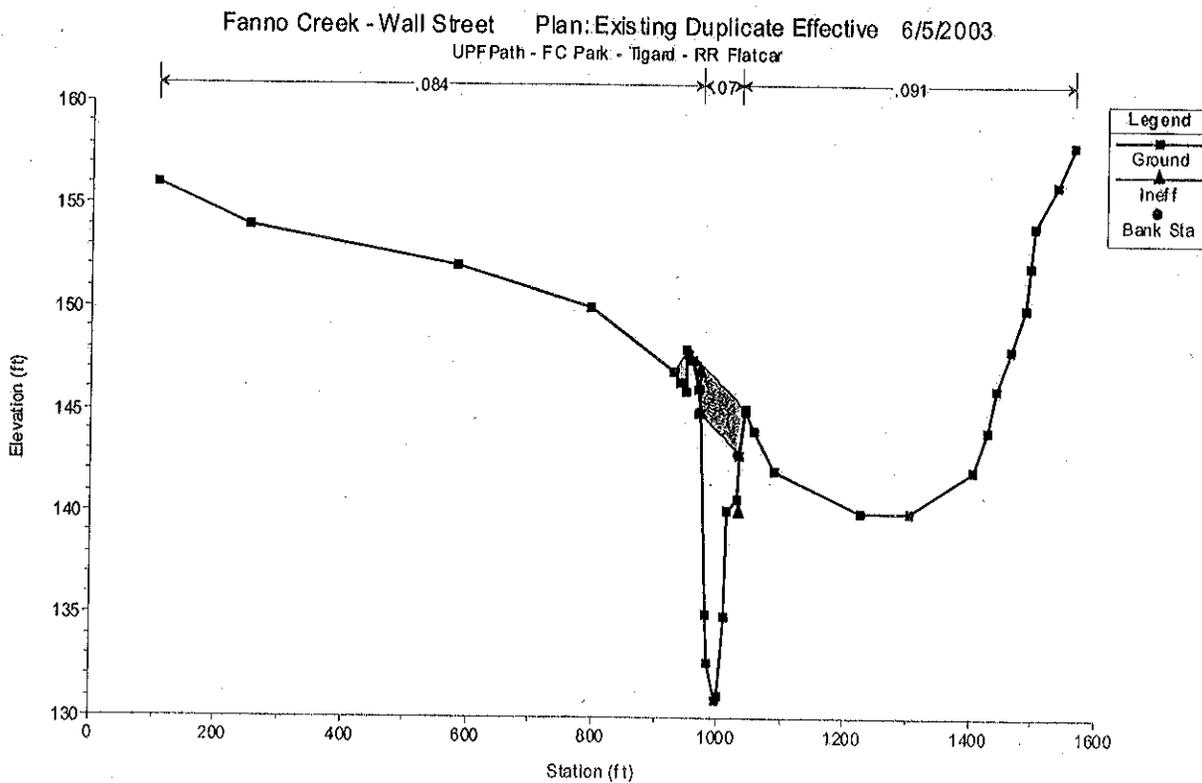
**FIGURE 3 – Cross Section Plots (Cont.)**



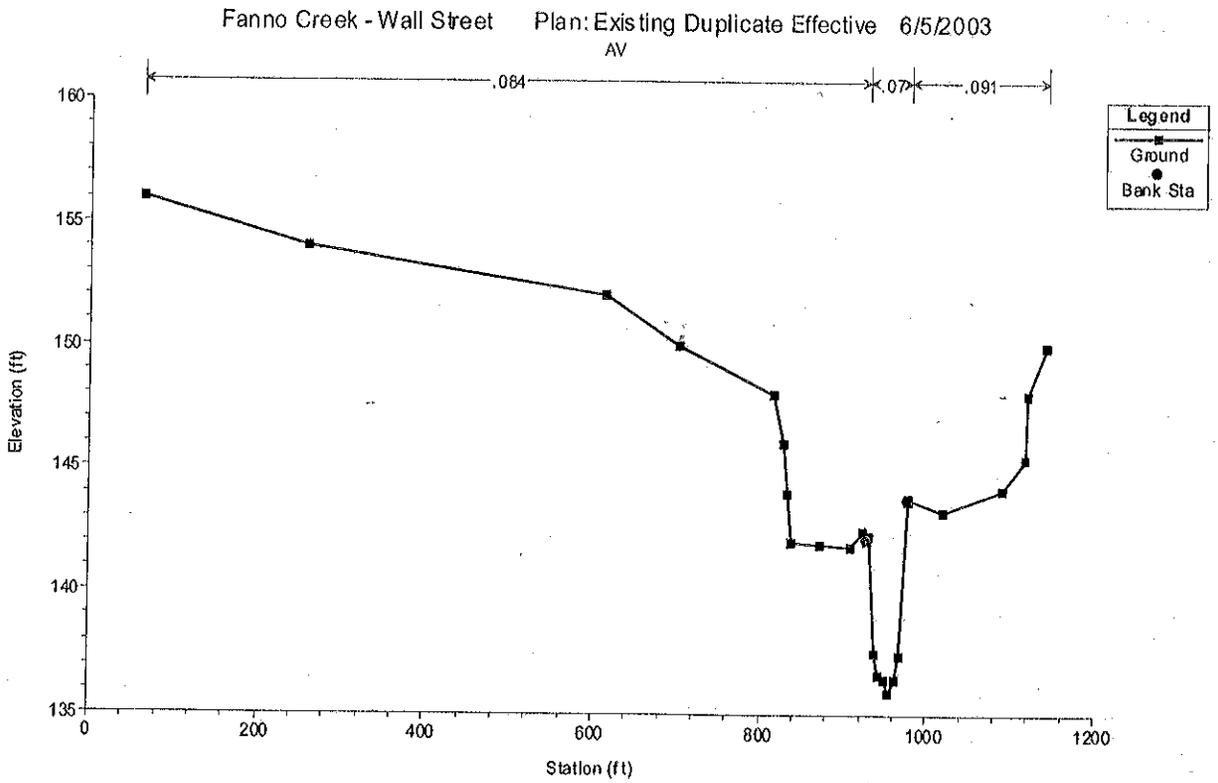
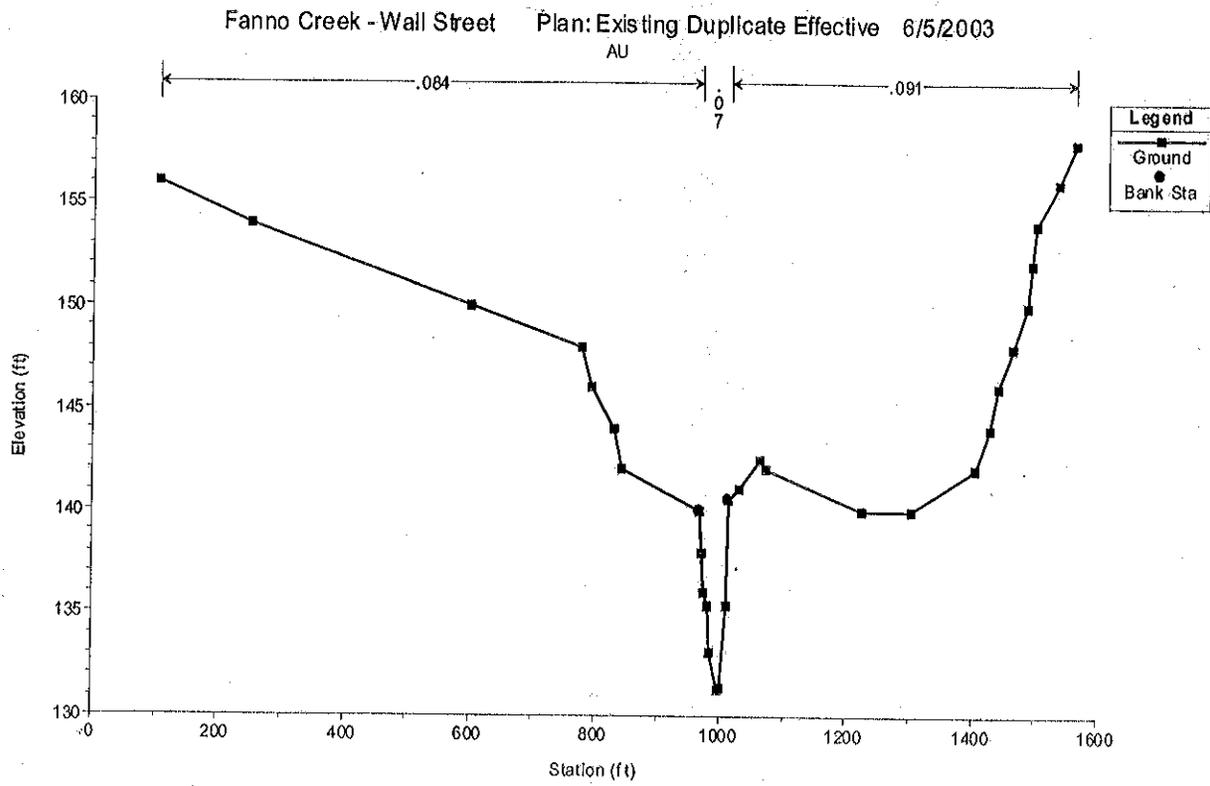
**FIGURE 3 – Cross Section Plots (Cont.)**



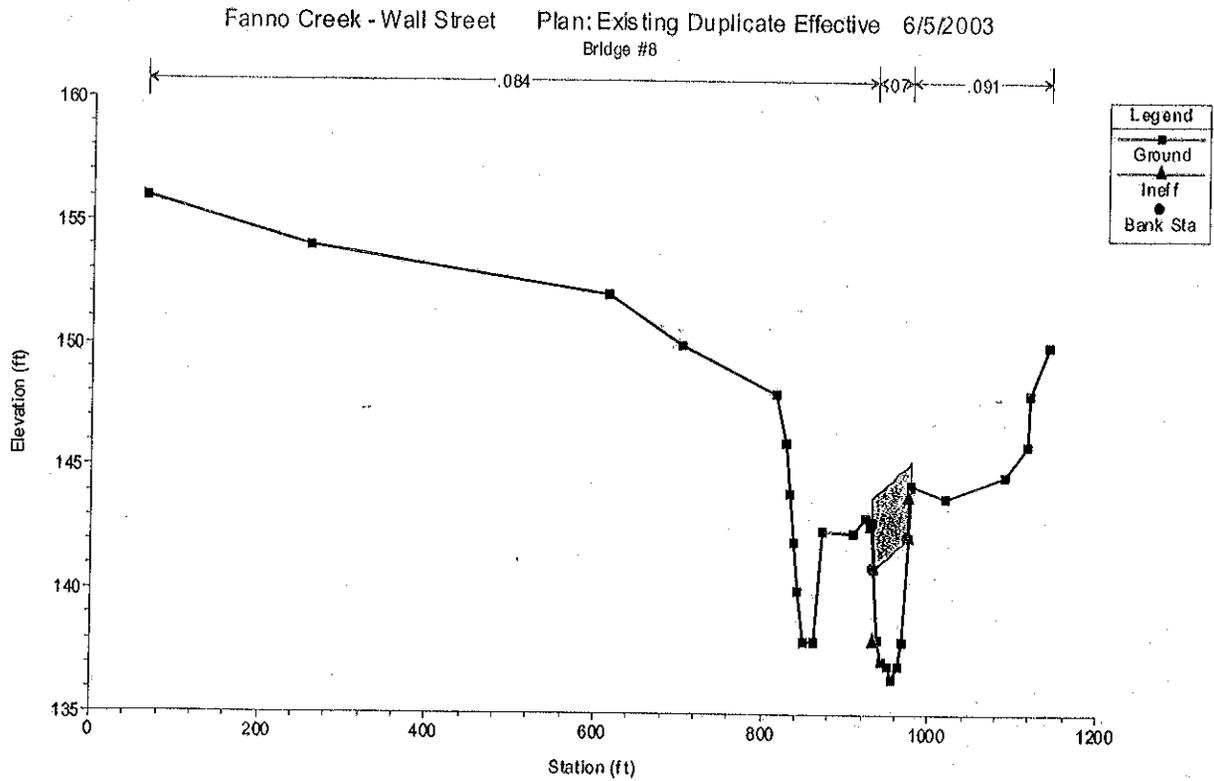
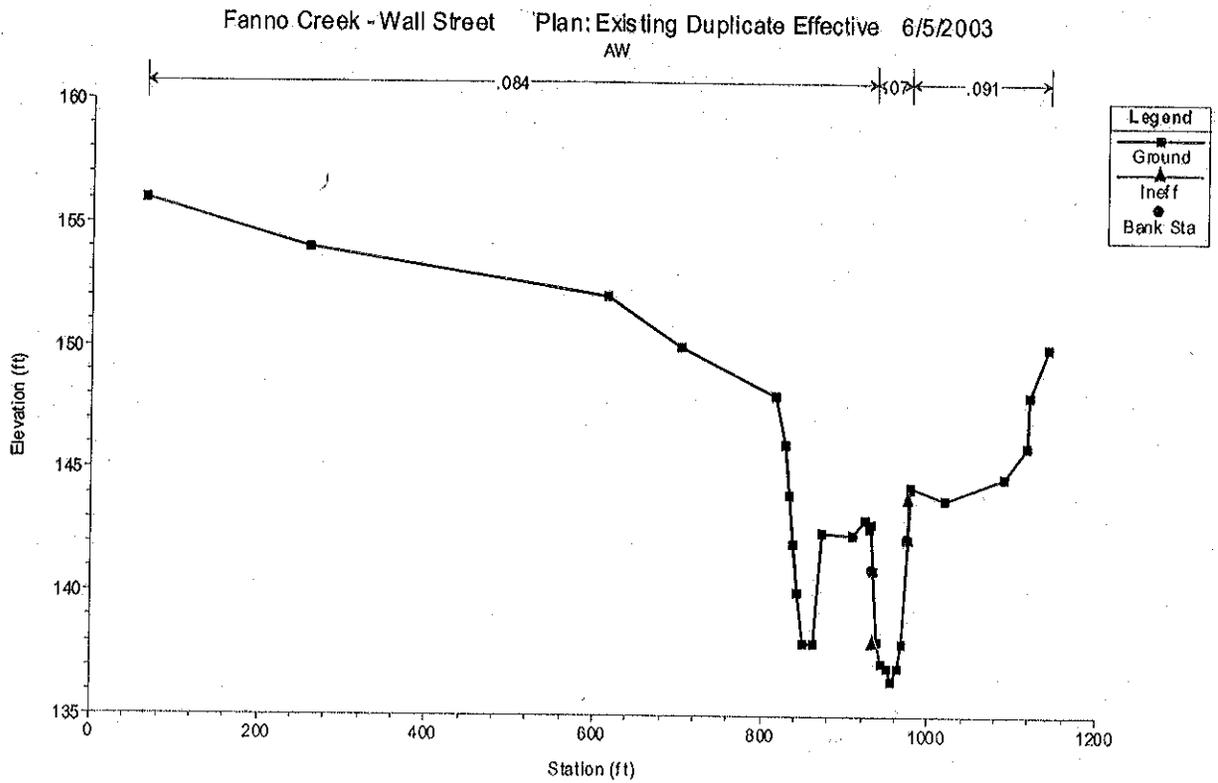
**FIGURE 3 – Cross Section Plots (Cont.)**



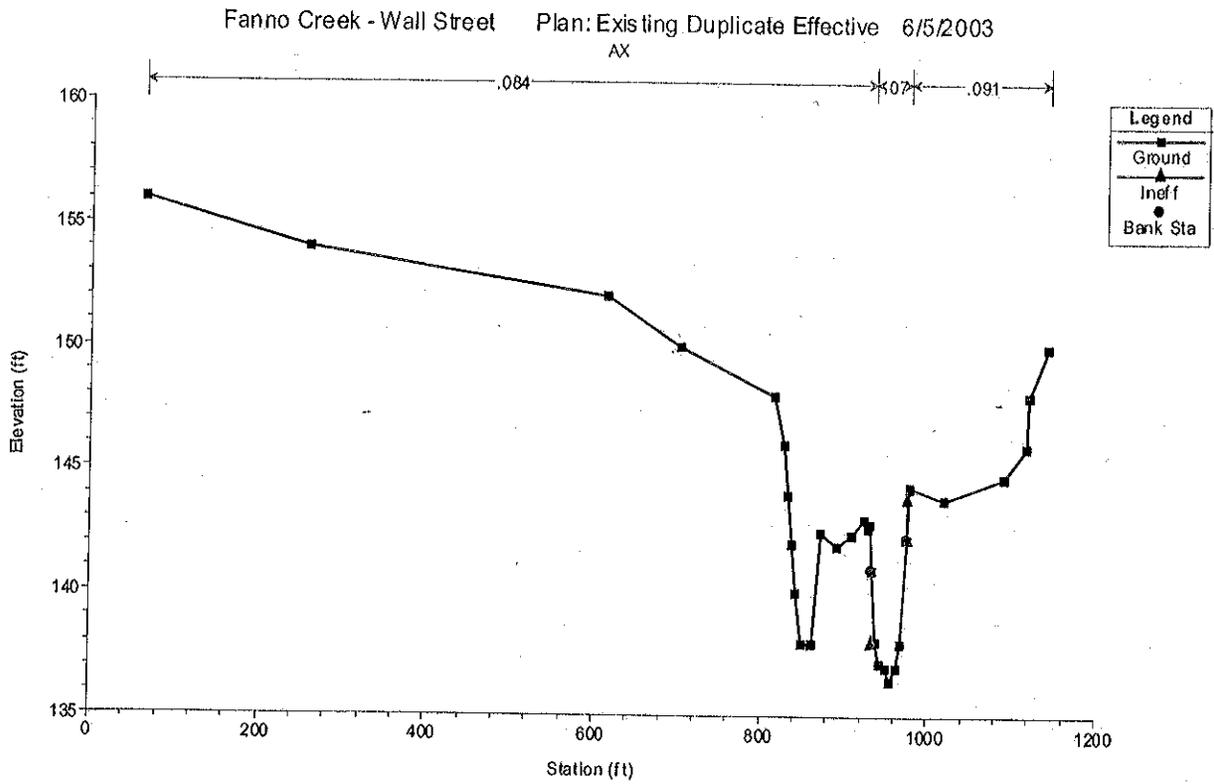
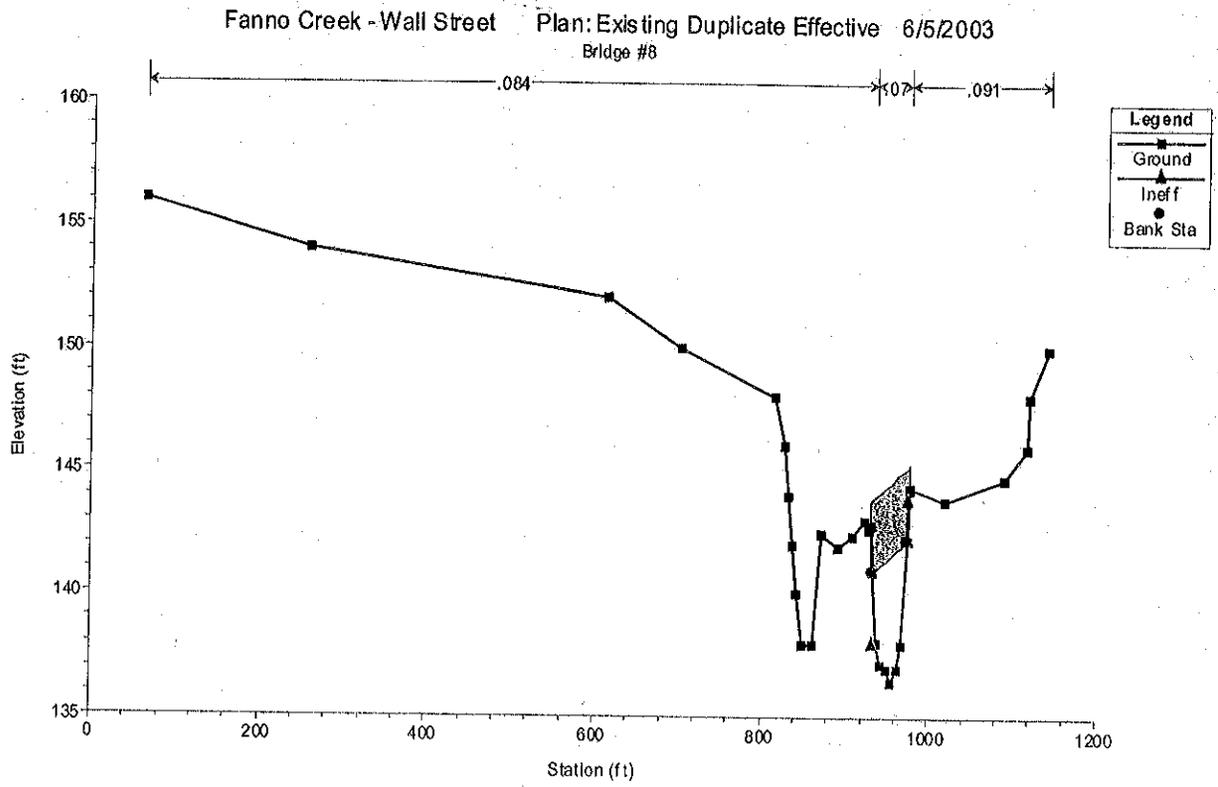
### FIGURE 3 – Cross Section Plots (Cont.)



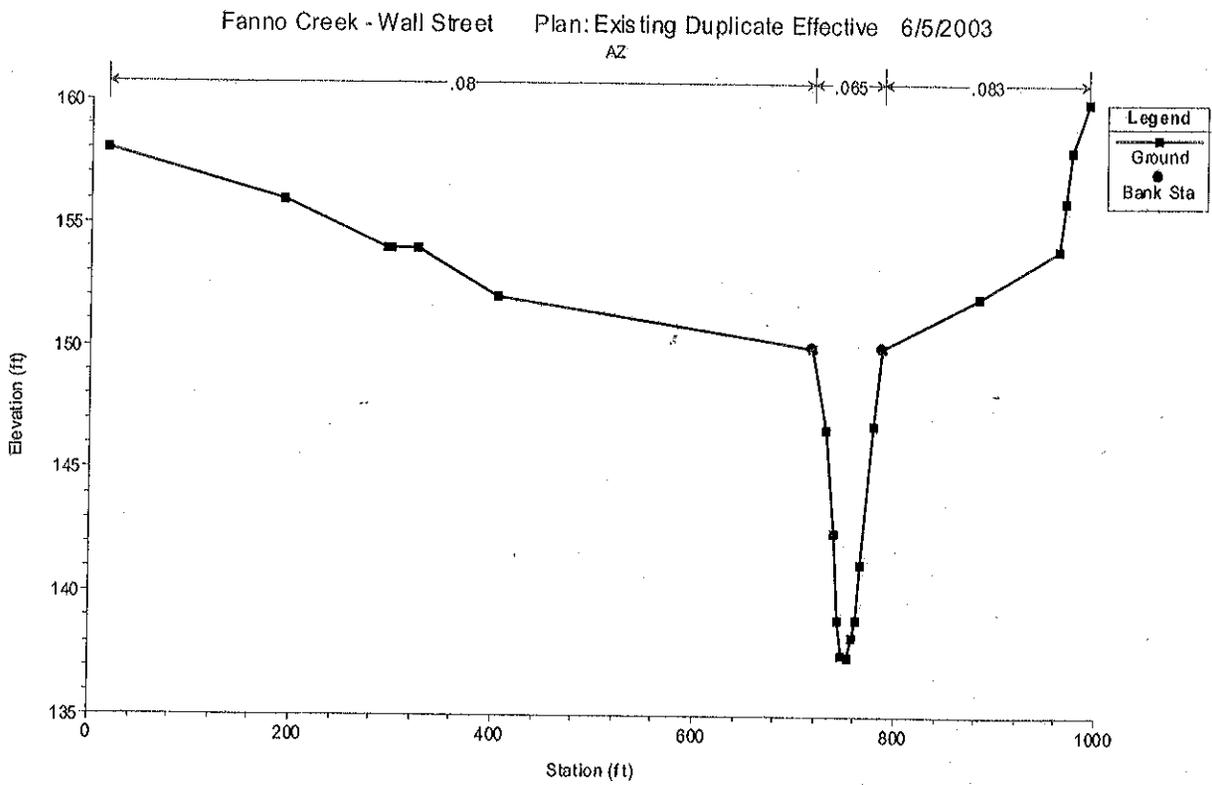
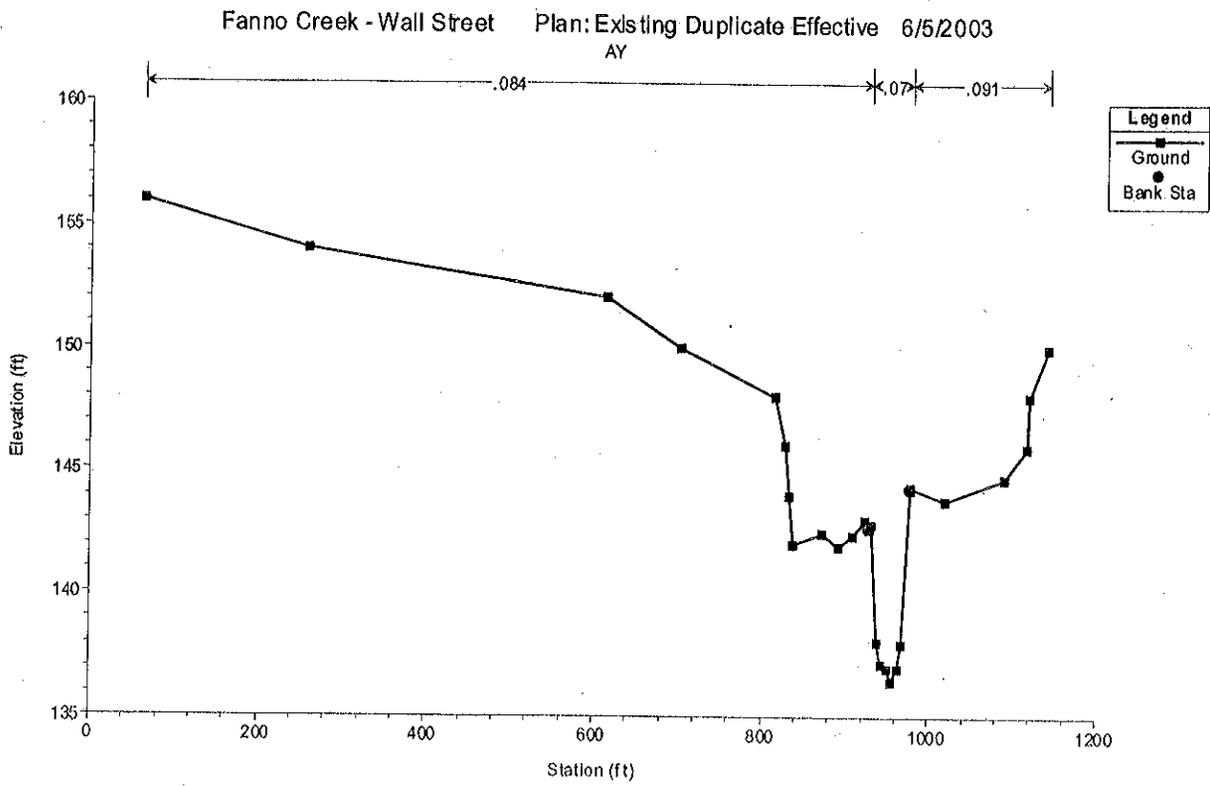
**FIGURE 3 – Cross Section Plots (Cont.)**



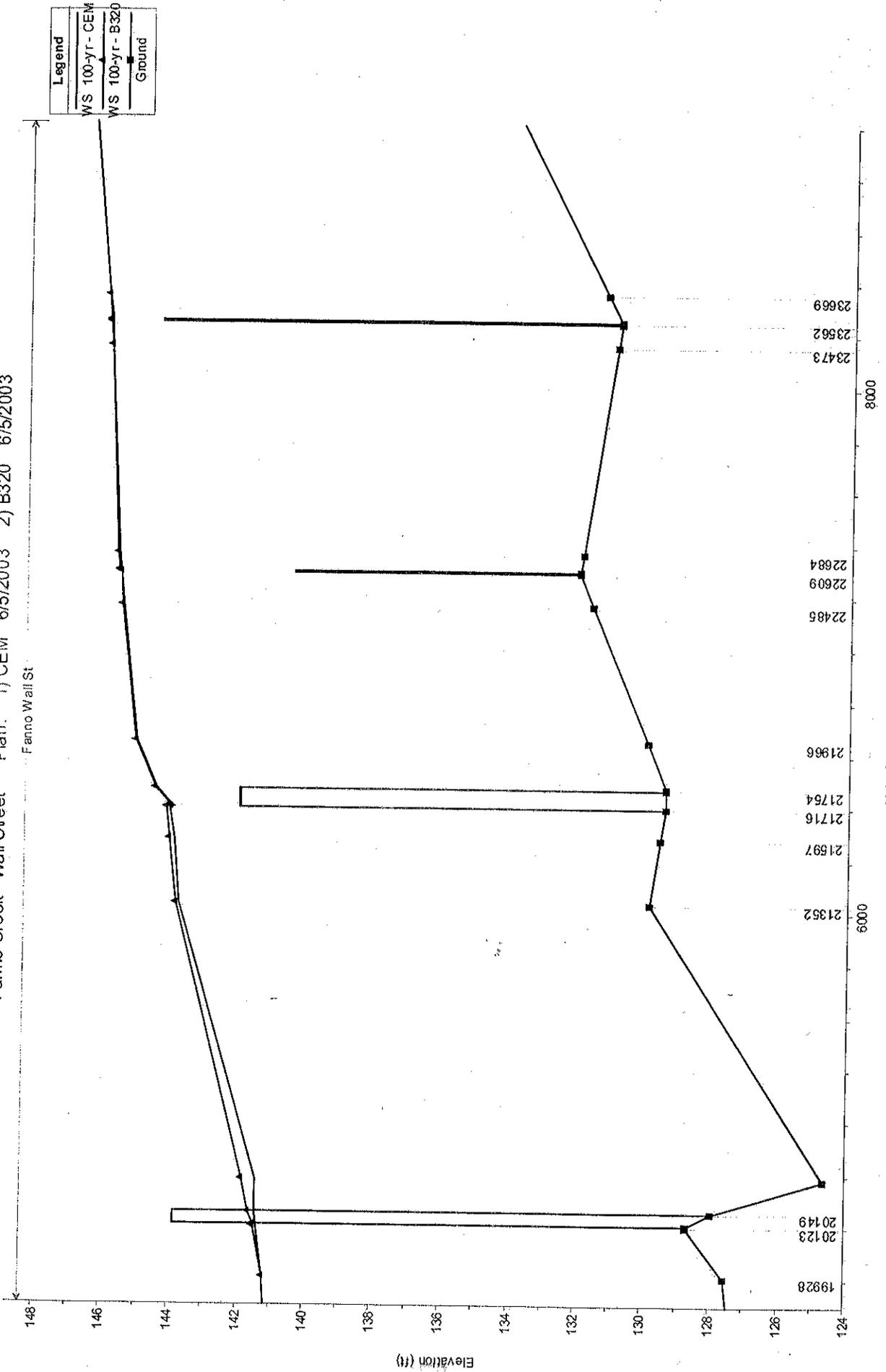
**FIGURE 3 – Cross Section Plots (Cont.)**



**FIGURE 3 – Cross Section Plots (Cont.)**



Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) B320 6/5/2003  
 Fanno Wall St



**FIGURE 4 - 100-yr Water Surface Profile for Plan3.**

Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) B240 6/5/2003

Fanno Wall St

Legend	
—	WS 100-yr - CEM
—	WS 100-yr - B240
—	Ground

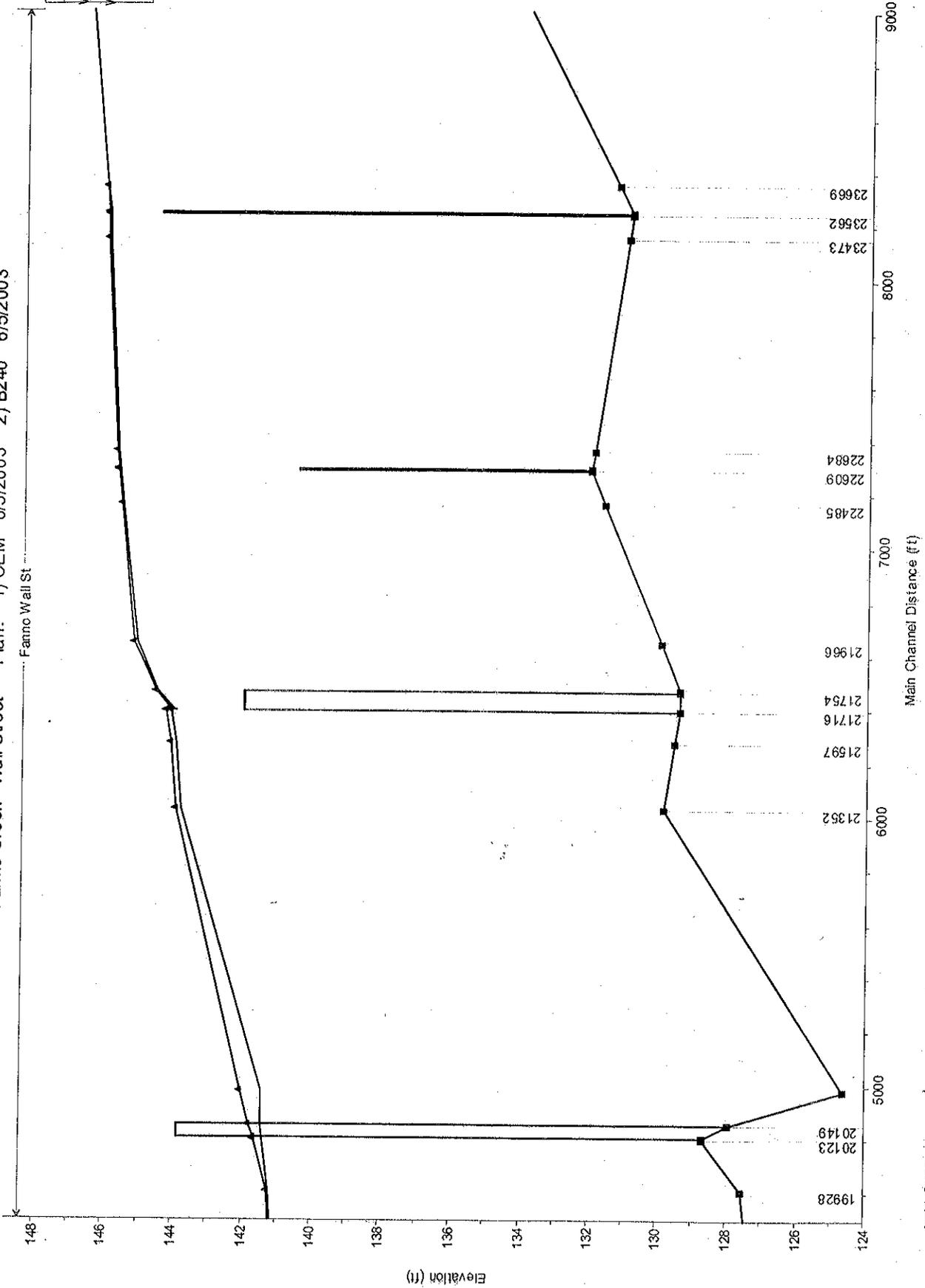


FIGURE 5 - 100-yr Water Surface Profile for Plan4.

Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) B160 6/5/2003

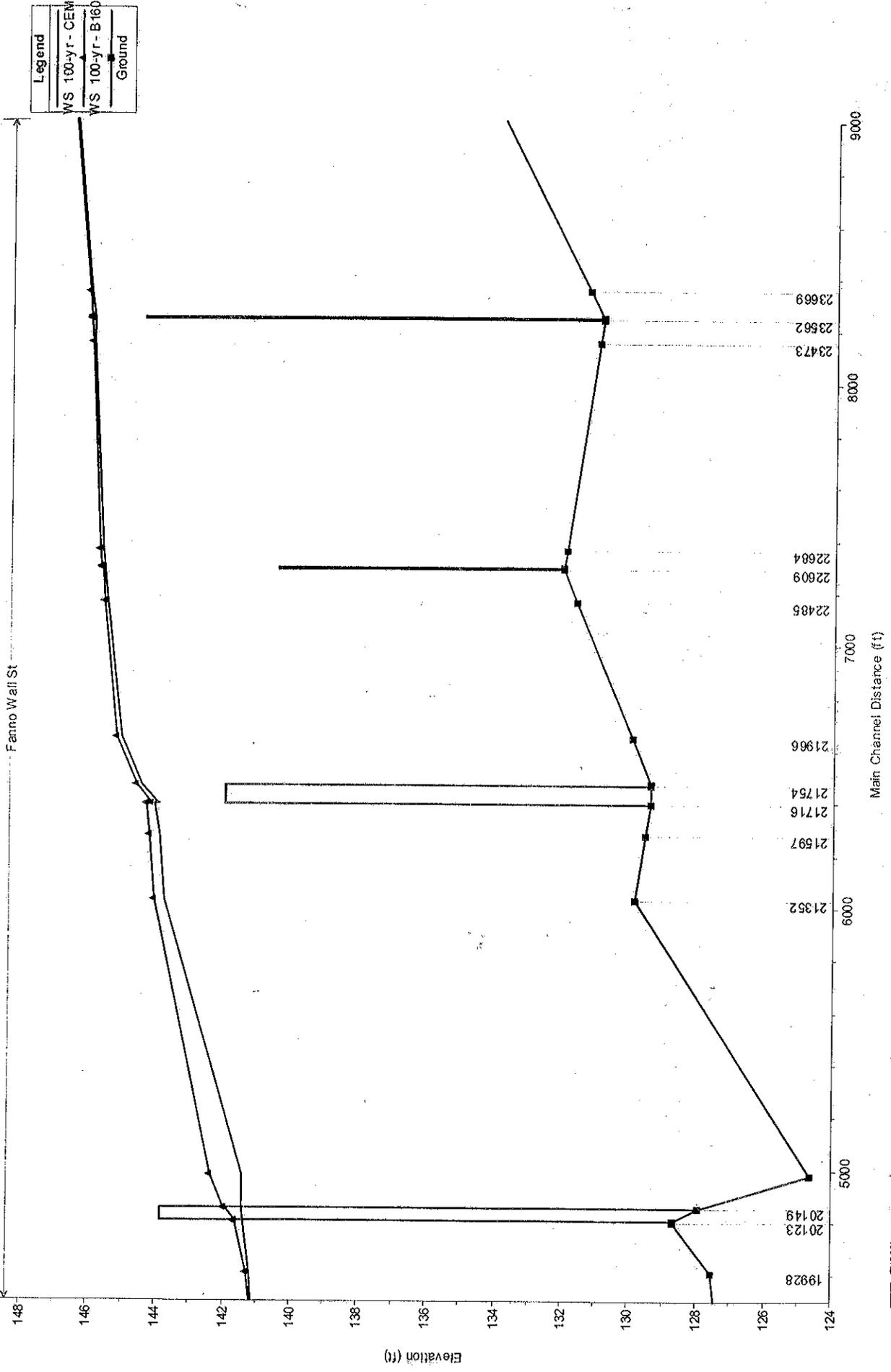


FIGURE 6 - 100-yr Water Surface Profile for Plan5.

Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) Plan 5b 6/6/2003

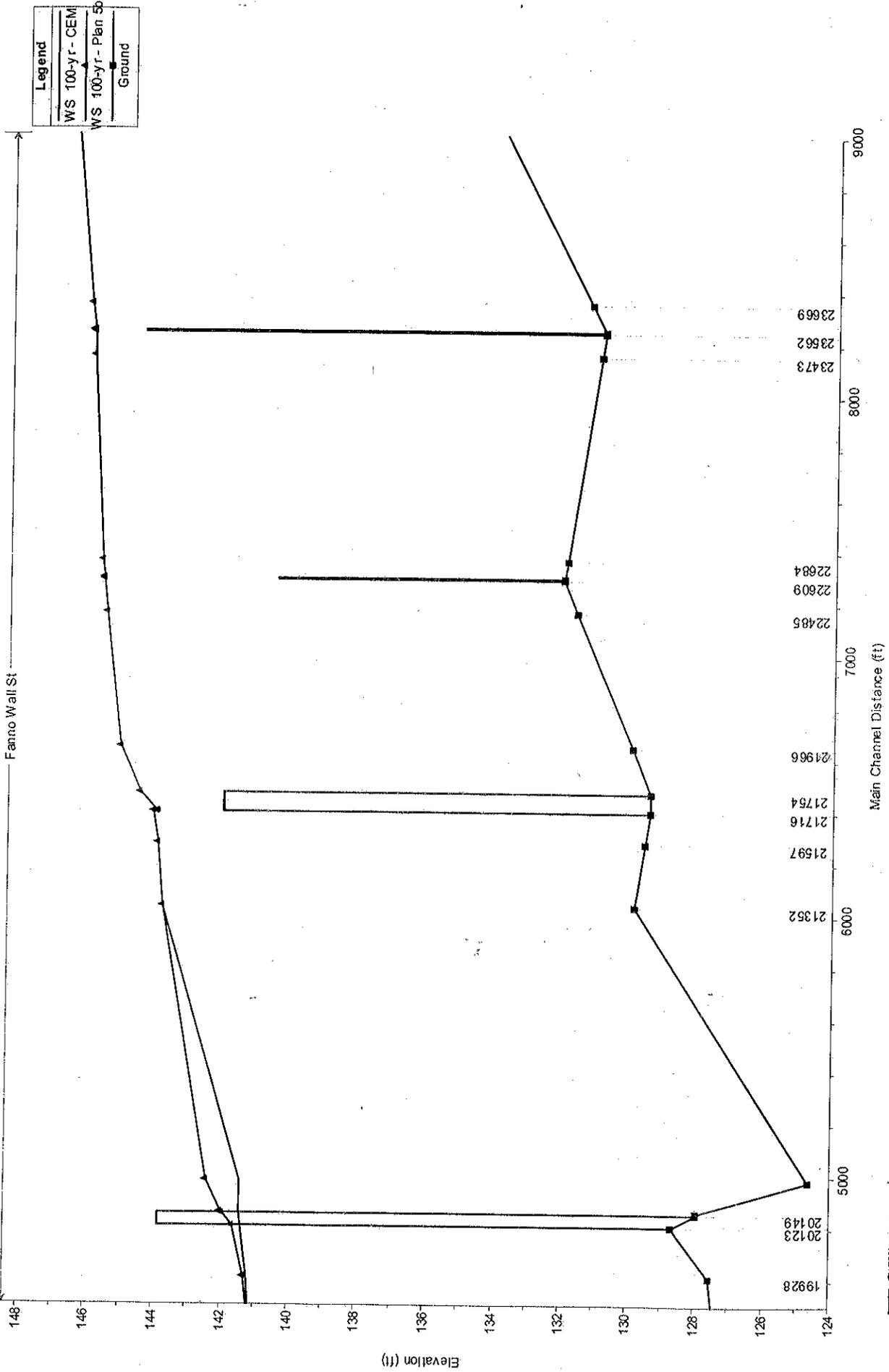


FIGURE 7 - 100-yr Water Surface Profile for Plan 5b.

Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) B320 6/5/2003

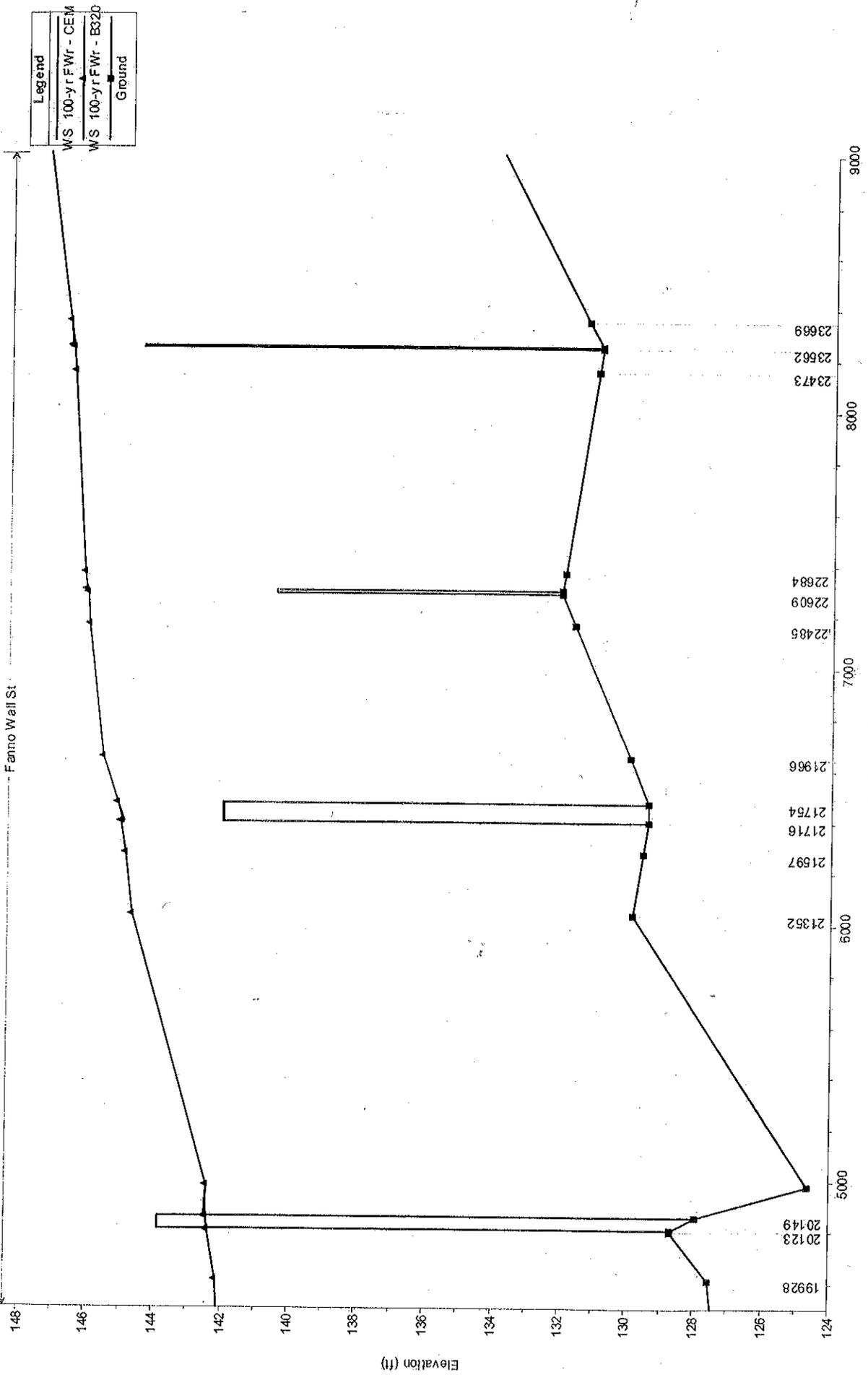


FIGURE 8 - Floodway Water Surface Profile for Plan3.

Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) B240 6/5/2003

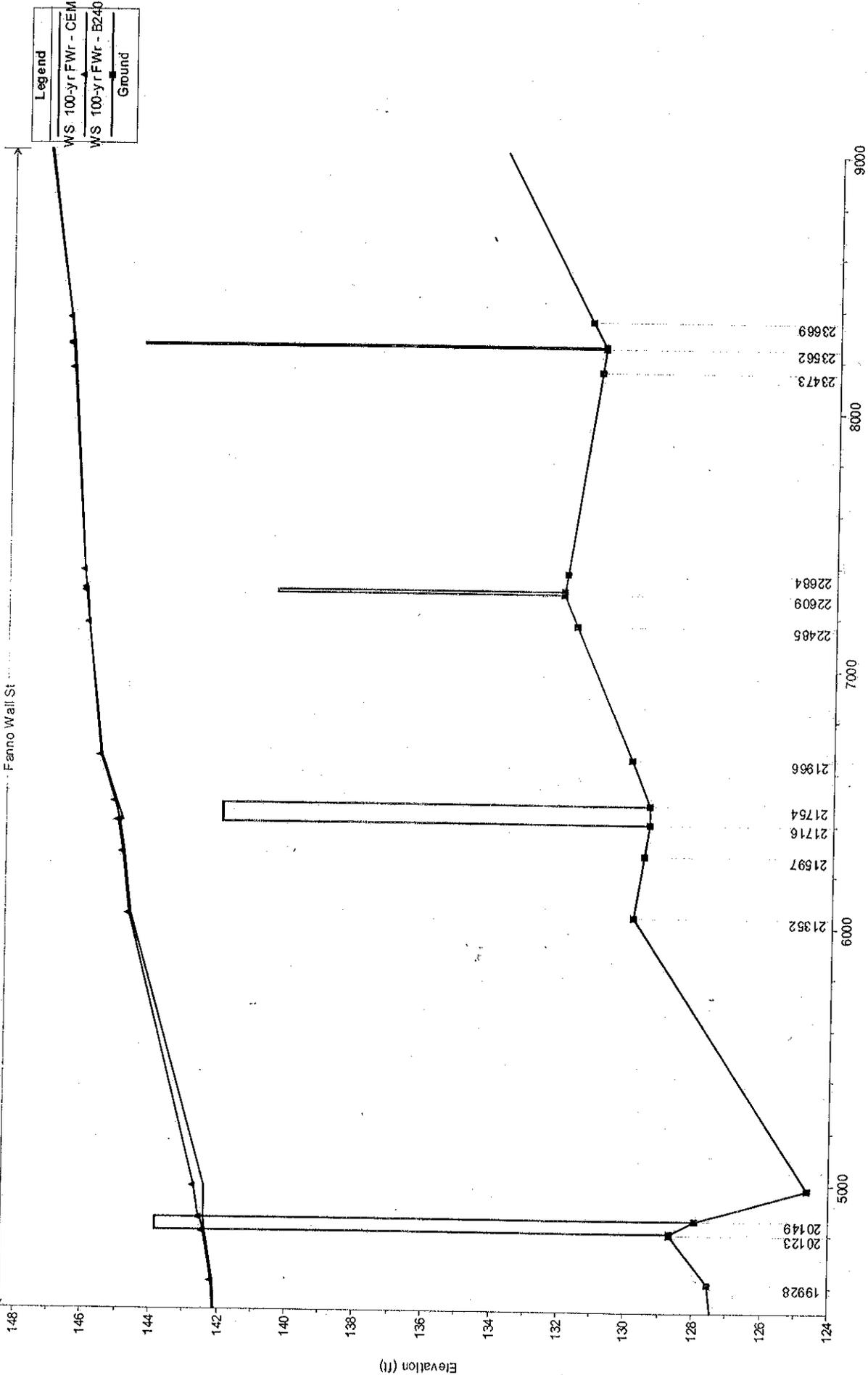


FIGURE 9 - Floodway Water Surface Profile for Plan 4.

Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) B160 6/5/2003

Fanno Wall St

Legend	
—	WS 100-yr FWR - CEM
—	WS 100-yr FWR - B160
—	Ground

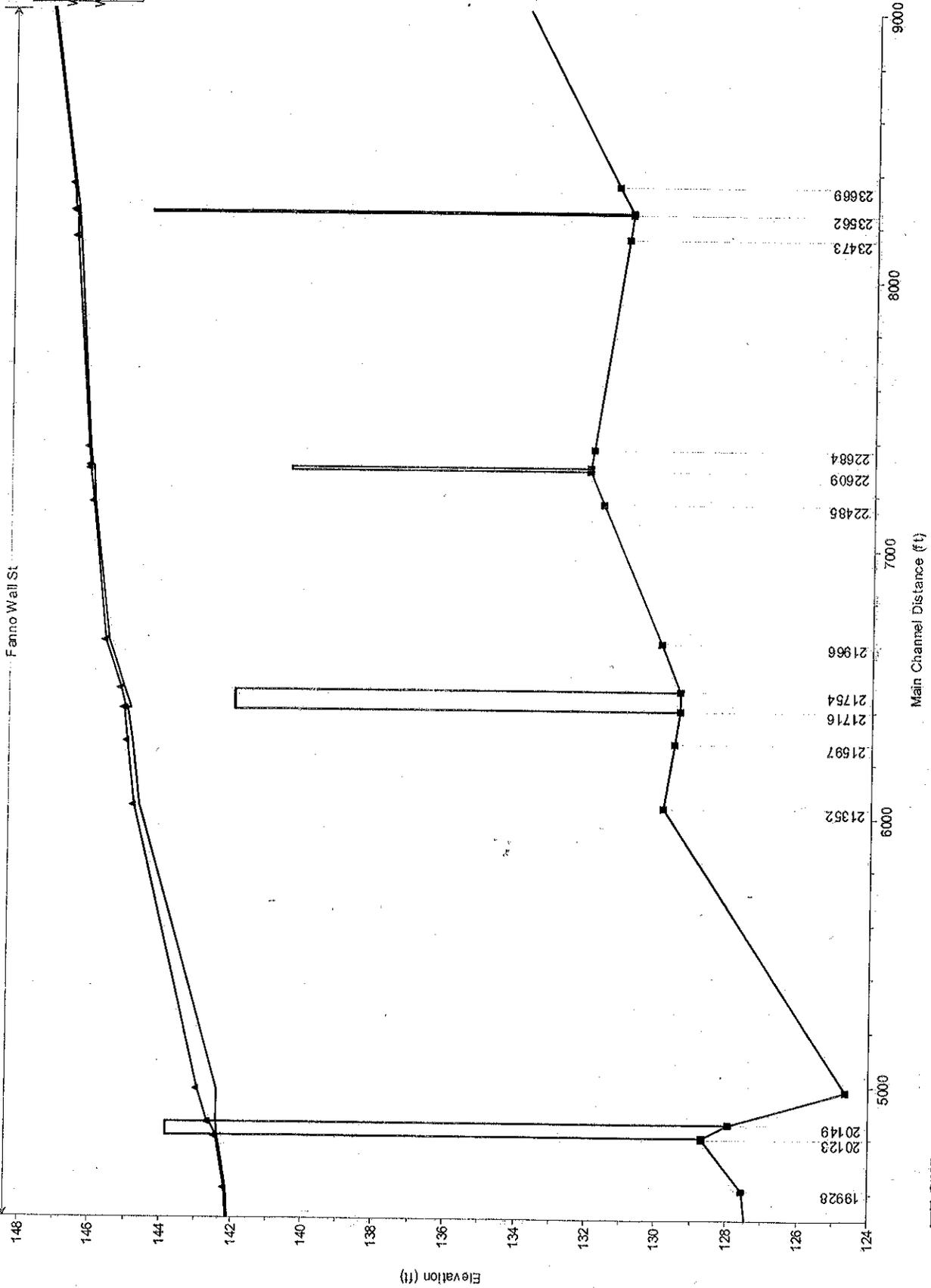


FIGURE 10 – Floodway Water Surface Profile for Plan5.

Fanno Creek - Wall Street Plan: 1) CEM 6/5/2003 2) Plan 5b 6/6/2003

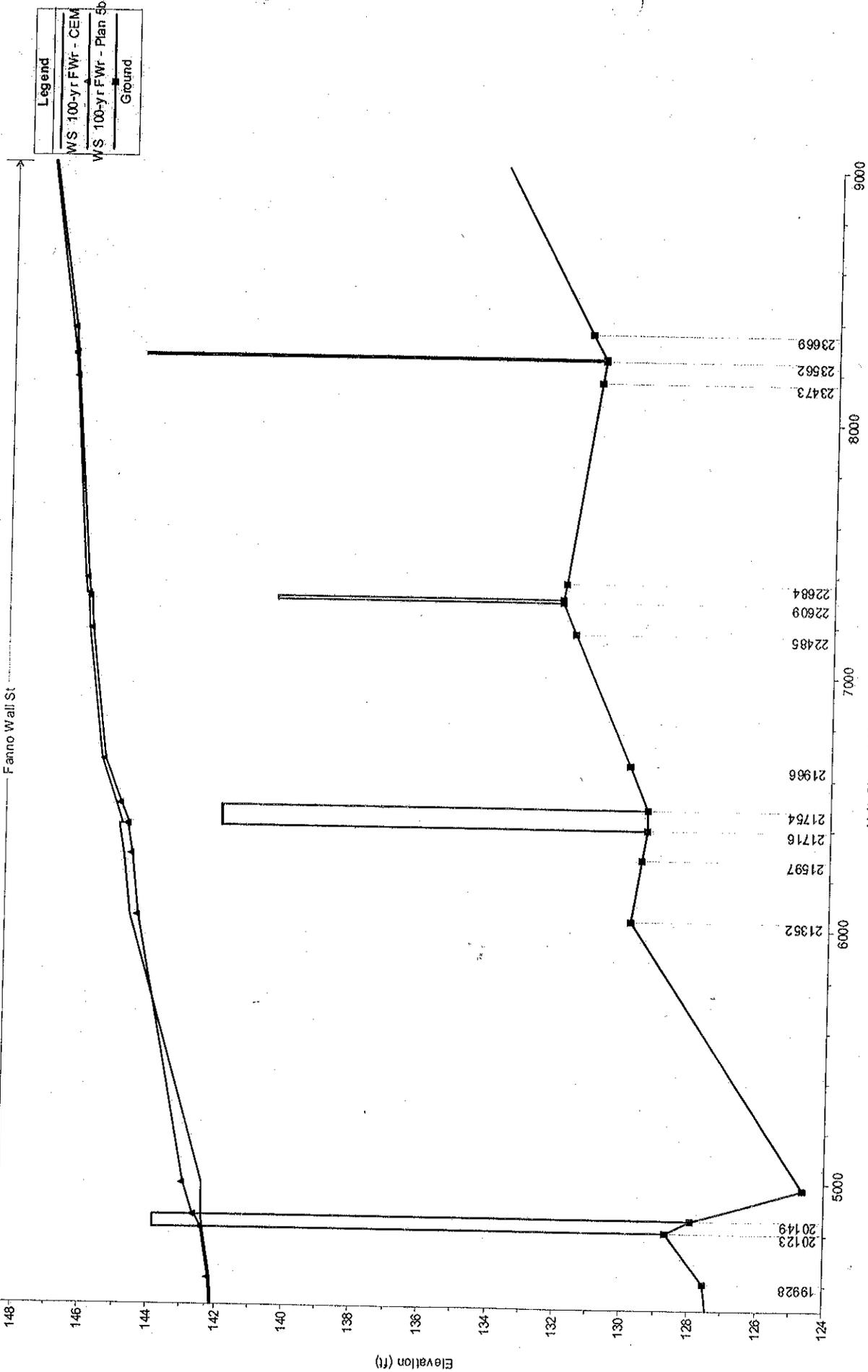


FIGURE 11 - Floodway Water Surface Profile for Plan 5b.

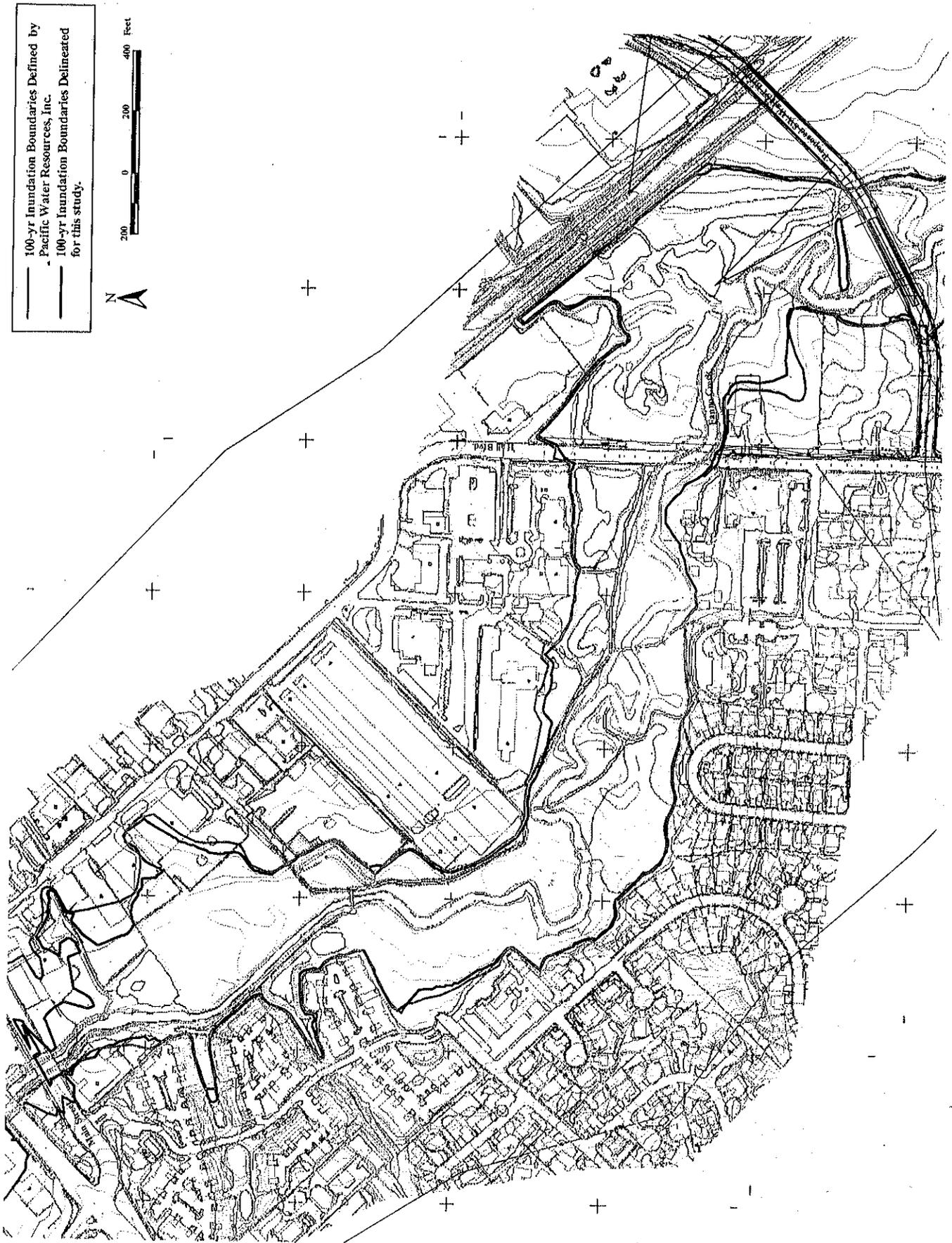


FIGURE 12 - Comparison of 100-year Inundation Boundaries.



FIGURE 13 – 100-year Inundation Boundaries for Plan 5.

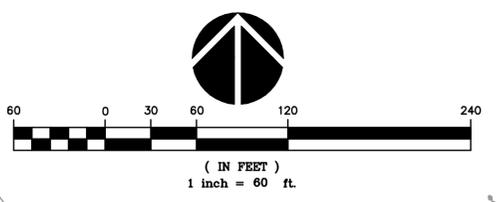
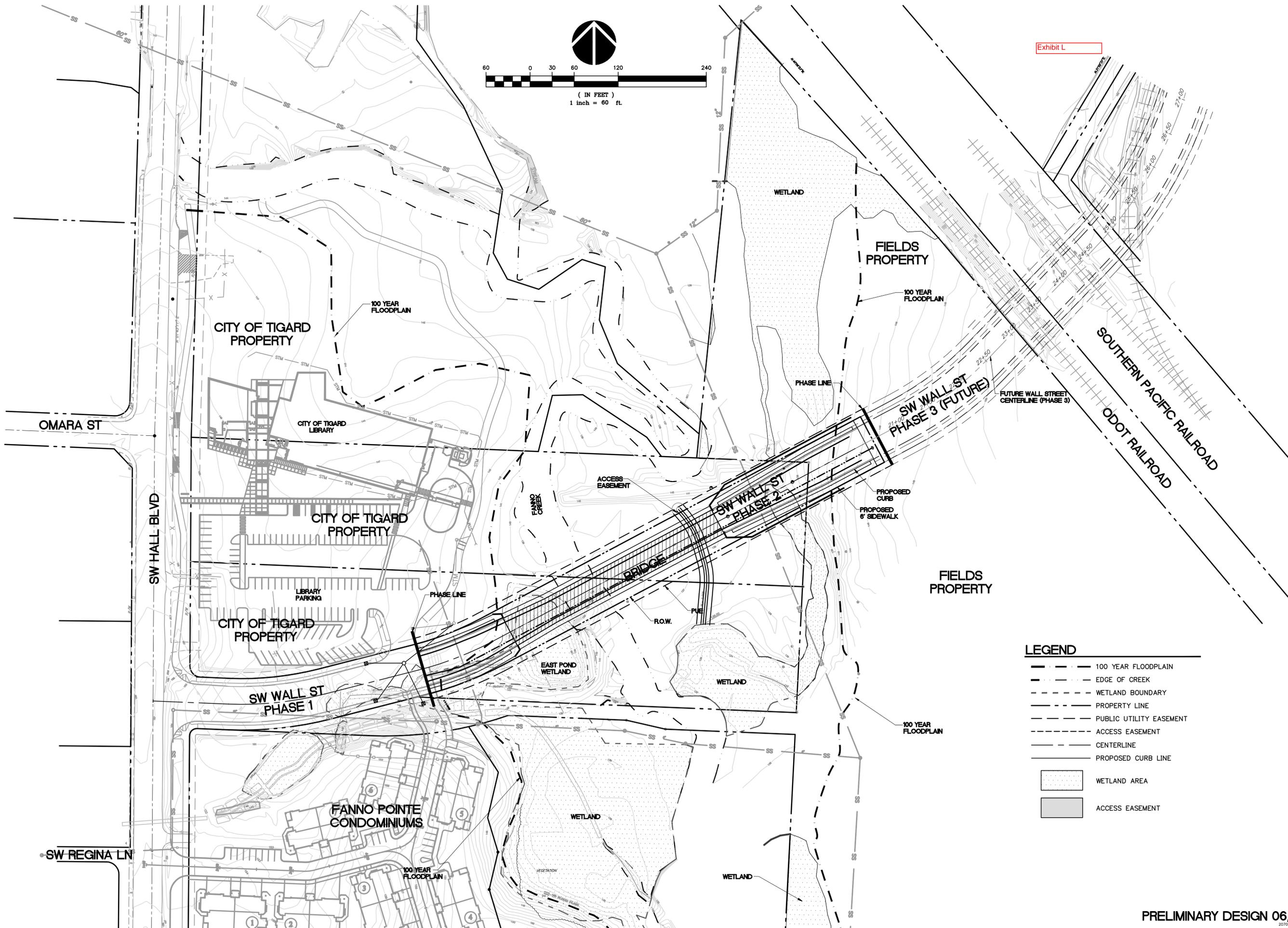


Exhibit L

**GROUP MACKENZIE**  
 Architecture  
 Interior Design  
 Land Use Planning  
 Civil Engineering  
 Structural Engineering  
 Transportation Planning  
 Landscape Architecture  
 Vancouver WA 360.696.7879  
 Portland OR 503.224.8660  
 Seattle WA 206.749.9883

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
**FIELDS PROPERTY**  
**WALL STREET EXTENSION PHASE 2**

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REVISIONS:

REVISION NO.	REVISIONS	REVISION DELTA	REVISION CLOSING DATE

SHEET TITLE:  
**WALL STREET SITE PLAN**

DRAWN BY:  
 CHECKED BY:  
 SHEET:

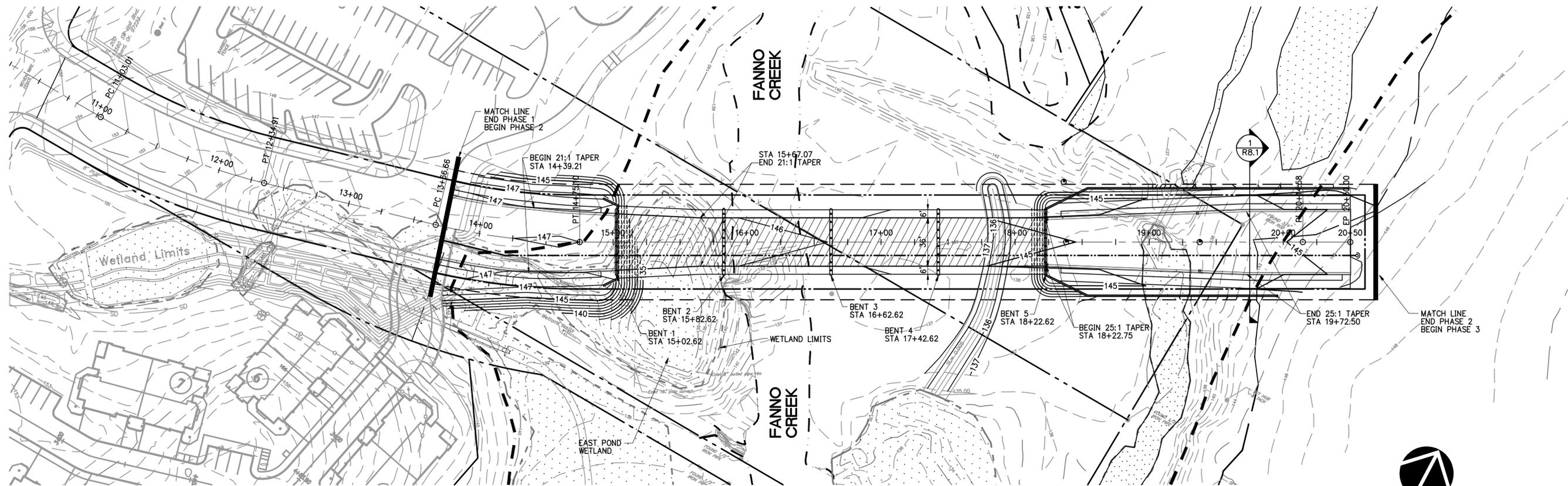
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JOB NO. **2070334.00**

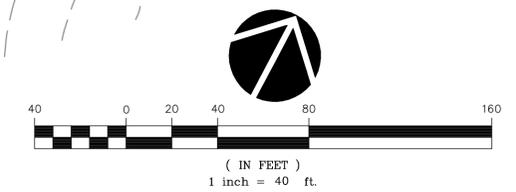
PRELIMINARY DESIGN 06/11/2010

**LEGEND**

- 100 YEAR FLOODPLAIN
- EDGE OF CREEK
- WETLAND BOUNDARY
- PROPERTY LINE
- PUBLIC UTILITY EASEMENT
- ACCESS EASEMENT
- CENTERLINE
- PROPOSED CURB LINE
- WETLAND AREA
- ACCESS EASEMENT



**1 SW WALL STREET PLAN**  
R2.1 1"=40'



**2 SW WALL STREET PROFILE**  
R2.1 HORIZ: 1"=40'  
VERT: 1"=10'

**GROUP MACKENZIE**  
Civil Engineering  
Structural Engineering  
Transportation Planning  
Landscape Architecture  
Architecture  
Interior Design  
Land Use Planning  
Portland OR 503.224.9660  
Vancouver WA 360.696.7879  
Seattle WA 206.749.9893

Client  
**FRED FIELDS**  
149 SW DAVENPORT AVE  
PORTLAND, OREGON  
97201

Project  
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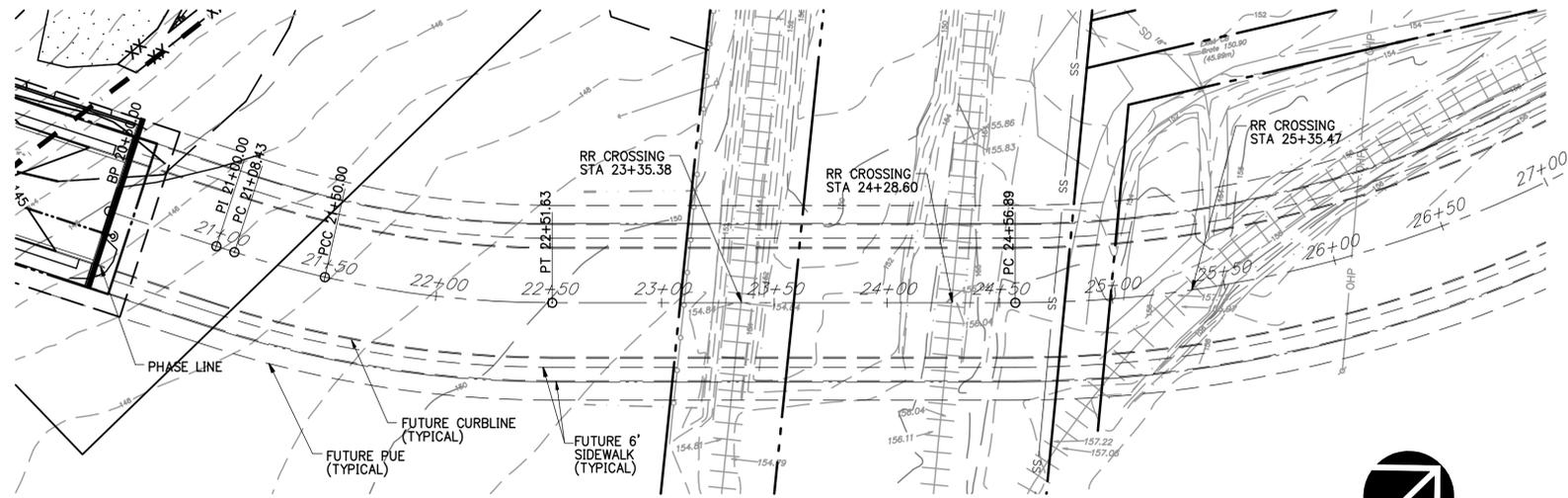
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SHEET TITLE:  
**PLAN/PROFILE SHEET**

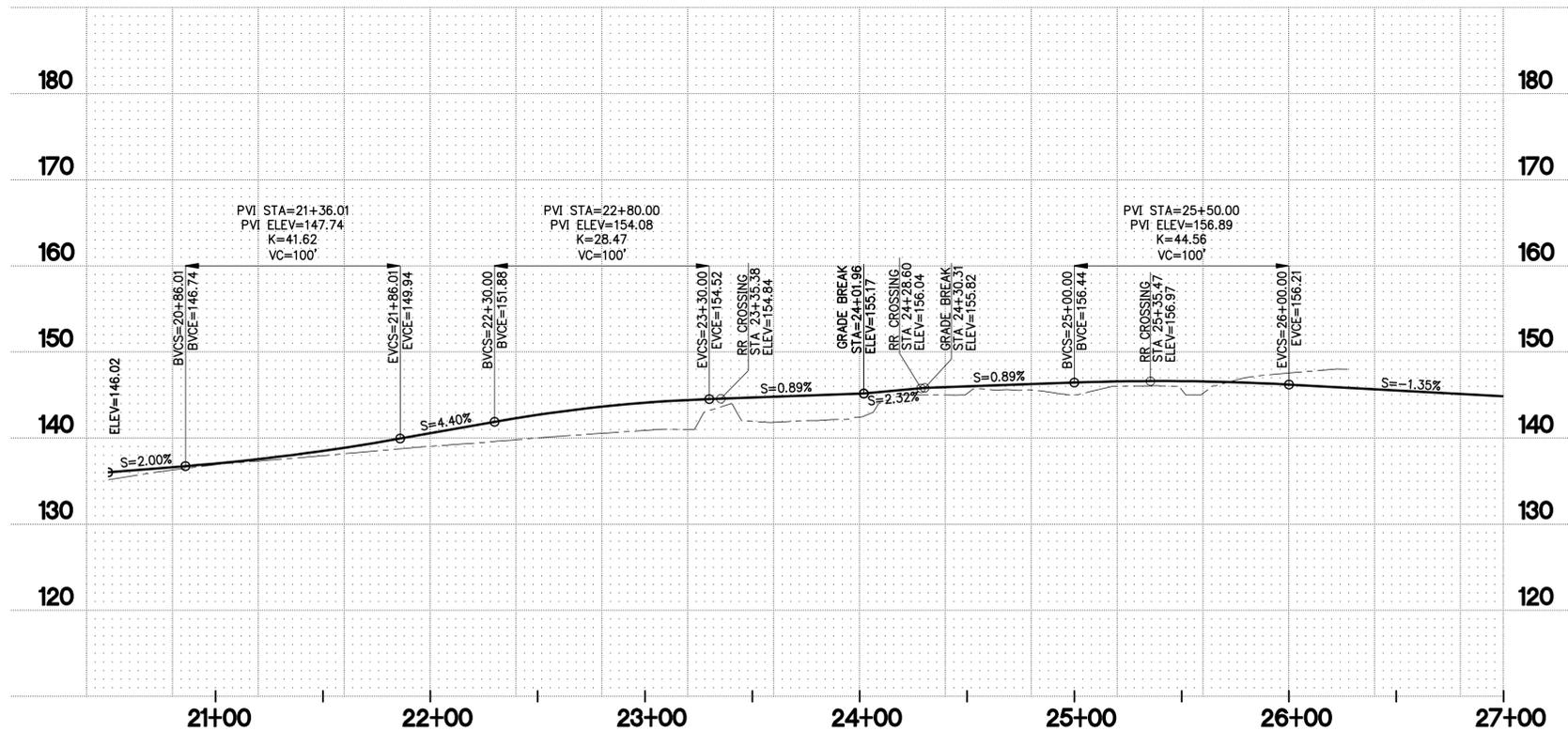
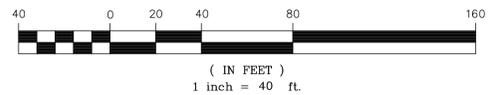
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CHECKED BY: MWB  
SHEET:

**R2.1**

JOB NO. **2070334.00**



**1 SW WALL STREET PHASE 3 PLAN**  
 R2.1A HORIZ: 1"=40'  
 VERT: 1"=10'



**2 SW WALL STREET PHASE 3 PROFILE**  
 R2.1A HORIZ: 1"=40'  
 VERT: 1"=10'

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
**FIELDS**  
**PROPERTY**

**WALL STREET**  
**EXTENSION PHASE 2**

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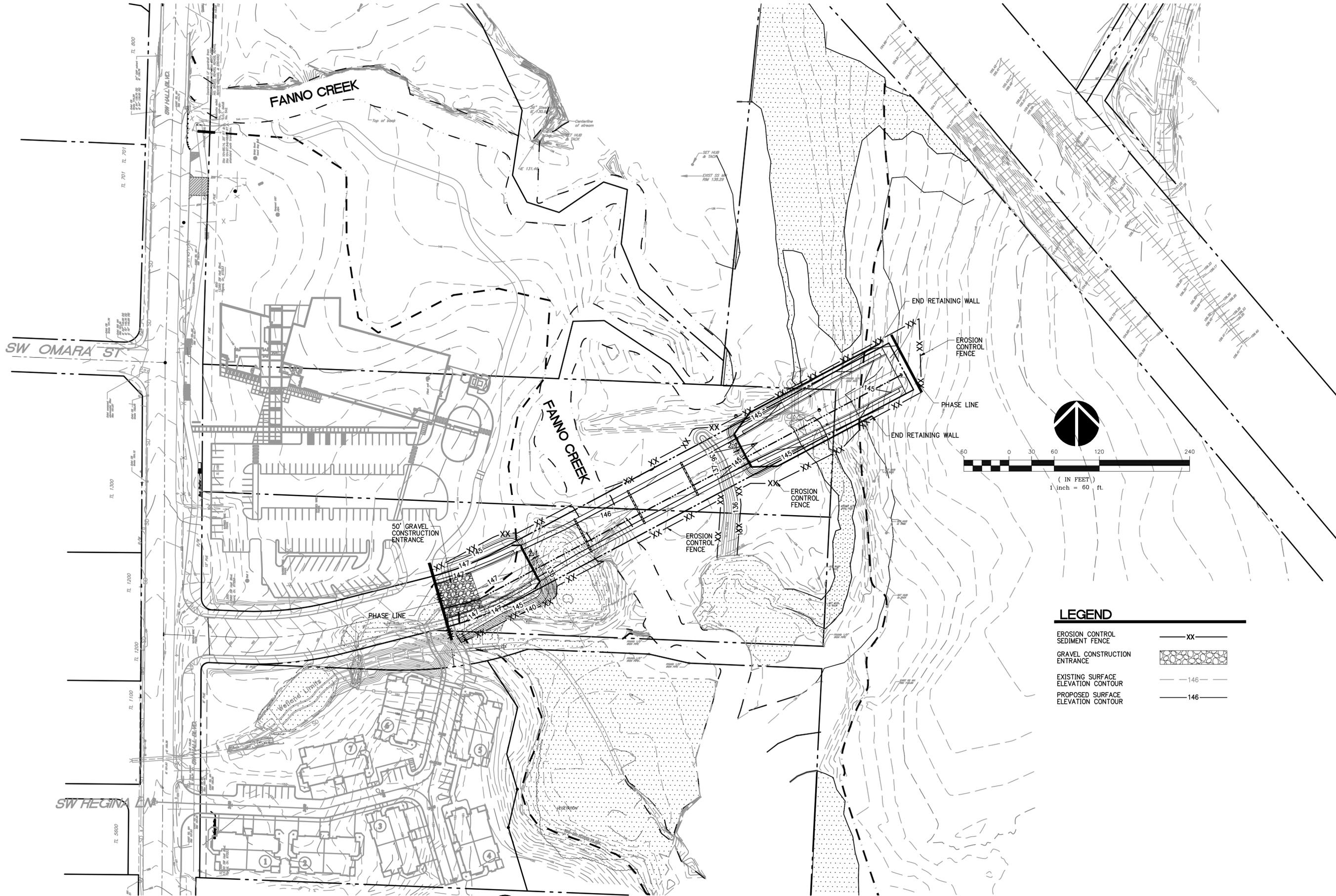
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**PLAN/PROFILE**  
**SHEET**

**SW WALL ST**  
**PHASE 3**

DRAWN BY: BDN  
 CHECKED BY: MWB  
 SHEET:

**R2.1A**

JOB NO. **2070334.00**



**GROUP MACKENZIE**  
 Architecture  
 Interior Design  
 Land Use Planning  
 Civil Engineering  
 Structural Engineering  
 Transportation Planning  
 Landscape Architecture  
 Portland OR 503.224.9660  
 Vancouver WA 360.696.7879  
 Seattle WA 206.749.9993

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
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**WALL STREET EXTENSION PHASE 2**

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REVISIONS:

REVISION	REVISIONS THIS SHEET	REVISION CLOSING DATE	DELTA

**LEGEND**

EROSION CONTROL SEDIMENT FENCE	— XX —
GRAVEL CONSTRUCTION ENTRANCE	
EXISTING SURFACE ELEVATION CONTOUR	— 146 —
PROPOSED SURFACE ELEVATION CONTOUR	— 146 —

SHEET TITLE:  
**GRADING/  
 EROSION CONTROL  
 PLAN**

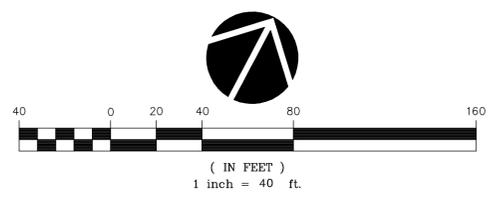
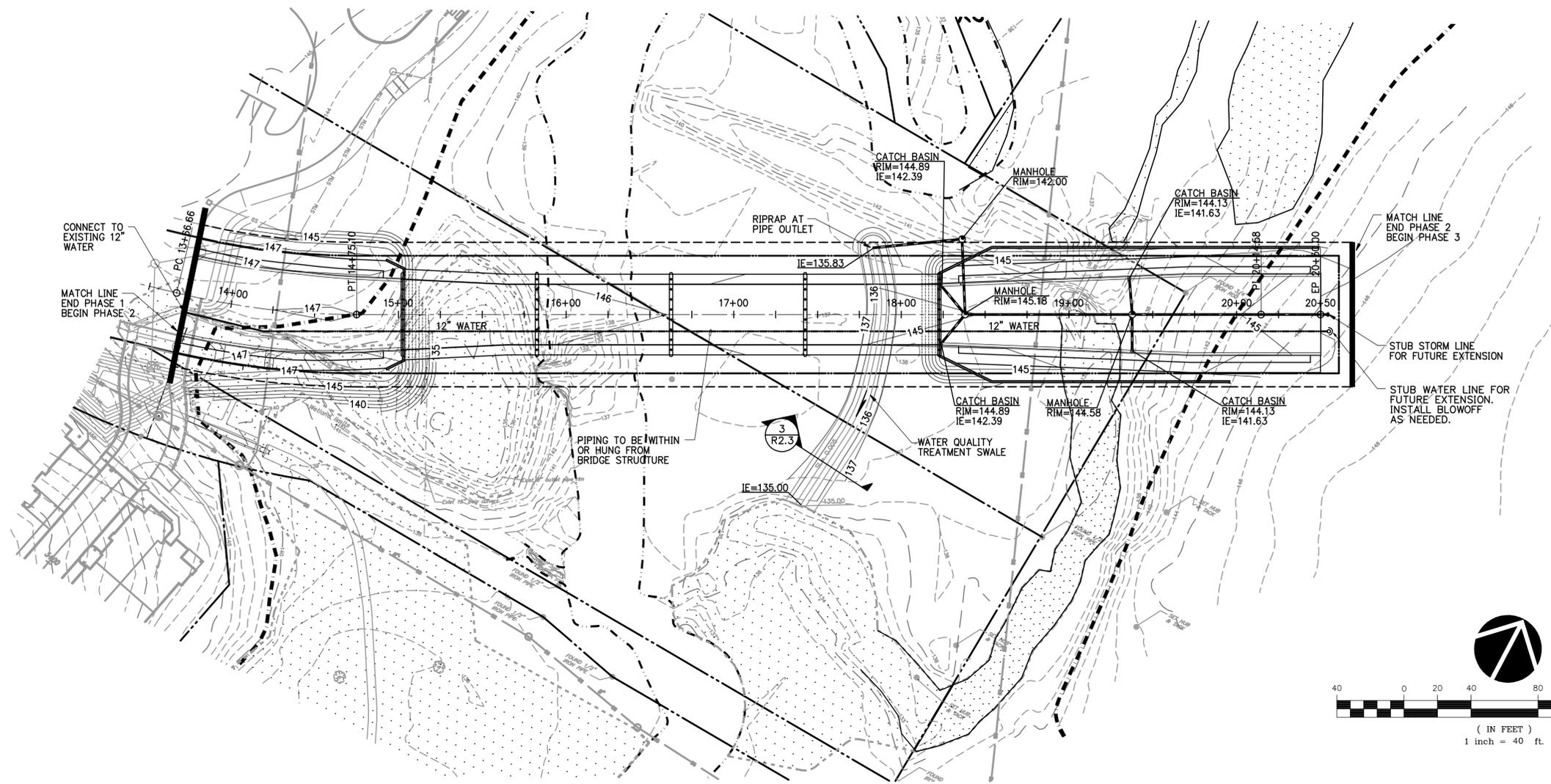
DRAWN BY: MAZ  
 CHECKED BY: MWB  
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**R2.2**

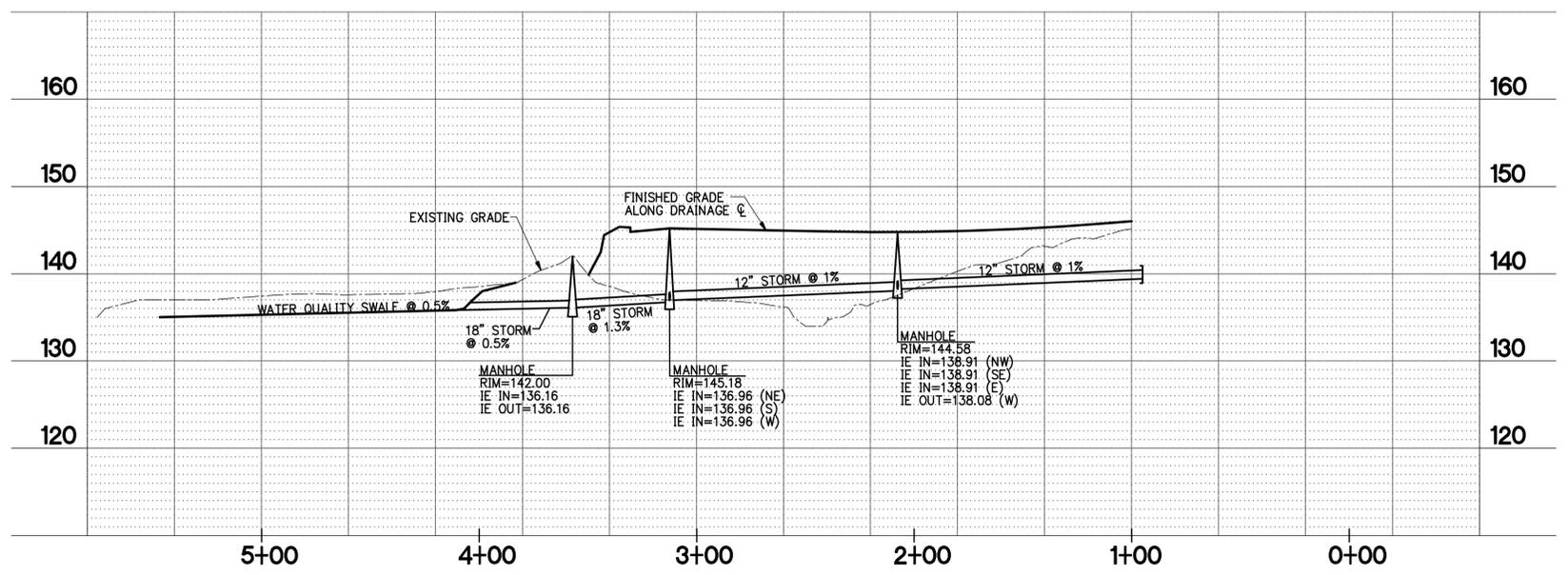
JOB NO. **2070334.00**

**1 GRADING/EROSION CONTROL PLAN**  
**R2.2**

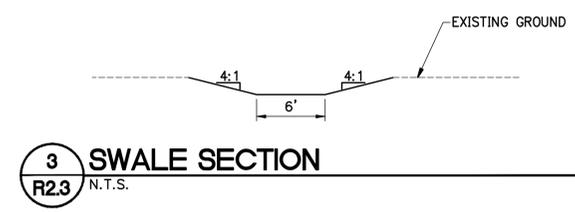
PRELIMINARY DESIGN 06/11/2010  
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**1 UTILITY/STORM DRAINAGE PLAN**  
R2.3



**2 STORM DRAINAGE PROFILE**  
R2.3 HORIZ: 1"=40'  
VERT: 1"=10'



**3 SWALE SECTION**  
R2.3 N.T.S.

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 Landscape Architecture  
 Vancouver WA 360.696.7879  
 Portland OR 503.224.9660  
 Seattle WA 206.749.9893

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
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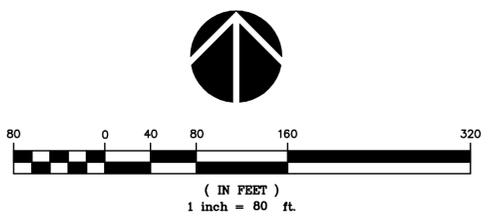
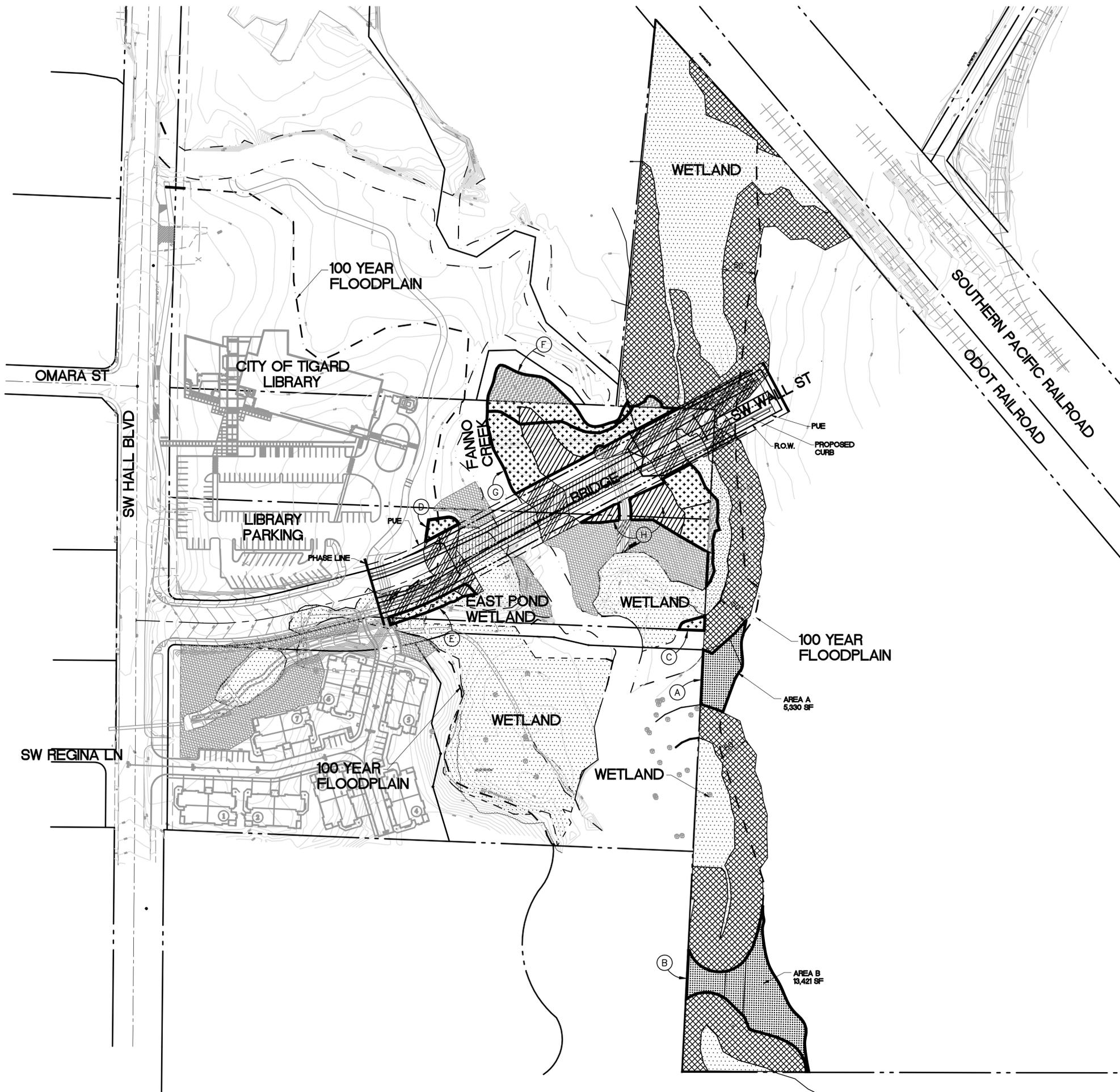
SHEET TITLE:  
**UTILITY/STORM DRAINAGE PLAN**

DRAWN BY: MAZ  
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 SHEET:

**R2.3**

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**LEGEND**

[Dotted pattern]	SENSITIVE AREA
[Cross-hatch pattern]	REGULATED VEGETATED CORRIDOR (PHS)
[Diagonal lines /]	ENCROACHMENT (PHASE 2) (28,383 SF)
[Diagonal lines \]	ON-SITE MITIGATION (PHASE 2) (9,632 SF)
[Grid pattern]	PROPOSED VEGETATED CORRIDOR MITIGATION AREA (PHS) (18,751 SF)
[Stippled pattern]	ON-SITE ENHANCEMENT (PHASE 2) (24,012 SF)
[Wavy pattern]	OFF-SITE ENHANCEMENT (PHASE 2) (6,320 SF)
[Horizontal lines]	PHASE 1 ENHANCEMENT/ MITIGATION AREAS
[Dashed line]	50' WETLAND BUFFER
[Circle with A]	PLANTING MITIGATION AREAS

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 Portland OR 503.224.8660  
 Seattle WA 206.749.9993

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 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

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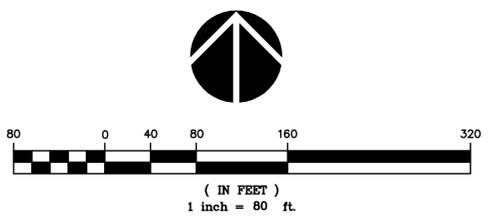
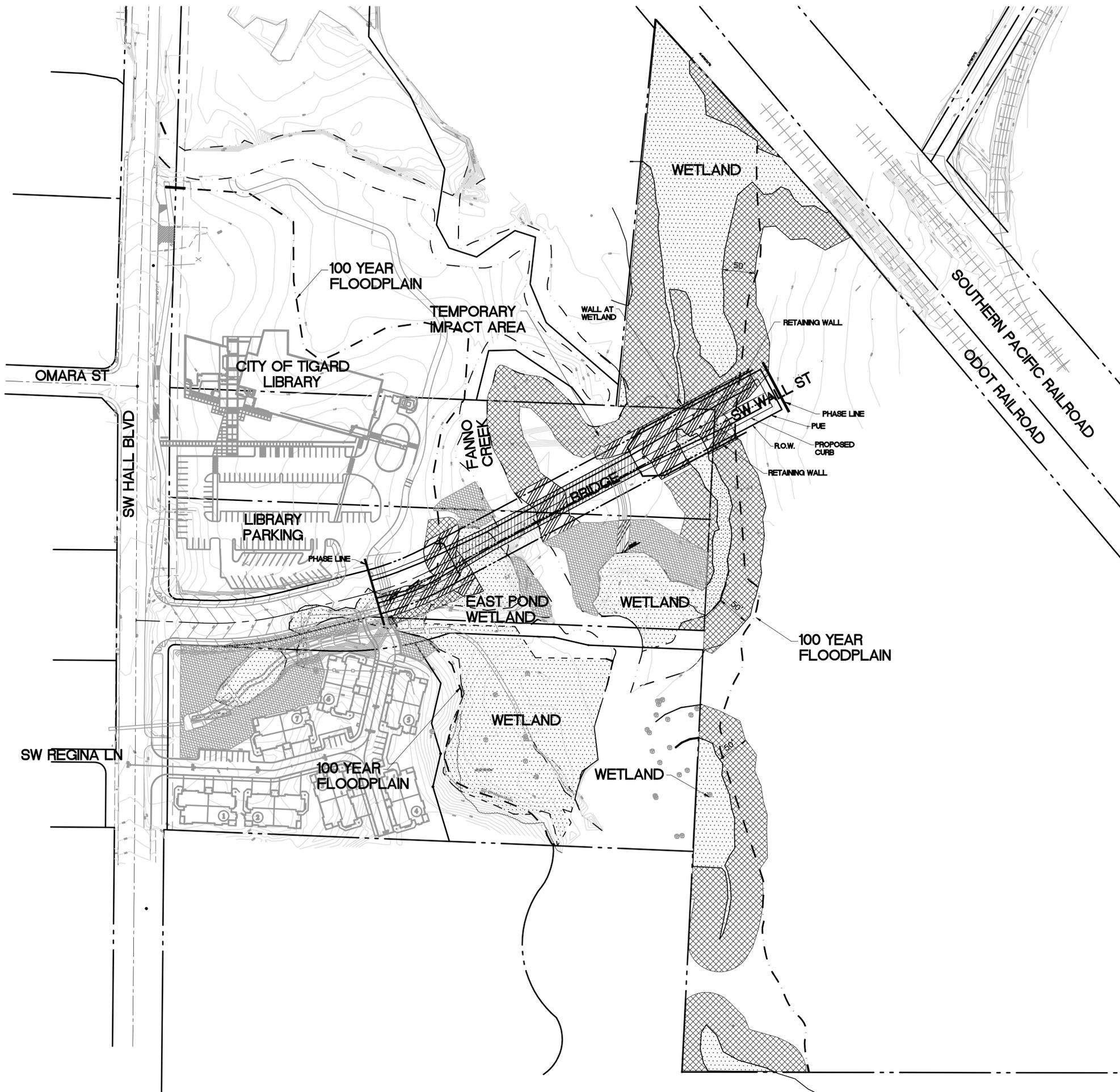
SHEET TITLE:  
**VEGETATED CORRIDOR MITIGATION PLAN**

DRAWN BY: MAZ  
 CHECKED BY: MWB  
 SHEET:

**R2.4**

JOB NO. **2070334.00**

CWS MITIGATION FIGURE  
 PRELIMINARY DESIGN 06/11/2010



**LEGEND**

	SENSITIVE AREA
	REGULATED VEGETATED CORRIDOR
	PHASE 1 MITIGATION AREA
	ENCROACHMENT AREA (PHASE 2) (28,383 SF)
	50' WETLAND BUFFER

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 Structural Engineering  
 Transportation Planning  
 Landscape Architecture  
 Vancouver WA 360.696.7879  
 Portland OR 503.224.8660  
 Seattle WA 206.749.9883

Client:  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

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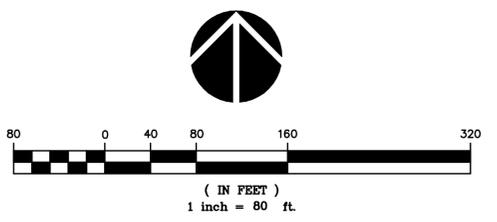
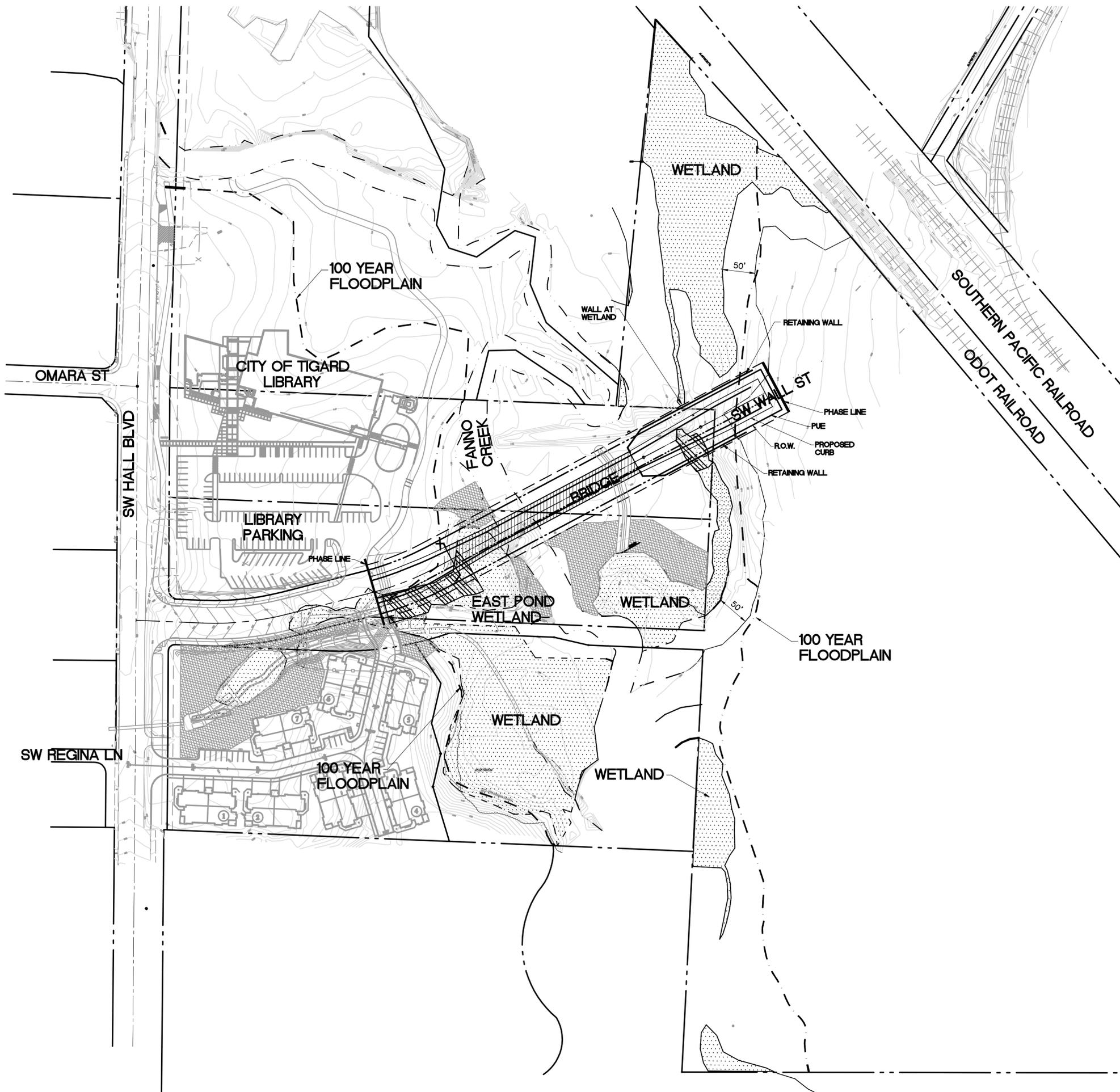
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SHEET TITLE:  
**SENSITIVE AREA IMPACT PLAN**

DRAWN BY: BDN  
 CHECKED BY: MWB  
 SHEET:

**R2.4A**

JOB NO. **2070334.00**  
 CWS DEVELOPMENT FIGURE  
 PRELIMINARY DESIGN 06/11/2010



**LEGEND**

-  SENSITIVE AREA
-  PHASE 1 MITIGATION AREA
-  WETLAND IMPACT AREA (PHASE 2)
-  50' WETLAND BUFFER

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 Vancouver WA 360.696.7879  
 Portland OR 503.224.8660  
 Seattle WA 206.749.9993

Client:  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

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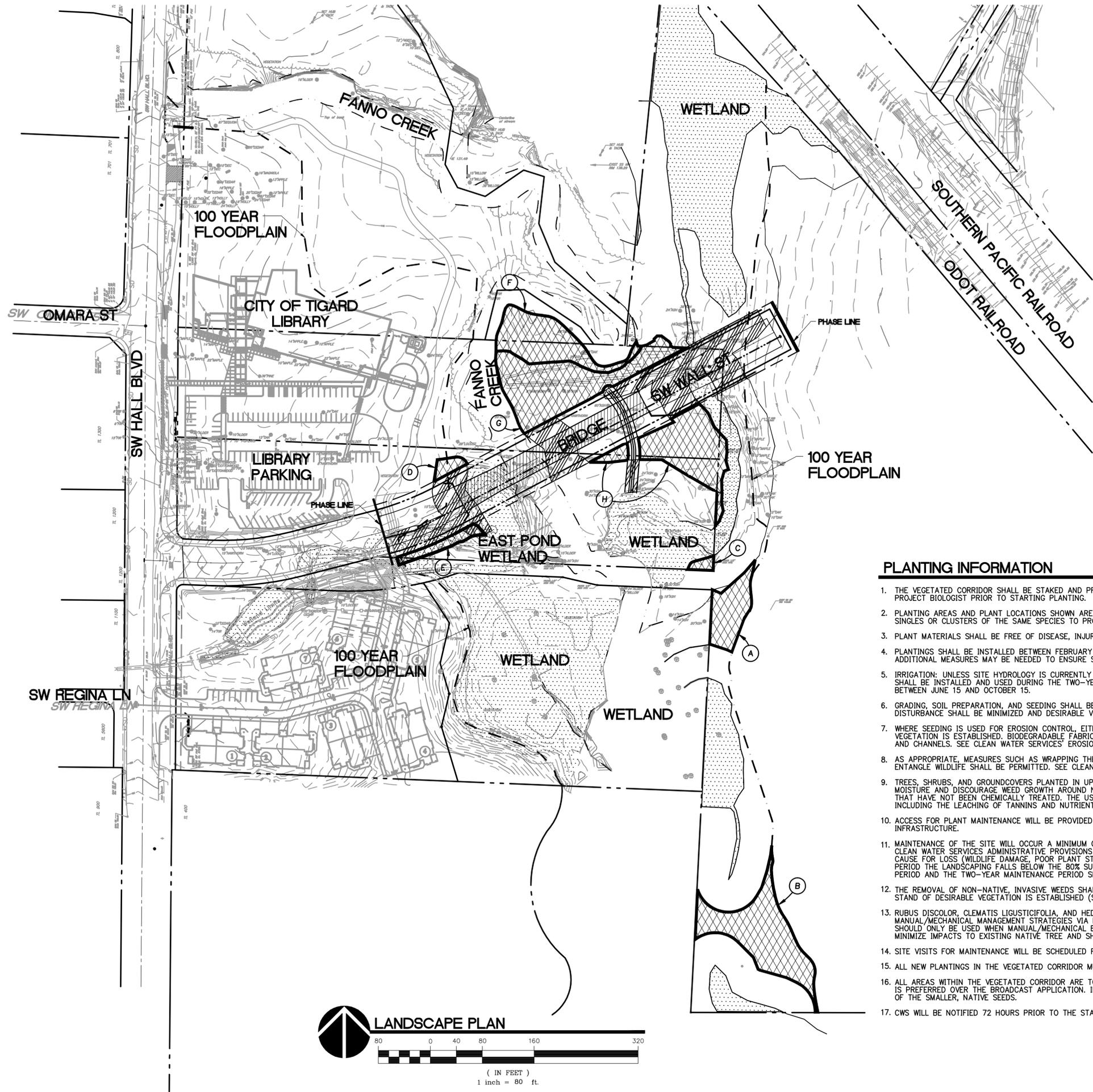
SHEET TITLE:  
**WETLAND AREA IMPACT PLAN**

DRAWN BY: BDN  
 CHECKED BY: MWB  
 SHEET:

**R2.4B**

JOB NO. **2070334.00**

CWS DEVELOPMENT FIGURE  
 PRELIMINARY DESIGN 06/11/2010



**PLANTING AREAS**

AREA I.D.	PLANTING AREA
A	5,330 SF
B	13,421 SF
C	613 SF
D	1,023 SF
E	1,878 SF
F	9,467 SF
G	15,550 SF
H	11,785 SF

NOTE: AREA D PLANTING HAS BEEN COMPLETED AS PART OF PHASE 1 CONSTRUCTION.

**LEGEND**

- SENSITIVE AREA
- REGULATED VEGETATED CORRIDOR (PHS)
- ENCROACHMENT (PHASE 2)

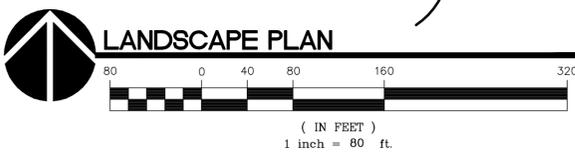
**PLANTING SCHEDULE** (PROVIDED BY PACIFIC HABITAT SERVICES, OCT. 1, 2009)

Botanical Name	Common Name	Minimum rooting size	Plant Quantity							
			Area A	Area B	Area C	Area E	Area F	Area G	Area H	
<b>TREES</b>										
<i>Acer circinatum</i>	Vine maple	2 gallon				10			20	30
<i>Acer macrophyllum</i>	Big leaf maple	2 gallon		14				5	5	10
<i>Crataegus douglasii</i>	Douglas hawthorn	2 gallon	16	13			5	5	30	20
<i>Populus trichocarpa</i>	Black cottonwood	2 gallon				3				32
<i>Quercus garryana</i>	Oregon white oak	2 gallon							10	20
<i>Rhamnus purshiana</i>	Cascara	2 gallon								26
<b>SHRUBS</b>										
<i>Amelanchier alnifolia</i>	Western serviceberry	1 gallon	25	90			21	20	100	58
<i>Mahonia aquifolium</i>	Tall Oregon grape	1 gallon	15	85				37		68
<i>Holodiscus discolor</i>	Oceanspray	1 gallon					20			25
<i>Oemleria cerasiformis</i>	Indian plum	2 gallon			50				40	100
<i>Polystichum munifolium</i>	Sword fern	2 gallon	10	55					40	80
<i>Ribes sanguineum</i>	Red flowering currant	1 gallon					15			
<i>Rosa nutkana</i>	Nootka rose	1 gallon				6			50	140
<i>Rubus parviflorus</i>	Thimbleberry	1 gallon			50					40
<i>Sambucus racemosa</i>	Red elderberry	1 gallon			75			20	40	50
<i>Symphoricarpos albus</i>	Snowberry	1 gallon	30	100	10				40	150
<i>Vaccinium parviflorum</i>	Red huckleberry	1 gallon			50					
<b>HERBACEOUS</b>										
<i>Bromus carinatus</i>	California brome	Seed rate								6 lbs
<i>Elymus glaucus</i>	Blue wild-rye	8 lbs/acre								3 lbs
<i>Gaultheria shallon</i>	Salal	1 gallon	100	10				100	200	50

- NOTES: 1. AREA D PLANTING COMPLETED AS PART OF PHASE 1 CONSTRUCTION.  
 2. IN AREAS A, B, C, E, F AND H: SEED ALL BARE AREAS >25 SF

**PLANTING INFORMATION**

- THE VEGETATED CORRIDOR SHALL BE STAKED AND PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL REVIEW THE LIMITS OF THE VEGETATED CORRIDOR WITH THE PROJECT BIOLOGIST PRIOR TO STARTING PLANTING.
- PLANTING AREAS AND PLANT LOCATIONS SHOWN ARE APPROXIMATE AND SUBJECT TO MODIFICATION BASED ON ACTUAL SITE CONDITIONS. PLANTS WILL BE PLANTED IN SINGLES OR CLUSTERS OF THE SAME SPECIES TO PROVIDE A NATURAL PLANTING SCHEME.
- PLANT MATERIALS SHALL BE FREE OF DISEASE, INJURY, AND INSECT INFESTATION.
- PLANTINGS SHALL BE INSTALLED BETWEEN FEBRUARY 1 AND MAY 1 OR BETWEEN OCTOBER 1 AND NOVEMBER 15. WHEN PLANTINGS MUST BE INSTALLED OUTSIDE THESE TIMES, ADDITIONAL MEASURES MAY BE NEEDED TO ENSURE SURVIVAL AND SHALL BE SPECIFIED ON THE PLANS.
- IRRIGATION: UNLESS SITE HYDROLOGY IS CURRENTLY ADEQUATE, A DISTRICT/CITY APPROVED IRRIGATION SYSTEM OR OTHER WATER PRACTICE (I.E., POLYMER, PLUS WATERING) SHALL BE INSTALLED AND USED DURING THE TWO-YEAR PLANT ESTABLISHMENT PERIOD. WATERING SHOULD BE PROVIDED AT A RATE OF AT LEAST ONE INCH PER WEEK BETWEEN JUNE 15 AND OCTOBER 15.
- GRADING, SOIL PREPARATION, AND SEEDING SHALL BE PERFORMED DURING OPTIMAL WEATHER CONDITIONS AND AT LOW FLOW LEVELS TO MINIMIZE SEDIMENT IMPACTS. SITE DISTURBANCE SHALL BE MINIMIZED AND DESIRABLE VEGETATION RETAINED, WHERE POSSIBLE.
- WHERE SEEDING IS USED FOR EROSION CONTROL, EITHER REGREEN (OR ITS EQUIVALENT) OR STERILE WHEAT SHALL BE USED TO STABILIZE SLOPES UNTIL PERMANENT VEGETATION IS ESTABLISHED. BIODEGRADABLE FABRICS (COIR, COCONUT OR APPROVED JUTE MATTING (MINIMUM 1/4" SQUARE HOLES)) MAY BE USED TO STABILIZE SLOPES AND CHANNELS. SEE CLEAN WATER SERVICES' EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL FOR ADDITIONAL INFORMATION.
- AS APPROPRIATE, MEASURES SUCH AS WRAPPING THE STEMS OF TREES AND SHRUBS SHOULD BE TAKEN TO LIMIT WILDLIFE RELATED DAMAGE. NO PLASTIC MESH THAT CAN ENTANGLE WILDLIFE SHALL BE PERMITTED. SEE CLEAN WATER SERVICES INTEGRATED VEGETATION AND ANIMAL MANAGEMENT (IVAM) GUIDANCE.
- TREES, SHRUBS, AND GROUNDCOVERS PLANTED IN UPLAND AREAS SHALL BE MULCHED A MINIMUM OF THREE INCHES IN DEPTH AND 18 INCHES IN DIAMETER, TO RETAIN MOISTURE AND DISCOURAGE WEED GROWTH AROUND NEWLY INSTALLED PLANT MATERIAL. APPROPRIATE MULCHES INCLUDE THOSE MADE FROM COMPOSTED BARK OR LEAVES THAT HAVE NOT BEEN CHEMICALLY TREATED. THE USE OF MULCH IN FREQUENTLY INUNDATED AREAS SHALL BE LIMITED, TO AVOID ANY POSSIBLE WATER QUALITY IMPACTS INCLUDING THE LEACHING OF TANNINS AND NUTRIENTS, AND THE MIGRATION OF MULCH INTO WATERWAYS.
- ACCESS FOR PLANT MAINTENANCE WILL BE PROVIDED FOR SENSITIVE AREAS AND VEGETATED CORRIDORS VIA AN EASEMENT OR SHARED BOUNDARY WITH STORM WATER INFRASTRUCTURE.
- MAINTENANCE OF THE SITE WILL OCCUR A MINIMUM OF TWO TIMES PER YEAR BY JUNE 1 AND SEPTEMBER 30. PLANTS THAT FAIL TO MEET THE ACCEPTANCE CRITERIA (SEE CLEAN WATER SERVICES ADMINISTRATIVE PROVISIONS CHAPTER 2.11.1 B) MUST BE REPLACED DURING THE TWO-YEAR MAINTENANCE PERIOD. PRIOR TO REPLACEMENT, THE CAUSE FOR LOSS (WILDLIFE DAMAGE, POOR PLANT STOCK, ETC.) SHALL BE DOCUMENTED, CORRECTED AND THE PLANTS REPLACED. IF AT ANY TIME DURING THE WARRANTY PERIOD THE LANDSCAPING FALLS BELOW THE 80% SURVIVAL LEVEL, THE RESPONSIBLE PARTY SHALL REINSTALL ALL DEFICIENT PLANTING AT THE NEXT APPROPRIATE PLANTING PERIOD AND THE TWO-YEAR MAINTENANCE PERIOD SHALL BEGIN AGAIN FROM THE DATE OF REPLANTING.
- THE REMOVAL OF NON-NATIVE, INVASIVE WEEDS SHALL BE NECESSARY PRIOR TO PLANTING AND THROUGHOUT THE TWO-YEAR MAINTENANCE PERIOD, OR UNTIL A HEALTHY STAND OF DESIRABLE VEGETATION IS ESTABLISHED (SEE IVAM GUIDANCE).
- RUBUS DISCOLOR, CLEMATIS LIGUSTICIFOLIA, AND HEDERA HELIX WILL BE REMOVED FROM ALL VEGETATED CORRIDOR ENHANCEMENT AND MITIGATION AREAS BY MANUAL/MECHANICAL MANAGEMENT STRATEGIES VIA HAND OR WITH EQUIPMENT (WEED WHIPS, MOVERS, TILLERS). PESTICIDES APPROVED BY THE CLEAN WATER SERVICES SHOULD ONLY BE USED WHEN MANUAL/MECHANICAL EFFORTS HAVE FAILED (SEE IVAM GUIDANCE, 2003). DURING REMOVAL OF INVASIVE VEGETATION, CARE WILL BE TAKEN TO MINIMIZE IMPACTS TO EXISTING NATIVE TREE AND SHRUB SPECIES.
- SITE VISITS FOR MAINTENANCE WILL BE SCHEDULED FOR THE MONTHS OF FEBRUARY, MAY, JULY, AND SEPTEMBER FOR THE DURATION OF THE MAINTENANCE PERIOD.
- ALL NEW PLANTINGS IN THE VEGETATED CORRIDOR MUST BE TAGGED TO FACILITATE IDENTIFICATION.
- ALL AREAS WITHIN THE VEGETATED CORRIDOR ARE TO BE SEEDED WITH A DRY AREA SEED MIX. ALL PERCENTAGES ARE BASED ON PURE LIVE SEED. THE HYDROSEED METHOD IS PREFERRED OVER THE BROADCAST APPLICATION. IF THE BROADCAST APPLICATION IS USED, INCREASE THE PERCENTAGE OF SEEDS/SF BY 40% TO PREVENT WIND DRIFT OF THE SMALLER, NATIVE SEEDS.
- CWS WILL BE NOTIFIED 72 HOURS PRIOR TO THE START AND COMPLETION OF VEGETATED CORRIDOR ENHANCEMENT/MITIGATION ACTIVITIES.



**GROUP MACKENZIE**

Civil Engineering  
 Structural Engineering  
 Interior Design  
 Transportation Planning  
 Landscape Architecture

Vancouver WA 360.696.7879  
 Portland OR 503.224.9660  
 Seattle WA 206.749.9993

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
**FIELDS PROPERTY**  
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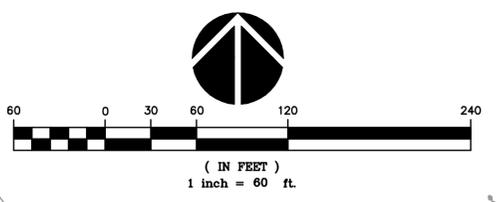
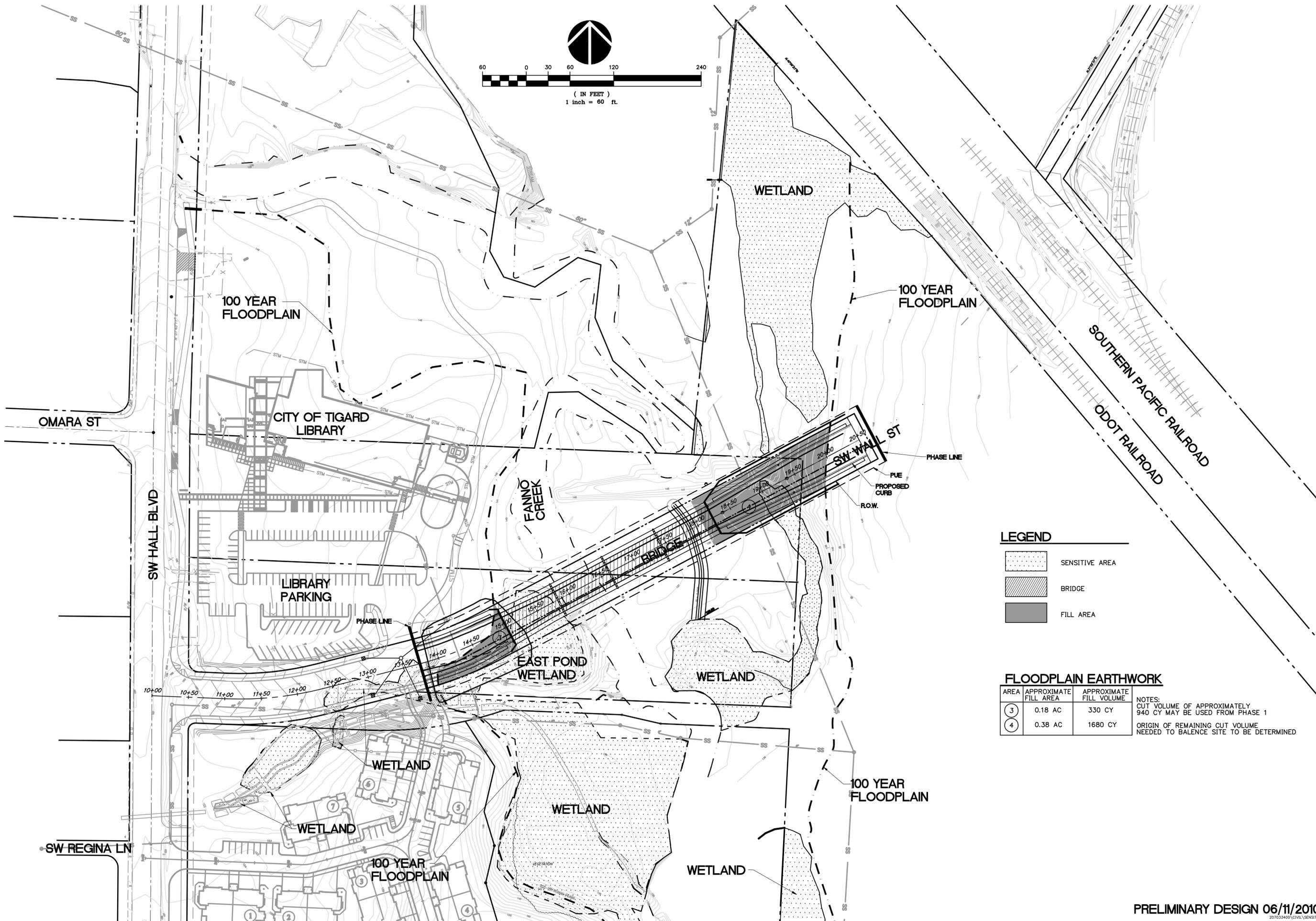
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SHEET TITLE:  
**LANDSCAPE PLAN**

DRAWN BY: MAZ  
 CHECKED BY: MWB  
 SHEET:

**R2.5**

JOB NO. **2070334.00**



**LEGEND**

-  SENSITIVE AREA
-  BRIDGE
-  FILL AREA

**FLOODPLAIN EARTHWORK**

AREA	APPROXIMATE FILL AREA	APPROXIMATE FILL VOLUME
3	0.18 AC	330 CY
4	0.38 AC	1680 CY

NOTES:  
 CUT VOLUME OF APPROXIMATELY 940 CY MAY BE USED FROM PHASE 1  
 ORIGIN OF REMAINING CUT VOLUME NEEDED TO BALANCE SITE TO BE DETERMINED

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 Civil Engineering  
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 Landscape Architecture  
 Vancouver WA 360.696.7879  
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 149 SW DAVENPORT AVE  
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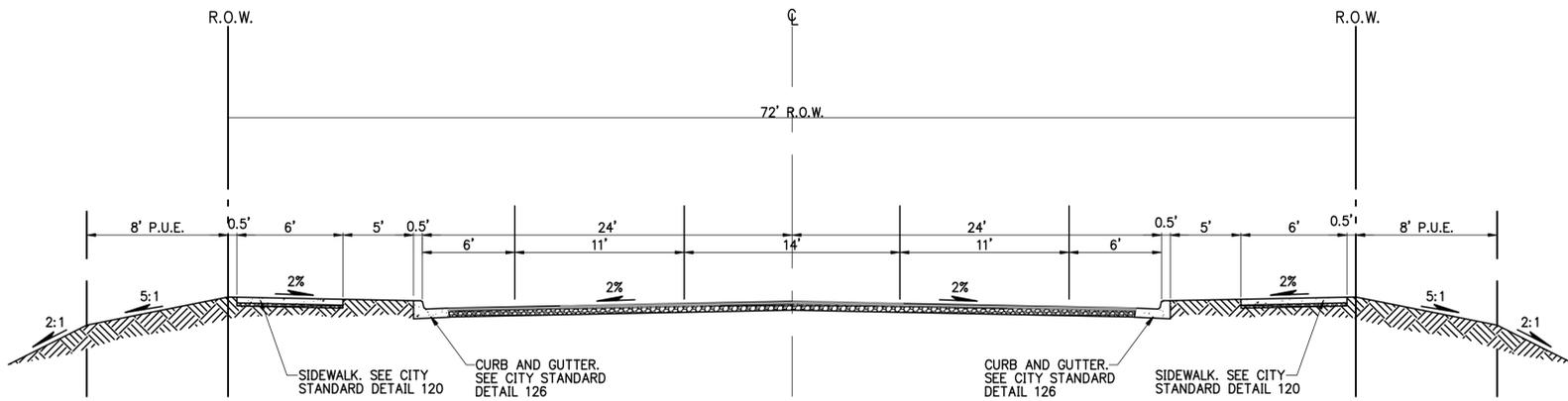
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**WALL STREET FLOODPLAIN IMPACTS**

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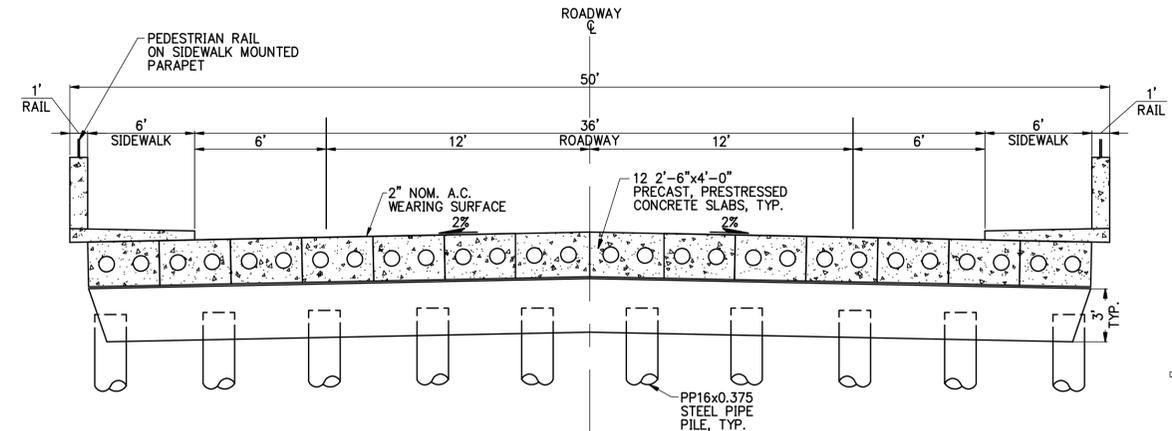
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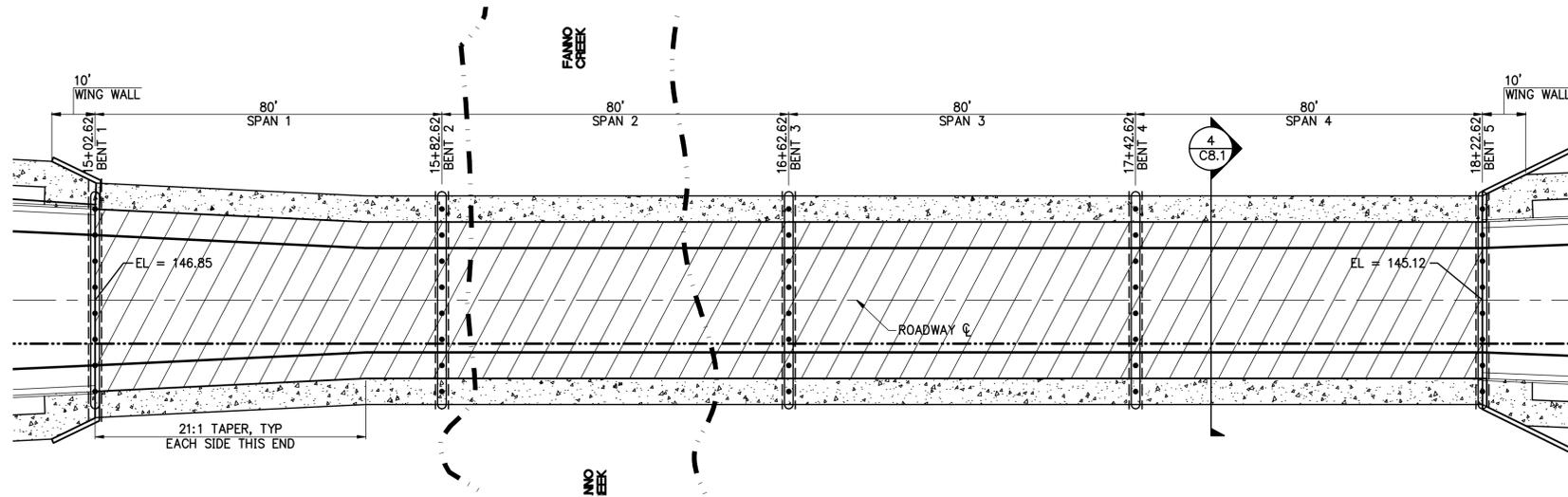
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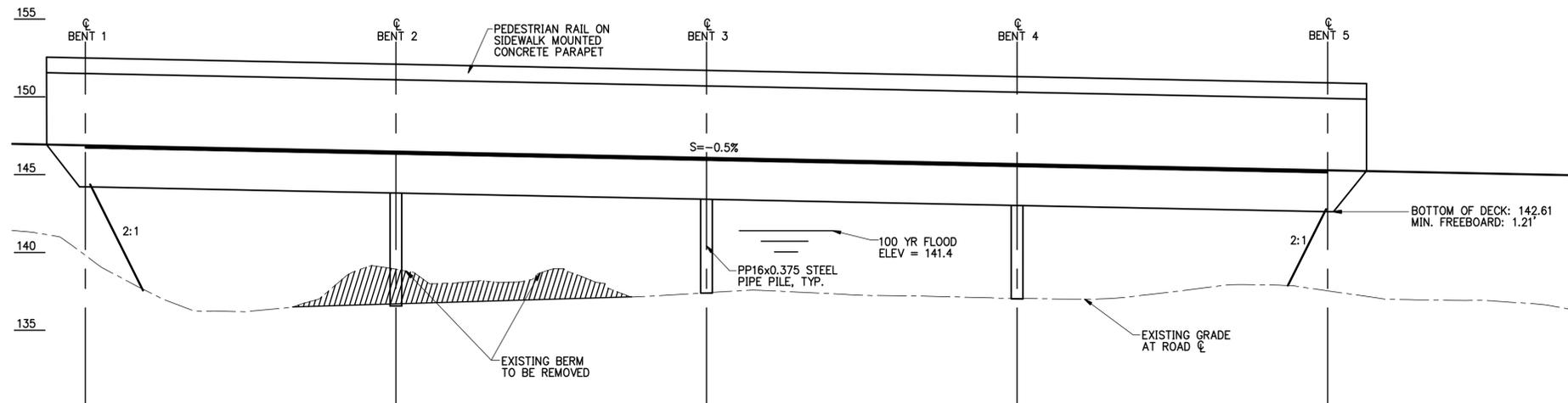
**1 TYPICAL STREET SECTION**  
R8.1 N.T.S.



**4 TYPICAL BRIDGE DECK SECTION**  
R8.1 N.T.S.



**2 BRIDGE PLAN**  
R8.1 1"=20'



**3 BRIDGE ELEVATION**  
R8.1 1"=20'

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Structural Engineering  
Transportation Planning  
Landscape Architecture  
Portland OR 503.224.9600  
Vancouver WA 360.696.7879  
Seattle WA 206.749.9893

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SHEET TITLE:  
**ROADWAY DETAILS**

DRAWN BY: MAZ  
CHECKED BY: MWB  
SHEET:

**R8.1**

JOB NO. **2070334.00**

PRELIMINARY DESIGN 06/11/2010

GROUP

Exhibit M

MACKENZIE

PRELIMINARY  
STORMWATER  
CALCULATIONS

**To**  
City of Tigard

**For**  
Fields Property  
Wall Street Extension

**Prepared**  
October 1, 2009

**Project Number**  
2070334.00

**GROUP MACKENZIE**

Since 1960  
RiverEast Center, 1515 SE Water Ave #100, Portland, OR 97214  
PO Box 14310 Portland, OR 97293  
T 503.224.9560 360.695.7879 F 503.228.1285 groupmackenzie.com

## 1. SITE DESCRIPTION

This preliminary stormwater report is prepared to demonstrate preliminary compliance of the proposed storm utility infrastructure with the City of Tigard requirements. The City of Tigard references Clean Water Services (CWS) standards within the 2007 Design and Construction Standards.

The proposed project is the Phase II of the Wall Street extension, which consists of constructing approximately 600 feet of roadway including a bridge structure over Fanno Creek. A water quality swale is proposed to treat and convey stormwater runoff from the proposed street improvement from stations 14+34 to 25+50. A series of catch basins and manholes are proposed to convey a pretreatment water quality manhole, then to the swale.

The project site is located adjacent to the City of Tigard Library located at SW Hall Blvd in Tigard. The street extension alignment is proposed to extend Wall Street to the west from south of the Tigard Library across Fanno Creek turning to the NE across the Southern Pacific Railroad tracks and connecting to the existing Wall Street.

## 2. DESIGN ASSUMPTIONS AND METHODOLOGY

Water quality treatment is required for all new impervious areas with this proposed project. Water quantity treatment is not proposed due to the outfall of the runoff into Fanno Creek, which has no known downstream flow restrictions from this site.

The swale is sized to treat the water quality event of 0.36 in over four hours, the CWS minimum, by maintaining the residence time of water through the swale at nine minutes. The swale is also sized for conveyance of the 25-yr, 24-hr storm using the rational method.

The storm pipes are sized to meet CWS standards of conveyance of the 25-yr 24-hr storm using the rational method. The rational method IDF curves are referenced from CWS standard detail 1275. The time of concentration is taken to be the minimum five minute and calculated using the time-lag method. The calculations are attached.

### 3. WATER QUALITY METHODOLOGY

The swale tributary basin includes the span of the bridge from station 14+34 to 20+35 of the current project and up to the station 25+50 of the future extension of Wall Street.

The total basin area is 68,285 SF or 1.57 acres.

Area = 68,285 SF

Water Quality Flow (WQF) =

$$WQF = (0.36 \text{ in}) \times (68,285 \text{ sf}) / ((12 \text{ in/ft}) \times (4 \text{ hr}) \times (3600 \text{ s/hr}))$$

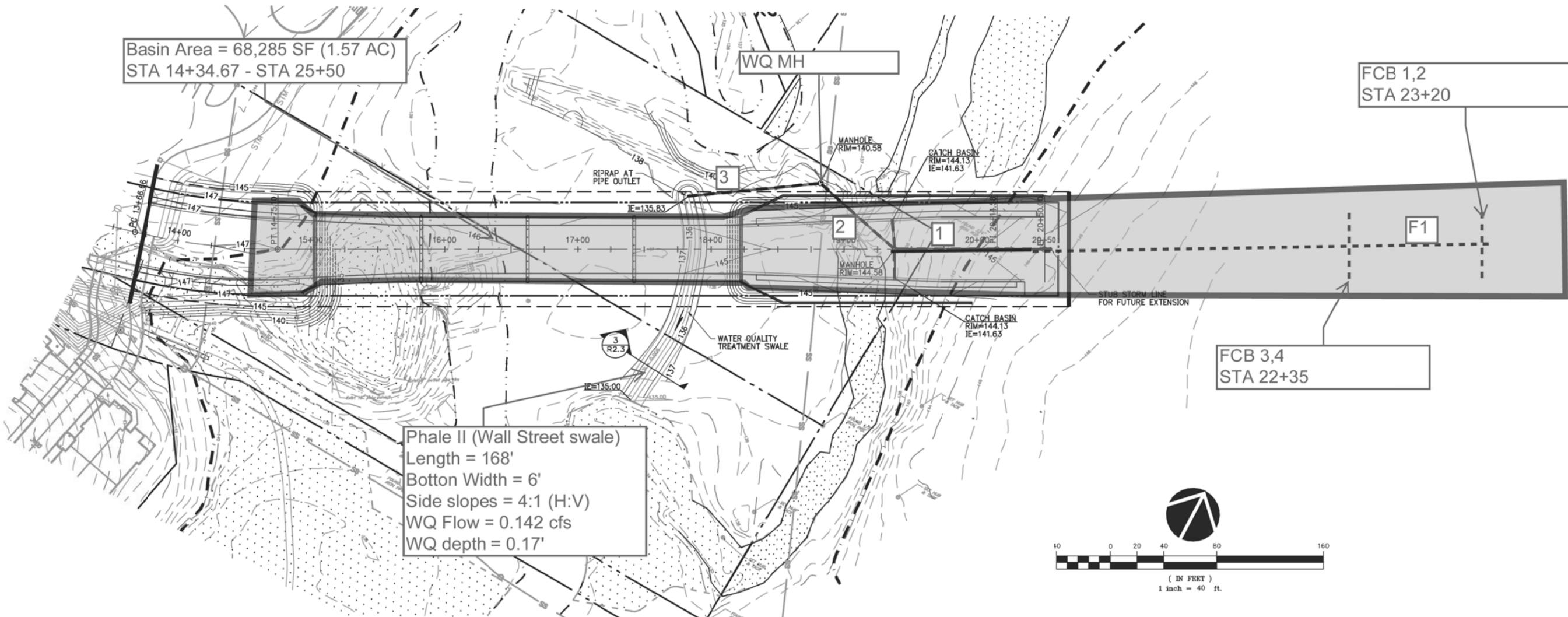
WQF = 0.142 cfs

This flow yields a design water quality flow depth of 0.17' < 0.50' maximum. The residence time is over 22 minutes > 9 minimum. The swale is to be planted with a variety of wetland type native grasses and shrubs per CWS requirements to promote sorption of the runoff.

The pretreatment requirement is met by installing a sumped oil/water separator type manhole prior to the swale outfall.

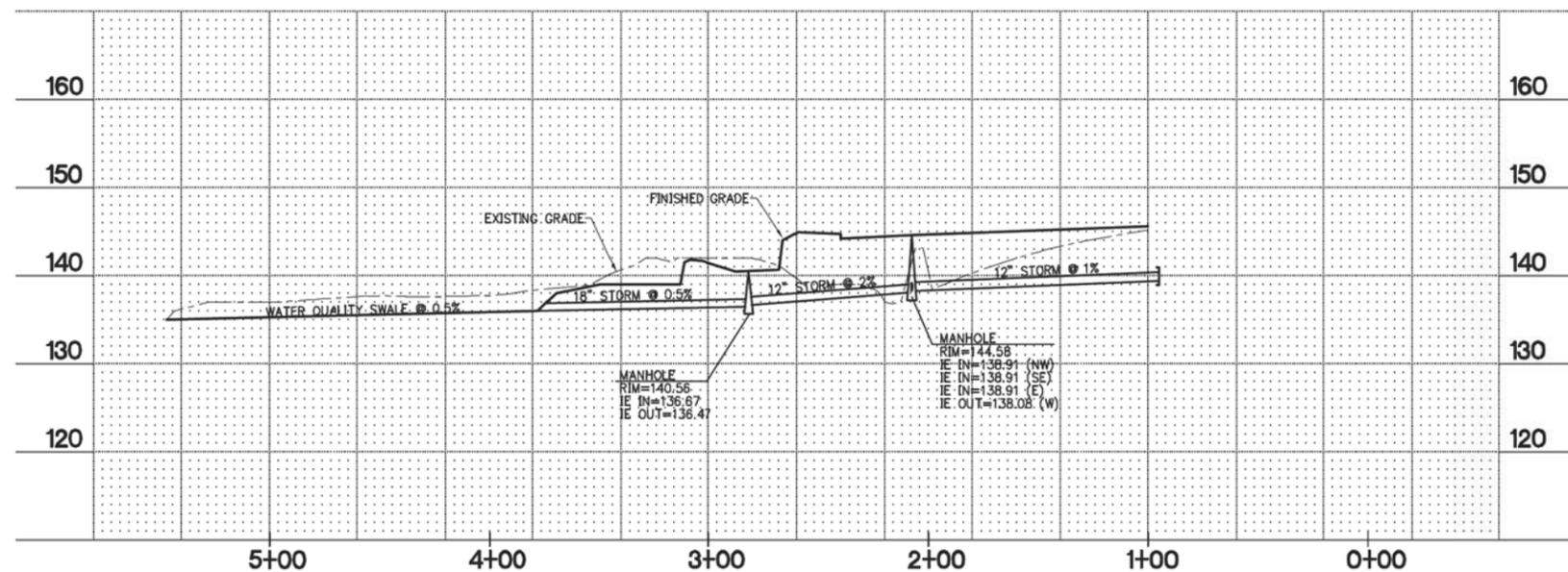
See attached water quality swale calculations.

Basin Area = 68,285 SF (1.57 AC)  
 STA 14+34.67 - STA 25+50

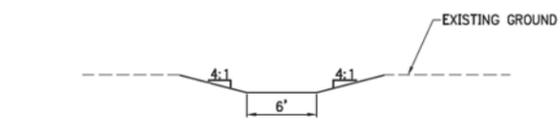


Phale II (Wall Street swale)  
 Length = 168'  
 Bottom Width = 6'  
 Side slopes = 4:1 (H:V)  
 WQ Flow = 0.142 cfs  
 WQ depth = 0.17'

**1 UTILITY/STORM DRAINAGE PLAN**  
 R2.3



**2 STORM DRAINAGE PROFILE**  
 R2.3  
 HORIZ: 1"=40'  
 VERT: 1"=10'



**3 SWALE SECTION**  
 R2.3 N.T.S.

**GROUP MACKENZIE**  
 Architecture  
 Interior Design  
 Land Use Planning  
 Civil Engineering  
 Structural Engineering  
 Transportation Planning  
 Landscape Architecture  
 Portland OR 503.224.9560  
 Vancouver WA 360.896.7879  
 Seattle WA 206.749.9993

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
**FIELDS PROPERTY**  
**WALL STREET EXTENSION PHASE 2**

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REVISIONS:

REVISION	REVISIONS	REVISION DELTA
NO.	DESCRIPTION	CLOSING DATE

SHEET TITLE:  
**UTILITY/  
 STORM DRAINAGE  
 PLAN**

DRAWN BY: MAZ  
 CHECKED BY: MWB  
 SHEET:

**R2.3**

JOB NO. **2070334.00**

PRELIMINARY DESIGN 10.02.2009

207033400\016\_V\SENITIVE LANDS REVIEW\R2.3.DWG M.S. 10/01/09 14:37 1:40.00

## Water Quality Swale Calculation

### Swale # Phase II (Wall Street swale)

Project: Fields Property  
Project #: 2070334  
Date: 30-Sep-09  
By: mjs

Q(cfs)= 0.142  
Width(ft)= 6  
Depth(ft)= 0.17  
Slope (s)= 0.005  
Manning 'n'= 0.24  
Sideslope(x:1)= 4  
Area= 1.1356  
Hyd. Radius R = 0.153421

$$AR^{0.67} = Qn/1.486(s)^{0.5}$$

$$Qn/1.486*s^{0.5} = 0.324$$

$$=AR^{0.67} = 0.325$$

Adjust width, slope  
or depth until these  
two cells match

$$V = Q/A = 0.125 \text{ ft/s}$$

$$\text{Length} = 168 \text{ ft}$$

$$\text{Time} = 22.39 \text{ min.}$$

## 25-yr Swale Conveyance Calculation

### Swale # Phase II (Wall Street swale)

Project: Fields Property

Project #: 2070334

Date: 30-Sep-09

By: mjs

Q(cfs)= 5.74 (25-yr storm using rational method)  
Width(ft)= 6  
Depth(ft)= 1.292  
Slope (s)= 0.005  
Manning 'n'= 0.24  
Sideslope(x:1)= 4  
Area= 14.42906  
Hyd. Radius R = 0.866396

$$AR^{0.67} = Qn / 1.486(s)^{0.5}$$

$Qn / 1.486 * s^{0.5}$  13.111 | Adjust width, slope  
or depth until these  
two cells match

$$= AR^{0.67} = 13.113 |$$

$$V = Q/A \quad 0.398 \text{ ft/s}$$

$$\text{Length} = 168 \text{ ft}$$

$$\text{Time} = 7.04 \text{ min.}$$



Exhibit N

# STREAM RESTORATION AND MITIGATION PLAN (REVISED)

for the

Wall Street / Hall Boulevard Project

City of Tigard

Washington County, Oregon



*Prepared for:*

City of Tigard  
13125 SW Hall Blvd.  
Tigard, OR 97223

*Submitted by:*

ZION Natural Resources Consulting  
P.O. Box 545  
Monmouth, OR 97361  
Phone/Fax: 503-838-0103  
ZNR Project #: 1137

June 2007

## **Introduction**

The following information pertains to a compensatory wetland mitigation plan associated with an already permitted removal and fill project known as the Wall Street Extension (31719-RF). It was determined by the applicant (City of Tigard) and by the Oregon Department of Fish and Wildlife that the existing wetland mitigation design associated with this development was inadequate to effectively restore this reach of stream of Pinebrook Creek and we therefore offer the subsequent revision of the compensatory wetland mitigation design. This design incorporates the reduction of water velocities, provides refuge for young fish during high flow times, will likely increase the presence of invertebrates, and prevents fish entrapment as the hydrology recedes from the site.

The sections listed below examine the original mitigation plan and highlight the proposed revisions. Sections not discussed remain unchanged from the original mitigation plan.

### **Section 3.3.2 Mitigation Wetlands - Wetland Function Attributes**

Table 1 has been revised to reflect the proposed functional attributes of the newly designed mitigated wetland areas.

<b>Function</b>	<b>Impact Wetlands</b>	<b>Original Mitigation Wetlands</b>	<b>Revised Mitigation Wetlands</b>	<b>Net Gain/Loss</b>
1. Water Storage and Delay	0.10	0.20	0.30	+0.20
2. Sediment Stabilization and Phosphorus Retention	0.93	0.87	0.93	No change
3. Nitrogen removal	0.66	0.81	0.81	+0.15
4. Thermoregulation	0.51	0.14	0.60	+0.09
5. Primary Production	0.73	0.71	0.75	+0.02
6. Resident Fish Habitat Support	0.68	0.61	0.70	+0.02
7. Anadromous fish Habitat Support	0.0	0.75	0.80	+0.80
8. Invertebrate Habitat Support	0.55	0.42	0.70	+0.15
9. Amphibian and Turtle Habitat	0.57	0.63	0.80	+0.23
10. Breeding Waterbird Support	0.0	0.0	0.0	No change
11. Wintering and Migratory Waterbird	0.48	0.52	0.60	+0.12
12. Songbird Habitat Support	0.62	0.46	0.62	No change
13. Support of Characteristic Vegetation	0.60	0.96	0.95	+0.35

With the proposed impacts and the resulting revised onsite mitigation for the impacts the functional attributes will improve. The area in which these improvements or gains will occur as a result of the mitigation effort will be in water storage and delay, nitrogen removal, thermoregulation, anadromous fish habitat support, invertebrate habitat support, amphibian and turtle habitat, wintering and migratory waterbird support, and songbird habitat support.

Water storage and delay should be improved through the use of the rock structures to reduce the velocities during storm events. The use of the berms and subsequent Newberry riffles there will be an increase in water storage during the wet season and will prolong the movement of hydrology towards Fanno Creek. Nitrogen removal will be increased and accomplished through the placement of characteristic vegetation, seasonal inundation, and the placement of downed large diameter trees placed throughout the mitigation site. The function of thermoregulation will

increase over time through the overshadowing of the stream and wetland areas by the planting of trees and shrubs to eventually reduce the temperatures of the water as the vegetation matures. The design of this mitigation area is specifically oriented toward anadromous fish habitat. This design incorporates the reduction of water velocities, provides refuge for young fish during high flow times, will likely increase the presence of invertebrates, and prevents fish entrapment as the hydrology recedes from the site. Invertebrate habitat support and amphibian and turtle support will be accomplished in the same manner through the placement of large boulders and downed wood, variable vegetation forms, and seasonal pools associated with Pinebrook Creek. Seasonal pools, increased native vegetation, and the contributing watershed upstream will provide an increase in functions for wintering and migratory waterbird support.

This revised CWM design illustrates an area that will be excavated to provide a very dependable water source for seasonal inundation and the establishment of high native species diversity. There is expected to be no loss of functions through the impact of the wetlands once compensated through the implementation of this mitigation plan.

#### **Section 4.0 Compensatory Mitigation**

This section has been revised to reflect the proposed mitigation design changes. As described in the existing mitigation plan; a total of 0.30 acres of wetland impact has been permitted for this project. In order to compensate for these impacts the applicant will be performing wetland enhancement and creation in association with restoration of a segment of Pinebrook Creek (Fig 1, Mitigation Plan). This mitigation consists of .06 acres of creation (**0.04** mitigation credit at 1.5:1), 0.67 acres of enhancement (**0.22** mitigation credit at 3:1), and 0.04 acres of restoration (**0.04** mitigation credit at 1:1).

The mitigation area begins just east of the existing culvert exiting from under Hall Blvd. There is a small segment of the existing channel that will be utilized. This channel will be expanded into the uplands creating a broad area for which 12-18 inch rock and 16 to 24” rock will be strategically placed to diffuse the velocities of water coming from the culvert (Fig. 5, Rock Cluster Detail). The hydrology will then enter the existing man made pond and will then funnel into a created wetland area. This area of creation prior to entering into the proposed 42” culvert will consist of another rock structure (Fig. 6). This structure consists of an upstream “V” weir with two rows of 24” rocks which will direct water into the culvert. A single one cubic yard boulder will be placed 25-30 feet above the culvert. This placement of the boulder will prevent debris blockage and allow the City to maintain the inlet to the culvert through the removal of any debris that may threaten the culvert. From the outlet of the culvert to the first Newberry riffle the remaining grade will be utilized as a broad channel. A low diversified berm will be constructed and will extend from the existing berm to the north to the riffle and to the south to assist in directing the flow through the Newberry riffle (Fig. 7, Newberry Riffle Detail). This riffle will match the elevation of the desired water depth for the mitigation area and connect with the restored channel. From the outlet of the riffle to the inlet of the second Newberry riffle the restored channel will be utilized as a low flow channel. The hydrology will then enter into a second Newberry riffle. A second low irregular berm will be constructed from the riffle south to connect with the existing embankment. The channel will then enter the existing reach of Pinebrook Creek.

The enhancement area located to the east of the second berm will consist of grading and removal of roughly 6” of the soil surface to remove the monoculture of reed canary grass. The site will then be planted with clusters of shrub and tree species to further stabilize this area of the 100 year flood plain along Fanno Creek. Hydrology will consist of groundwater and the placement of weep ports within the berm that will act as artificial springs. There will be three weep ports strategically placed within the berm which will consist of 0.5 inch PVC pipe which will be set at an elevation to maintain the water level in the upper structure. The pipe would then go through the berm where the outlet would consist of an elbow and a stand pipe which would control the level of water entering the enhancement area. This outlet would then be surrounded by a rock ring to further protect the outlet area.

Removal of reed canary grass will occur in the stream restoration and enhancement areas. This will consist of grading and removal of roughly 6” of the soil surface. Erosion control fabric will be placed beneath all rock weirs and Newberry riffles to stabilize the substrate beneath the rock assemblies. Large woody debris proposed to be removed from the site will be reused and placed randomly throughout the mitigation areas to enhance amphibian and invertebrate habitats. All native woody vegetation within the mitigation areas will remain intact.

A planting plan will incorporate additional native trees and shrubs as well as native herbaceous vegetation. Sterile rye grass will also be planted to immediately assist in stabilizing the newly contoured substrate upon project completion.

#### **Section 4.2 Mitigation Site Constraints**

As stated within the original mitigation plan, the site constraints include the limited site area that is available in which to reconstruct Pinebrook Creek due to the close proximity of the Tigard Library and the Fanno Pointe Condominiums to the location of the proposed right-of-way for the Wall Street Project.

#### **Section 4.3 Mitigation Design Assumptions**

As provided in the original mitigation plan, design assumptions include the presence of requisite wetland hydrology within the created and restored wetland areas. A hydrological analysis of the upstream drainage basin and existing Pinebrook Creek stream flows was also completed to determine the size of the stream channel that would allow the stream to disperse its energy during a storm event as it exits the Hall Blvd. culvert. This will be done through strategically placed boulder clusters placed just outside the Hall Blvd. culvert, then into a broad wetland area, and finally recollecting at slower velocities as it enters into upstream V weirs that direct it through the proposed 42” culvert.

## **Section 4.6 Mitigation Site Grading**

A majority of the site grading will take place within the area just east of the Hall Blvd. culvert. This area will consist of repositioning the direction of flow from the culvert into the rock cluster area. This will then connect up to the pond which will be taken offline and be used as an enhanced seasonal palustrine emergent wetland. The ponded area is then re-graded to approximately 146' to match the elevation of the stream flow and is connected to a newly created area which will enter into the second 42" culvert. The banks of this created and enhanced area will consist of a 5:1 slope (see Figure 1 Wetland Mitigation Plan, Figure 3a and 3b Wetland Mitigation Plan Cross Sections). The area of the restored stream channel and the enhanced mitigation area will consist of the minor grading and removal of the top 6" of the soil surface to remove the reed canary grass from the site. Through this minor grading the stream channel will be redefined. The berms will be constructed of upland soil found onsite with the elevation of the first berm at 141' and the elevation of the second at 139'.

The excavation for the grading of the mitigation site will be done with trucks and scrapers with rubber tires, during the dry season, to limit any potential impacts to the area. Access to the site for construction activities will be from Hall Blvd. Excavation of the mitigation site will occur in a manner that will minimize any impacts to soil structure and stability. During and after the construction phase of the project, the mitigation area will be protected from erosion and sedimentation with hay bales or silt fencing, if necessary. The area will be planted as soon as possible following excavation to minimize any possible runoff due to precipitation.

## **Section 4.7 Mitigation Site Planting**

Scientific Name	Common Name	Type	Rate/Spacing	Location*	Quantity
Lolium perenne	Sterile rye grass	Seed	20 lbs/acre	All	20 lbs
Agrostis exarata	Spike bentgrass	Seed	2 lbs/acre	All	1.5 lbs
Carex obnupta	Slough sedge	Propagules	1 ft centers in groups of 5	West Pond East of West Pond East enhance area	75 100 100
Eleocharis ovata	Ovoid spikerush	Seed	2 lbs/acre	All	1.5 lbs
Hordeum brachyantherum	Meadow barley	Seed	12 lbs/acre	All	9 lbs
Juncus tenuis	Slender rush	Seed	1 lb/acre	All	0.75 lbs
Lupinus polyphyllus	Large-leafed lupine	Seed	8 lbs/acre	All	6 lbs
Scirpus microcarpus	Small-fruited bulrush	Propagules	1 ft centers in groups of 5	West of West Pond West Pond East enhance area	100 75 100
*Wetland planting mix to be seeded in all wetland mitigation areas and temporary wetland impact areas. Distribute seed uniformly over the designated area and hand rake to insure that seed is firmly in contact with the soil.					

Scientific Name	Common Name	Size*	Spacing	Planting Location	Quantity
Acer circinatum	Vine maple	1 gallon	5-8 feet on center	Perimeter of west pond mitigation area	10 10
Cornus stolonifera [(sericea)]	Red-osier dogwood	1 gallon	5-10 feet on center	Top of restored stream bank area	100
Crataegus douglasii	Black hawthorn	1 gallon	10 feet on center	Perimeter of west pond mitigation area	10
Fraxinus latifolia	Oregon ash	2 gallon	15 feet on center	West Pond Berms Along Fanno Creek	20 15 15
Physocarpus capitatus	Pacific ninebark	1 gallon	5-8 feet on center	West Pond Berms	10 8
Rosa pisocarpa	Wild clustered rose	1 gallon	Groups of 3; 3 feet on center	West Pond Berms	20 15
Salix lasiandra	Pacific willow	1 gallon of stakes	10-15 feet on center	Top of stream bank East enhance area	40 10
Salix piperi	Piper's willow	1 gallon of stakes	5-10 feet on center	Top of stream bank East enhance area	70 30
Salix scouleriana	Scouler willow	1 gallon of stakes	15 feet on center	East enhance area	30
Thuja plicata	Western red cedar	2 gallons	15 feet on center	West Pond (149-150 ft) Berms	5 5

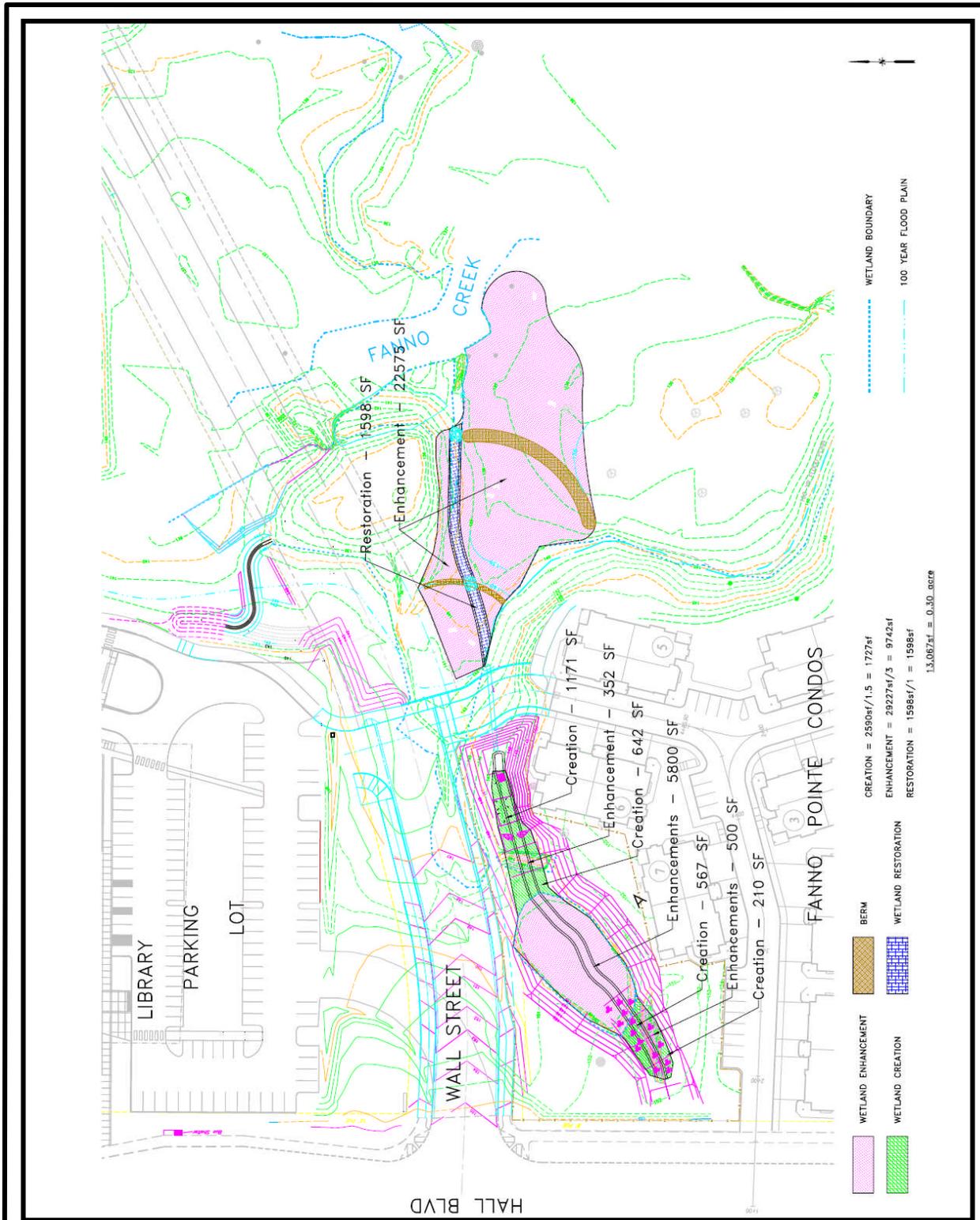
\*Bare root plants may be substituted for container plants based upon seasonal availability and site conditions.

## **Section 6.0 Construction Schedule**

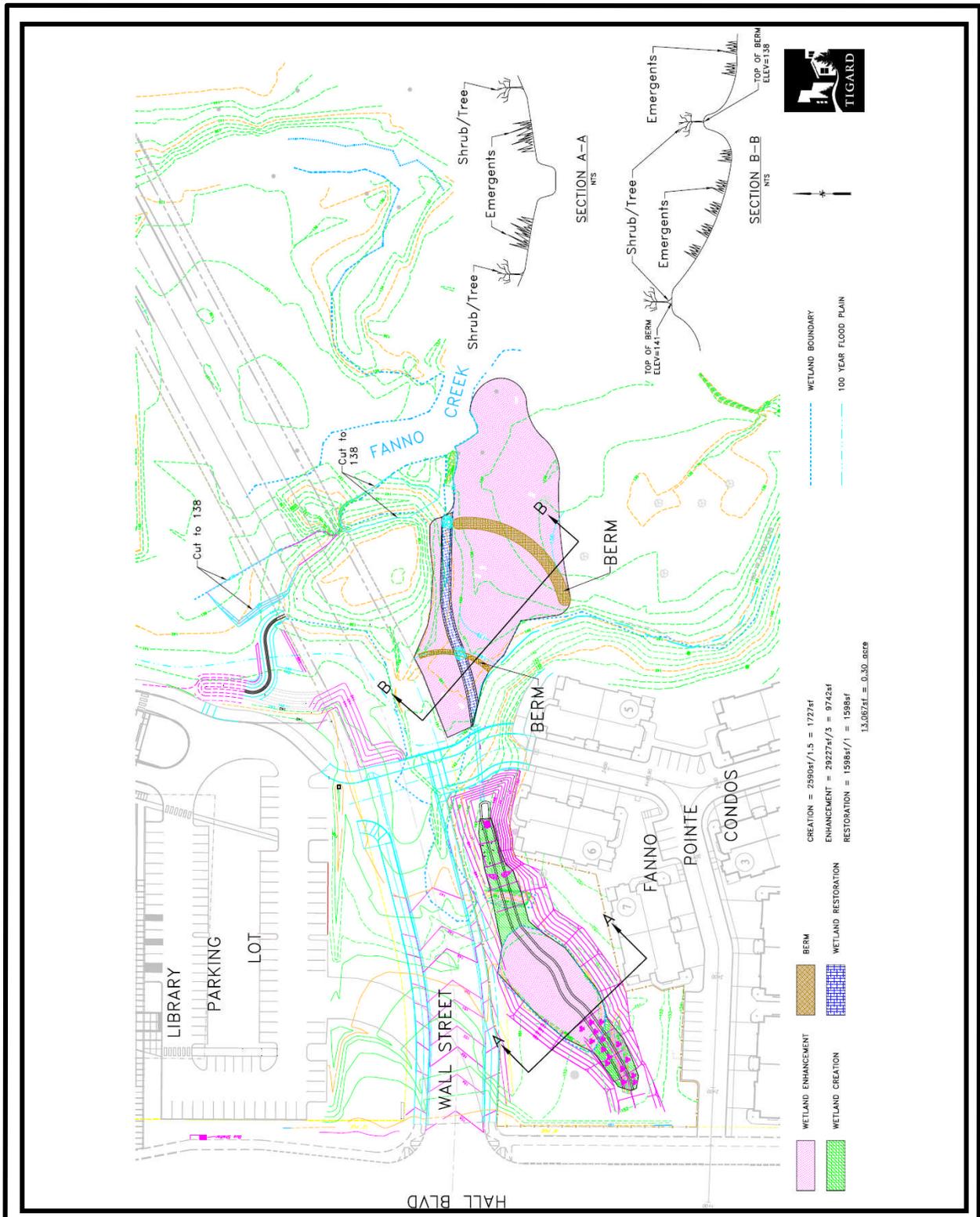
The Construction Schedule found on Table 5 of the mitigation plan should begin in summer of 2007 and the consecutive dates would be revised accordingly.

# **APPENDIX A:**

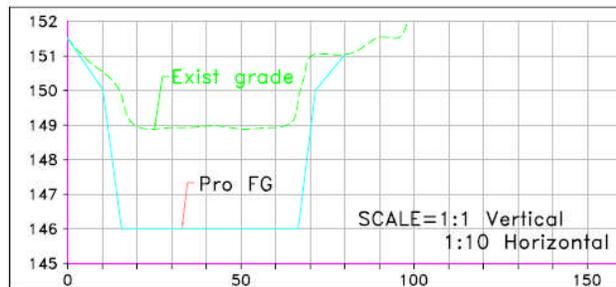
## **Site Figures**



**FIGURE 1**  
**Revised Mitigation Site Plan**  
**Project: Wall St / Hall Blvd**



**FIGURE 2**  
**Mitigation Site Plan X-Sections (large scale)**  
**Project: Wall St / Hall Blvd**



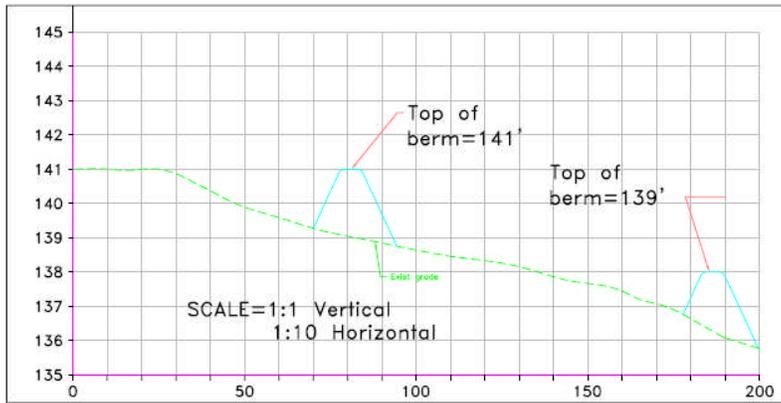
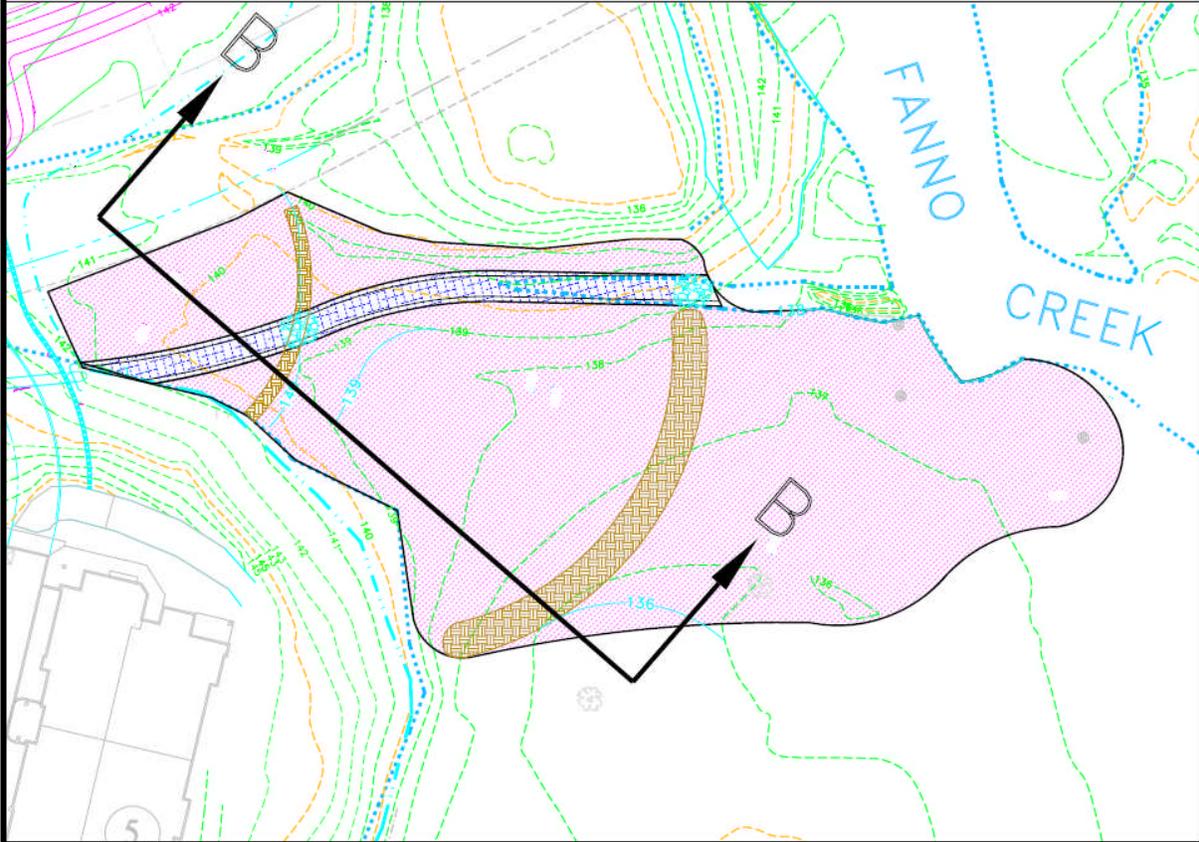
- |   |                     |   |                     |
|---|---------------------|---|---------------------|
|  | WETLAND ENHANCEMENT |  | BERM                |
|  | WETLAND CREATION    |  | WETLAND RESTORATION |

CREATION =  $2590\text{sf} / 1.5 = 1727\text{sf}$   
 ENHANCEMENT =  $29227\text{sf} / 3 = 9742\text{sf}$   
 RESTORATION =  $1598\text{sf} / 1 = 1598\text{sf}$   
 13,067sf = 0.30 acre



**FIGURE 3a**  
**Cross Section A-A**  
 Project: Wall St / Hall Blvd



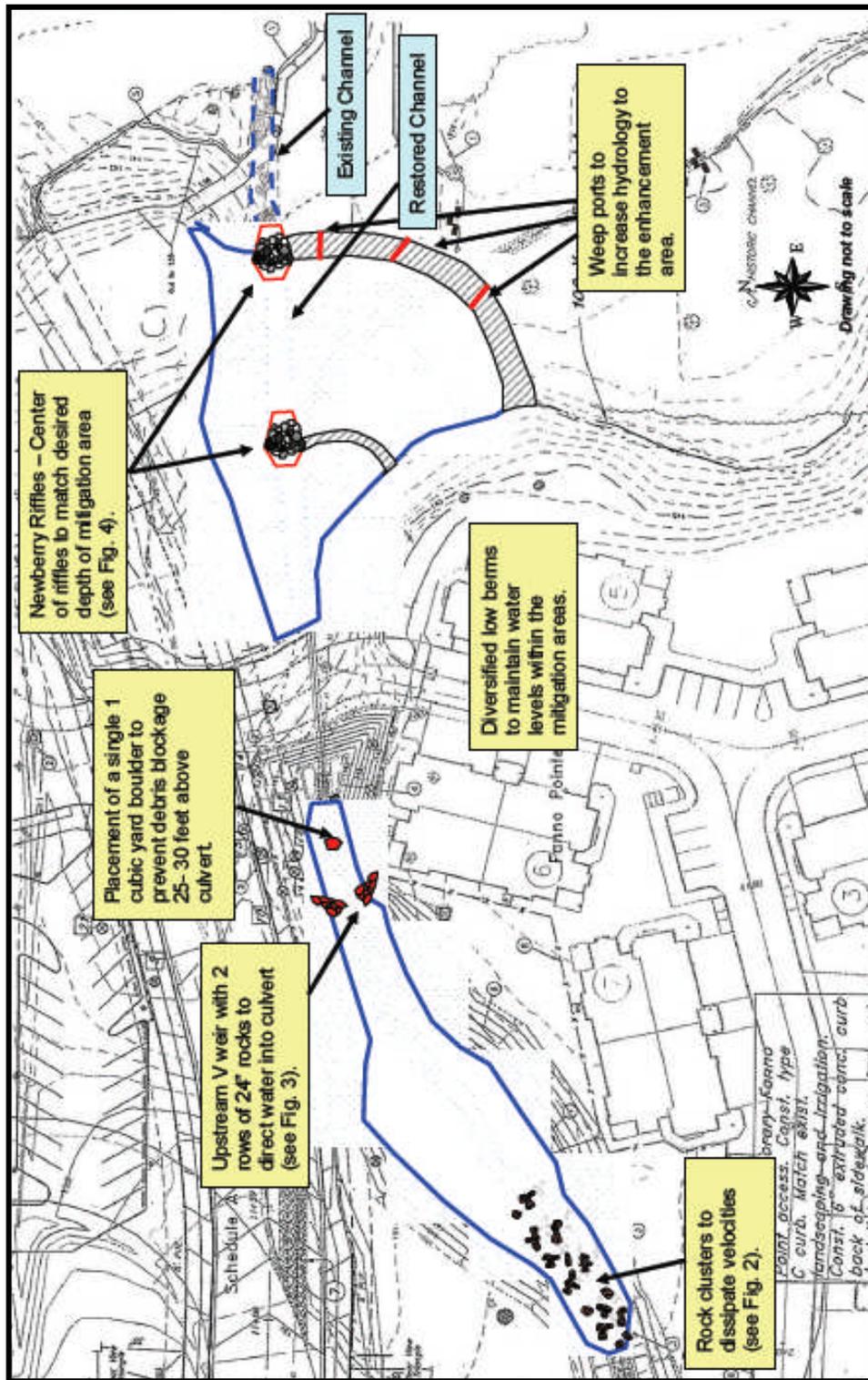


----- WETLAND BOUNDARY  
 - - - - - 100 YEAR FLOOD PLAIN

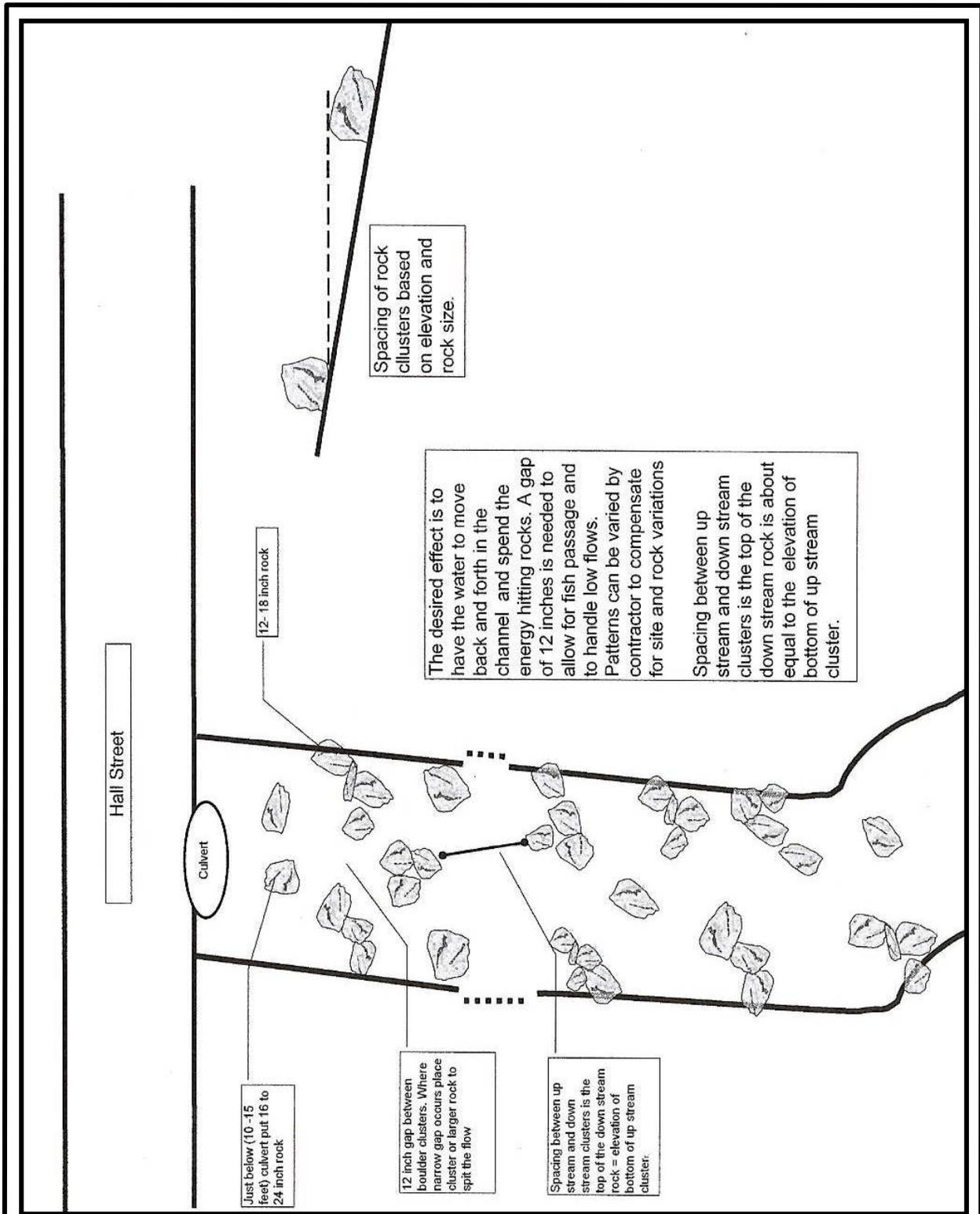


**FIGURE 3b**  
**Cross Section B-B**

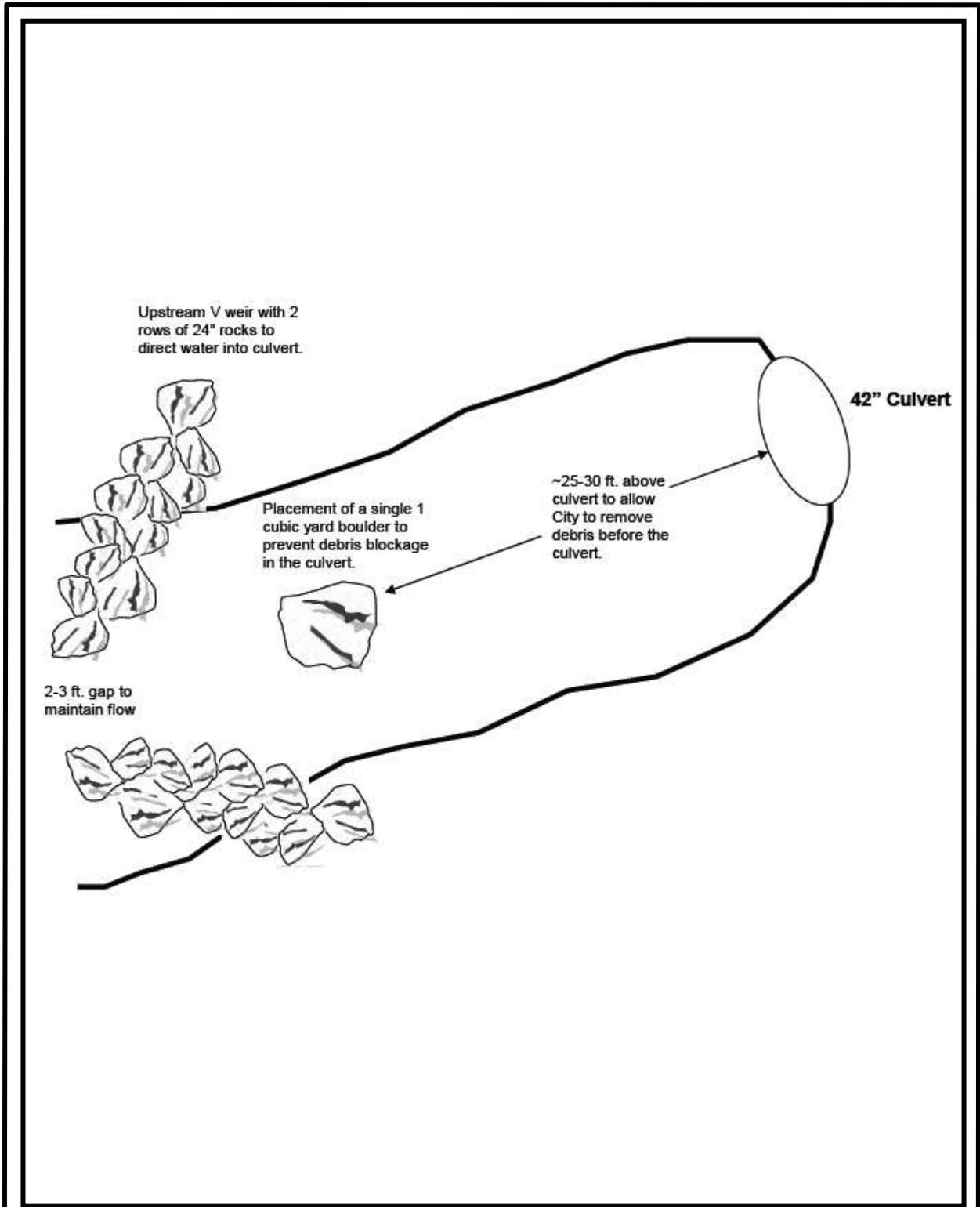
**Project: Wall St / Hall Blvd**



**FIGURE 4**  
**Proposed Restoration Site Detail**  
**Project: Wall St / Hall Blvd**

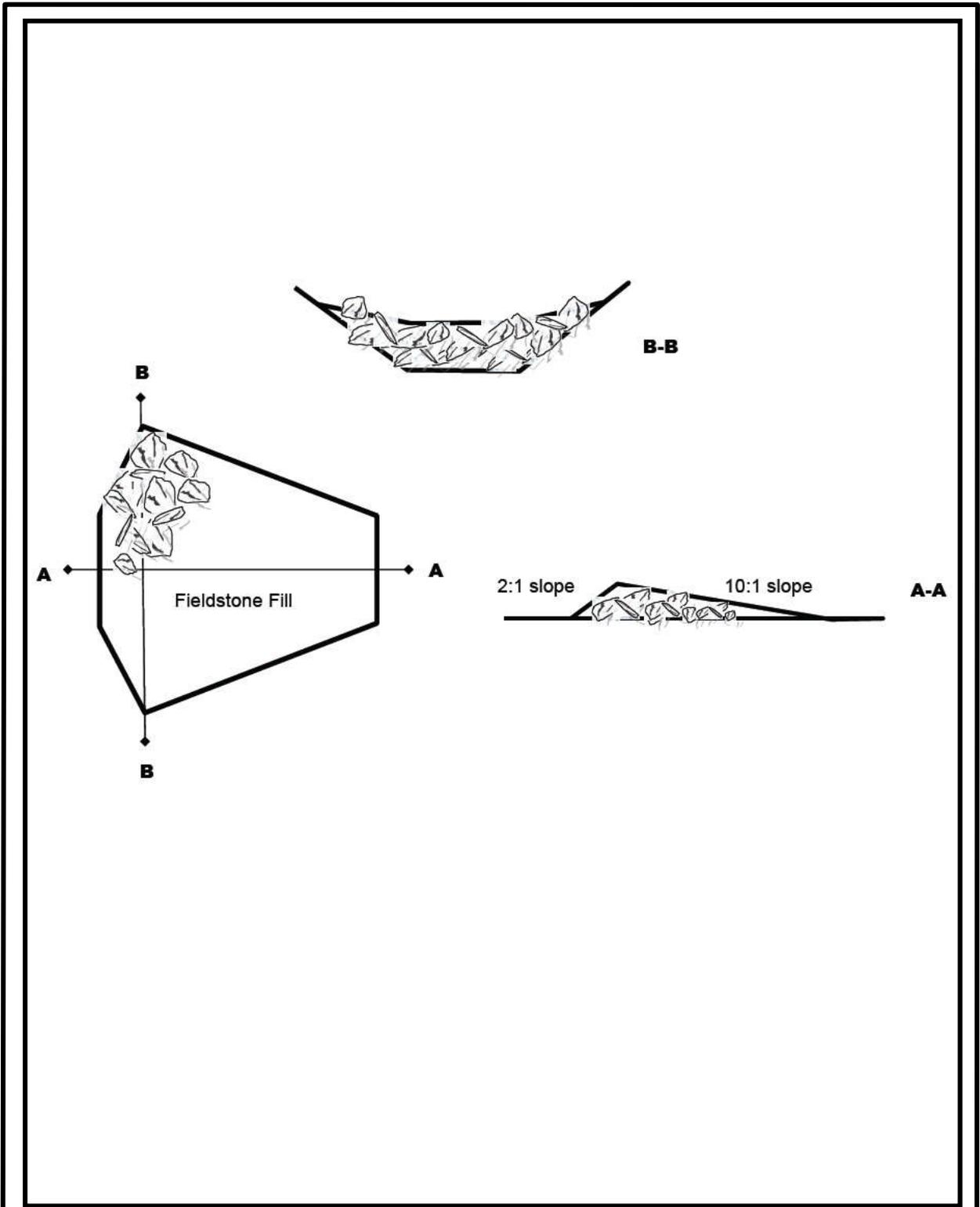


**FIGURE 5**  
**Rock Cluster Detail**  
 Project: Wall St / Hall Blvd



**FIGURE 6**  
**V-Weir Detail**

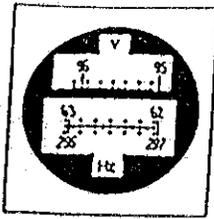
**Project: Wall St / Hall Blvd**



**FIGURE 7**  
Newberry Riffle Detail  
Project: Wall St / Hall Blvd







**DE HAAS**  
&  
**Associates, Inc.**  
Consulting Engineers & Surveyors

Suite 300 - AGC Center  
9450 SW Commerce Circle  
Wilsonville, OR. 97070  
(503) 682-2450  
(503) 682-4018 Fax

March 4, 2005

18.775.070.D.3

Memorandum to File  
Wall Street Improvements - Phase 1  
Investigation regarding "no-rise" criteria

18.775.070.D.5

This memorandum relates to the requirement that Phase 1 construction in the 100-year floodplain will not cause an increase in flood levels during the base flood discharge.

During a previous study in July of 2003 by our Subconsultant, Oregon Bridge Engineering Company (OBEC), related to costs of varying bridge lengths and approval requirements of FEMA, OBEC retained West Consultants (West) to prepare a Hydraulic Analysis Report related to the various bridge lengths. West performed extensive modeling of Fanno Creek extending above and below the proposed Wall Street alignment.

Inasmuch as West had the extensive modeling resources available, we retained them to evaluate the flood level effect of the proposed Wall Street Phase 1 improvements and to provide certification of their findings.

The resulting scope of work procedure and findings are attached.

As indicated in the Scope of Work Phase 1 construction earthwork in the floodplain consists of 135 yd<sup>3</sup> of fill and 1,076 yd<sup>3</sup> of excavation for a net total of 941 yd<sup>3</sup> excavation. Accordingly, the Phase 1 construction enhances the floodplain storage function.

As certified by Christopher R. Goodell, P.E., Phase 1 construction as shown on the attached drawings would cause no-rise in Fanno Creek during a 100-year flood event.

  
Marlin J. DeHaas, P.E., P.L.S.  
President

cc: 02.629.118 ✓  
Vannie Nguyen - City of Tigard  
Geraldene Moyle - Group Mackenzie  
Chris Goodell - West Consultants

Exp. 12/31/05



## 1. INTRODUCTION

1. OBEC Consulting Engineers is currently working on the design of a proposed bridge for SW Wall Street over Fanno Creek. The proposed bridge would be located within a regulated floodway. Therefore, the local community and Federal Emergency Management Agency (FEMA) must be involved in the approval process for this project. The project would have to be submitted to FEMA as a Conditional Letter of Map Revision (CLOMR). Mr. Gayle Harley of OBEC Consulting Engineers requested that WEST Consultants, Inc. conduct a hydraulic analysis of various bridge configurations for the proposed structure to assist OBEC with this process. Information about the hydraulic analysis and the results of the analysis are documented in the following paragraphs of this brief report.

2. The location of the proposed bridge is shown in Figure 1. The proposed bridge will be located within the City of Tigard, Oregon, approximately 3.8 miles upstream of the confluence with Tualatin River and about 1,430 feet downstream of the existing bridge for Hall Boulevard, which is labeled as SW 85<sup>th</sup> Avenue in Figure 1.

## 2. HYDRAULIC ANALYSIS

3. A revised Flood Insurance Study (FIS) of Fanno Creek has recently been completed by Pacific Water Resources, Inc. as part of a watershed assessment study of the Tualatin Basin. The study reach for the FIS extended approximately 13.5 miles upstream from the confluence with Tualatin River. The hydraulics for the FIS were computed using the US Army Corps of Engineers HEC-2 Computer Program, Version 4.6.2, dated May 1991. The HEC-2 model and all of the supporting data for the FIS are currently available from FEMA's Contractor, Michael Baker Jr., Inc. Unfortunately, it would take several months to obtain this information from Michael Baker Jr., Inc. Therefore, WEST Consultants, Inc. contacted Pacific Water Resources, Inc., who did the FIS, and obtained a copy of all the data submitted to FEMA for their final submittal. Their submittal included base maps, work maps, report, hydraulic model, ground TIN, and other supporting data. It should be noted that as the FEMA contractor, Michael Baker Jr. Inc., may have modified the submittal and certainly completed the final mapping. This data would have to be obtained from FEMA for the final CLOMR submittal. WEST Consultants, Inc. has contacted Michael Baker Jr., Inc. and initiated the process of obtaining the effective data for Fanno Creek.

4. The HEC-2 model developed for the FIS was utilized to create a Duplicate Effective Model (DEM) required for the CLOMR. The DEM is a copy of the hydraulic analysis used in the effective FIS. The DEM was developed using the US Army Corps of Engineers HEC-RAS Computer Program, Version 3.1, dated November 2002 since this program has more advanced and improved bridge routines for evaluating the proposed SW Wall Street bridge. The model was developed by importing the HEC-2 model developed for the FIS into HEC-RAS for the reach from the upstream side of the Bonita

Road bridge to the downstream side of Main Street. This reach and the cross sections located within the reach are shown in Figure 2. Plots of the cross sections are provided in Figure 3. For the DEM, the default setting (At Breaks in n Values Only) for the Conveyance Calculation Option within HEC-RAS was changed to the same method used for HEC-2 program (Between Every Coordinate Point) to obtain the same results as the current effective FIS model. The starting water surface elevation for the DEM was based on the HEC-2 model results for the cross section just upstream of Bonita Road bridge, and the elevations for the various flood frequencies are provided as follows:

Return Period	Starting WS Elevation (ft)
10-yr	136.84
50-yr	138.02
100-yr	138.45
100-yr Floodway	138.84
500-yr	139.57

5. In addition to the DEM, a Corrected Effective Model (CEM) is required for the CLOMR. The CEM is a model that corrects any errors that occur in the DEM, adds any additional cross sections to the DEM, or incorporates more detailed topographic information than what was used in the current effective model. The CEM was developed by incorporating the cross sections at the downstream and upstream side of the proposed bridge. These cross sections were provided by DeHaas & Associates, Inc., who performed all of the survey work for this project. The cross sections were developed by extracting the cross section from the digital terrain model (DTM) of the area and incorporating the data obtained from the field survey of the main channel into the cross section. Plots of these cross sections are also included in Figure 3. As shown in the plots, these cross sections have ineffective flow boundaries to account for the sudden expansion of flow caused by a berm located upstream at Cross Section AF. This berm is shown in Figure 2 and reflected in the cross section plot of Cross Section AF in Figure 3. The ineffective flow boundaries within the left overbank were set to become effective when the berm was overtopped. The contraction and expansion coefficients for the two new cross sections and for Cross Section AF were increased from 0.2 and 0.4 to 0.3 and 0.5, respectively. The stations for the floodway encroachment at these cross sections were originally defined using the workmaps provided by Pacific Water Resources, Inc. However for the reach immediately upstream of the proposed bridge, the boundaries needed to be revised to ensure that the rise associated with the floodway would be equal to or less than 1.0 foot. The revised boundaries are provided in the following table, and they were used in the hydraulic analysis of the various bridge plans:

Cross Section	Original Floodway Boundaries <sup>1</sup>		Revised Floodway Boundaries <sup>2</sup>	
	Station of Left Encroachment	Station of Right Encroachment	Station of Left Encroachment	Station of Right Encroachment
D/S side of Proposed Bridge	213.45	504.7	199	521
U/S side of Proposed Bridge	206.3	484.1	195	525
Cross Section AF	567	868	565	870

Notes:

1. Original Floodway Boundaries corresponds to the boundaries established in the FIS conducted by Pacific Water Resources, Inc.
2. Revised Floodway Boundaries corresponds to the boundaries established for the Corrective Effective Model.

6. As directed by Mr. Harley, the following plans were considered for the proposed bridge: (1) Plan 1 – Bridge with a total span of 560 ft; (2) Plan 2 – Bridge with a total span of 400 ft; (3) Plan 3 – Bridge with a total span of 320 ft; (4) Plan 4 – Bridge with a total span of 240 ft; and (5) Plan 5 – Bridge with a total span of 160 ft. A hydraulic model was developed for each of the plans by incorporating the bridge configuration into the CEM. Generally, the bridge configuration was the same for each of the plans. The only difference between the various plans was the total span length. For each of the plans, the high chord of the bridge deck was defined using the top of road profile provided in the AutoCAD file (WALLST051603.dwg) provided by Mr. Harley on May 19, 2003; the low chord of the bridge deck was set at 40 inches below the high chord; the span lengths were assumed to be 80 feet; and the piers were assumed to be 16-inches-wide.

7. Mr. Harley indicated that the preferred alternative would be the bridge with the shortest span length, i.e., Plan 5. As discussed below, the backwater from this plan would extend upstream of Hall Blvd, which is undesirable. Thus, a modification to this plan was considered to make it a viable option. The modification involved excavating the berm at Cross Section AF from elevation 142 ft to 140 ft, and it is presented in this report as Plan 5b. Mr. Harley also indicated that a library would soon be constructed on right hand side of the creek immediately upstream of the proposed bridge (near Cross Section AF). Thus, the water surface elevation upstream of the proposed bridge at Cross Section AF must be below the design base floor elevation of 143.5 feet.

### 3. RESULTS

8. The results of the hydraulic analysis are summarized in Tables 1 through 3 and depicted in Figures 4 through 11. The results for the base flood event, which corresponds to the 100-year flood event, are provided in Table 1. The shaded area provided in this table reflects the reach of the creek where the base flood elevations would be increased, and it represents the extent of the backwater associated with the proposed bridge plan. The results for the floodway event are provided in Table 2, and the results of the floodway analysis for the various bridge alternatives are provided in Table 3. The water surface profile for the base flood event for Plans 3, 4, 5, and 5b are provided in Figures 4 through 7, respectively; and the floodway water surface profile for Plans 3, 4, 5, and 5b are provided in Figures 8 through 11, respectively. Profiles were not provided for Plans 1 and 2 since they would not be noticeably different than the profile for the CEM shown in Figures 4 through 11.

**Table 1 – Results for the Base Flood Event.**

Cross Section	Station	WS EI for Without-Project (ft)	Plan 1 (Span of 560 ft)		Plan 2 (Span of 400 ft)		Plan 3 (Span of 320 ft)		Plan 4 (Span of 240 ft)		Plan 5 (Span of 160 ft)		Plan 5b (Span of 160 ft)		
			WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)
AB	15320	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0	138.5	0.0
AC	16224	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0	138.7	0.0
AD	18358	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0	140.3	0.0
AE	19928	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.3	0.1	141.3	0.1	141.3	0.1
	20123	141.4	0.0	141.4	0.0	141.5	0.1	141.5	0.1	141.6	0.2	141.6	0.2	141.6	0.2
	20175	141.4	0.0	141.4	0.0	141.6	0.2	141.7	0.2	141.8	0.4	141.8	0.4	142.0	0.5
AF <sup>1</sup>	20298	141.4	0.1	141.5	0.1	141.7	0.2	141.8	0.4	142.0	0.6	142.0	0.5	142.0	0.5
AG	21352	143.8	0.0	143.8	0.0	143.8	0.0	143.9	0.1	144.0	0.2	144.1	0.3	144.2	0.3
AH	21597	144.0	0.0	144.0	0.0	144.0	0.0	144.1	0.1	144.1	0.2	144.2	0.3	144.2	0.3
AI	21716	144.1	0.0	144.1	0.0	144.1	0.0	144.2	0.1	144.3	0.2	144.4	0.3	144.4	0.3
AJ	21717	143.9	0.0	143.9	0.0	144.0	0.0	144.1	0.1	144.1	0.2	144.2	0.3	143.9	0.0
Hall Blvd.															
AK	21791	144.5	0.0	144.5	0.0	144.5	0.0	144.5	0.0	144.6	0.1	144.6	0.1	144.5	0.0
AL	21966	145.1	0.0	145.1	0.0	145.1	0.0	145.2	0.0	145.2	0.0	145.2	0.0	145.1	0.0
AM	22485	145.5	0.0	145.5	0.0	145.5	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.5	0.0
AN	22609	145.6	0.0	145.6	0.0	145.6	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.6	0.0
AO	22618	145.6	0.0	145.6	0.0	145.6	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.6	0.0
AP	22684	145.7	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.7	0.0	145.8	0.1	145.7	0.0
AQ	23473	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0
AR	23562	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.1	0.1	146.0	0.0
AS	23563	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.1	0.1	146.0	0.0
AT	23571	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.1	0.1	146.0	0.0
AU	23669	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.1	146.0	0.0
AV	24821	146.8	0.0	146.8	0.0	146.8	0.0	146.9	0.0	146.9	0.0	146.9	0.0	146.1	0.0
AW	24957	147.2	0.0	147.2	0.0	147.2	0.0	147.2	0.0	146.9	0.0	146.9	0.0	146.8	0.0
AX	24966	147.3	0.0	147.3	0.0	147.3	0.0	147.3	0.0	147.2	0.0	147.3	0.0	147.2	0.0
AY	25025	147.4	0.0	147.4	0.0	147.3	0.0	147.3	0.0	147.3	0.0	147.3	0.0	147.3	0.0
AZ	26008	151.2	0.0	151.2	0.0	147.4	0.0	147.4	0.0	147.4	0.0	147.5	0.0	147.4	0.0
				151.2	0.0	151.1	0.0	151.1	0.0	151.1	0.0	151.1	0.0	151.2	0.0

Notes:

1. The proposed library near Cross Section AF was designed with a base floor elevation of 1 foot above the effective floodway elevation of 142.5 ft, i.e., 143.5 ft.
2. The shaded area above corresponds to where the 100-year water surface elevations would be increased as a result of the proposed bridge plan.

**Table 2 – Results for the Floodway Event.**

Cross Section	Station	WS EI for Without-Project (ft)	Plan 1 (Span of 560 ft)		Plan 2 (Span of 400 ft)		Plan 3 (Span of 320 ft)		Plan 4 (Span of 240 ft)		Plan 5 (Span of 160 ft)		Plan 5b (Span of 160 ft)		
			WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)	Change in WS EI (ft)	WS EI (ft)
AB	15320	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0	138.8	0.0
AC	16224	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0	139.2	0.0
AD	18358	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0	141.2	0.0
AE	19928	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0	142.1	0.0
	20123	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0
	20175	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0
AF	20298	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0	142.4	0.0
AG	21352	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0	144.7	0.0
AH	21597	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0	144.9	0.0
AI	21716	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0
AJ	21717	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0	145.0	0.0
Hall Blvd.															
AK	21791	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0	145.1	0.0
AL	21966	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0	145.6	0.0
AM	22485	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0	146.0	0.0
AN	22609	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0
AO	22618	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0	146.1	0.0
AP	22684	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0	146.2	0.0
AQ	23473	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0	146.5	0.0
AR	23562	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0
AS	23563	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0
AT	23571	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0	146.6	0.0
AU	23669	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0	146.7	0.0
AV	24821	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0	147.9	0.0
AW	24957	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0	148.1	0.0
AX	24966	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0	148.2	0.0
AY	25025	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0	148.3	0.0
AZ	26008	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0	151.2	0.0

Notes:

1. The proposed library near Cross Section AF was designed with a base floor elevation of 1 foot above the effective floodway elevation of 142.5 ft, i.e., 143.5 ft.
2. The above results are based on the floodway boundaries established for the Corrective Effective Model that are based on the boundaries established for the FIS completed by Pacific Water Resources, Inc. with some minor revisions as discussed in Paragraph 5.

**Table 3 – Floodway Results for the Various Bridge Alternatives.**

Cross Section	Station	Increase in the Water Surface Elevation above the Base Flood (ft) <sup>1</sup>						
		CEM	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 5b
AB	15320	0.4	0.4	0.4	0.4	0.4	0.4	0.4
AC	16224	0.5	0.5	0.5	0.5	0.5	0.5	0.5
AD	18358	0.9	0.9	0.9	0.9	0.9	0.9	0.9
AE	19928	1.0	1.0	0.9	0.9	0.9	0.9	0.9
	20123	1.0	1.0	0.9	0.9	0.8	0.8	0.8
	20175	1.0	1.0	0.9	0.8	0.8	0.7	0.7
AF	20298	1.0	1.0	0.8	0.6	0.7	0.6	0.6
AG	21352	0.9	0.9	0.9	0.8	0.8	0.8	0.7
AH	21597	0.9	0.9	0.9	0.8	0.8	0.8	0.7
AI	21716	0.9	0.9	0.9	0.8	0.8	0.8	0.7
AJ	21717	1.0	1.0	1.0	0.9	0.9	0.9	0.8
AK	21791	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AL	21966	0.5	0.5	0.5	0.4	0.5	0.4	0.4
AM	22485	0.5	0.5	0.5	0.4	0.5	0.5	0.4
AN	22609	0.5	0.5	0.5	0.4	0.5	0.5	0.4
AO	22618	0.5	0.5	0.5	0.5	0.5	0.5	0.4
AP	22684	0.5	0.5	0.5	0.4	0.5	0.5	0.4
AQ	23473	0.6	0.6	0.6	0.5	0.6	0.6	0.5
AR	23562	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AS	23563	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AT	23571	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AU	23669	0.6	0.6	0.6	0.6	0.6	0.6	0.5
AV	24821	1.0	1.0	1.0	1.0	1.0	1.0	1.0
AW	24957	0.9	0.9	0.9	0.9	0.9	0.9	0.9
AX	24966	0.9	0.9	0.9	0.9	0.9	0.9	0.8
AY	25025	0.8	0.8	0.8	0.8	0.8	0.8	0.8
AZ	26008	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Notes:

1. The increases provided above are based on the Base Flood Elevations (100-yr) associated with the proposed bridge plan and not the BFEs from the FIS completed by Pacific Water Resources, Inc.
2. The above results are based on the floodway boundaries established for the Corrective Effective Model that are based on the boundaries established for the FIS completed by Pacific Water Resources, Inc. with some minor revisions as discussed in Paragraph 5.

9. The results provided in Tables 1 through 3 indicate the following: (1) the water surface elevation for the base flood event increases as the bridge opening decreases and the largest increase is associated with the smallest bridge opening (Table 1); (2) the increase in water surface elevations caused by the proposed bridge decreases when including the effective floodway boundaries (Table 1 and 2); (3) for the base flood event, the backwater from the proposed bridge would extend upstream of Hall Blvd. for Plans 4 and 5 (Table 1); (4) the water surface elevation near the proposed library site, Cross Section AF, for the base flood event would be less than the base floor elevation of the library (143.5 ft) for all of the alternatives (Table 1); (5) the floodway water surface elevation near the proposed library site would also be less than the base floor elevation of the library for all of the alternatives (Table 2); (6) excavation of the berm at Cross Section AF would offset the backwater associated with the proposed bridge and prevent the backwater from extending upstream of Hall Blvd. (Table 1); and, (7) the increase associated with the floodway would be less than 1.0 foot for all of the proposed bridge plans (Table 3).

10. The results also indicate that the base flood event would impact the left side of the bridge for all of the proposed bridge plans except for Plan 5. Thus, the increase in the water surface associated with these plans can be reduced by raising the bridge deck near the left side to be above the base flood. Also, the increase in water surface elevations for Plans 1 through 3 could be offset by excavating the high ground between the main channel and the natural pond west of the channel (Figure 3) for the reach near the proposed bridge (between Cross Sections AF and AE).

11. To show the maximum impact the proposed bridge structure would have on the 100-year flood boundaries, the 100-year flood boundaries were delineated for without project conditions and for Plan 5. Spatial analysis within ArcView 3.0 was used to delineate the boundaries. Briefly, a surface was created for both the water surface profile and the existing ground. The surface for the ground was developed using the AutoCAD file of the TIN included in the FIS submittal by Pacific Water Resources, Inc. The surfaces were then converted to a grid and the map calculator was used to define the areas where the difference between the two grids would be greater than 0. The map calculator results were then converted to a shape file.

12. The inundation boundaries defined using the procedure above with the effective BFEs (based on the FIS submitted by Pacific Water Resources, Inc.) were compared to the boundaries developed by Pacific Water Resources, Inc. This comparison is shown in Figure 12. As shown in this figure, there are some noticeable differences between the two boundaries. The FIS submittal by Pacific Water Resources, Inc. does not contain any discussions or information on how the boundaries were delineated. It is, however, suspected that they were established manually since there are some locations where the width of the delineated boundaries is different than the width from the hydraulic results and there are no noticeable difference in the cross section extracted from the TIN and the cross section that was used in the hydraulic model. The difference in the two boundaries at the upstream end just downstream of Main Street is related to the difference in the cross section extracted from the TIN and the cross section reflected in the hydraulic model.

13. The 100-year flood boundaries for the without-project condition and Plan 5 are provided in Figure 13. As shown in this figure, Plan 5 would not significantly impact the 100-year flood boundaries upstream of the structure, and the difference between the two boundaries exists is only noticeable for the reach between the proposed bridge and Hall Blvd.

#### 4. CONCLUSIONS

14. A hydraulic analysis was performed on various bridge plans for a new proposed bridge over Fanno Creek. The results of the analysis indicate that for all of the plans the base flood and floodway water surface elevations upstream of the proposed bridge would be less than the design base floor elevation of the library that will be constructed in the near future. The results also indicate that the proposed bridge would have to have a span length of 320 feet to prevent the increase in the base flood elevations (backwater from the structure) to extend upstream of Hall Blvd, and a 160-foot long structure could be used if the berm at Cross Section AF was excavated from an elevation of 142 to 140 feet. Finally, as shown in the delineation of the 100-year flood boundaries for Plan 5, the proposed bridge structure would not cause a significant increase in the 100-year flood boundaries upstream of the structure and the only noticeable difference would exist within the reach from the proposed bridge and Hall Blvd.

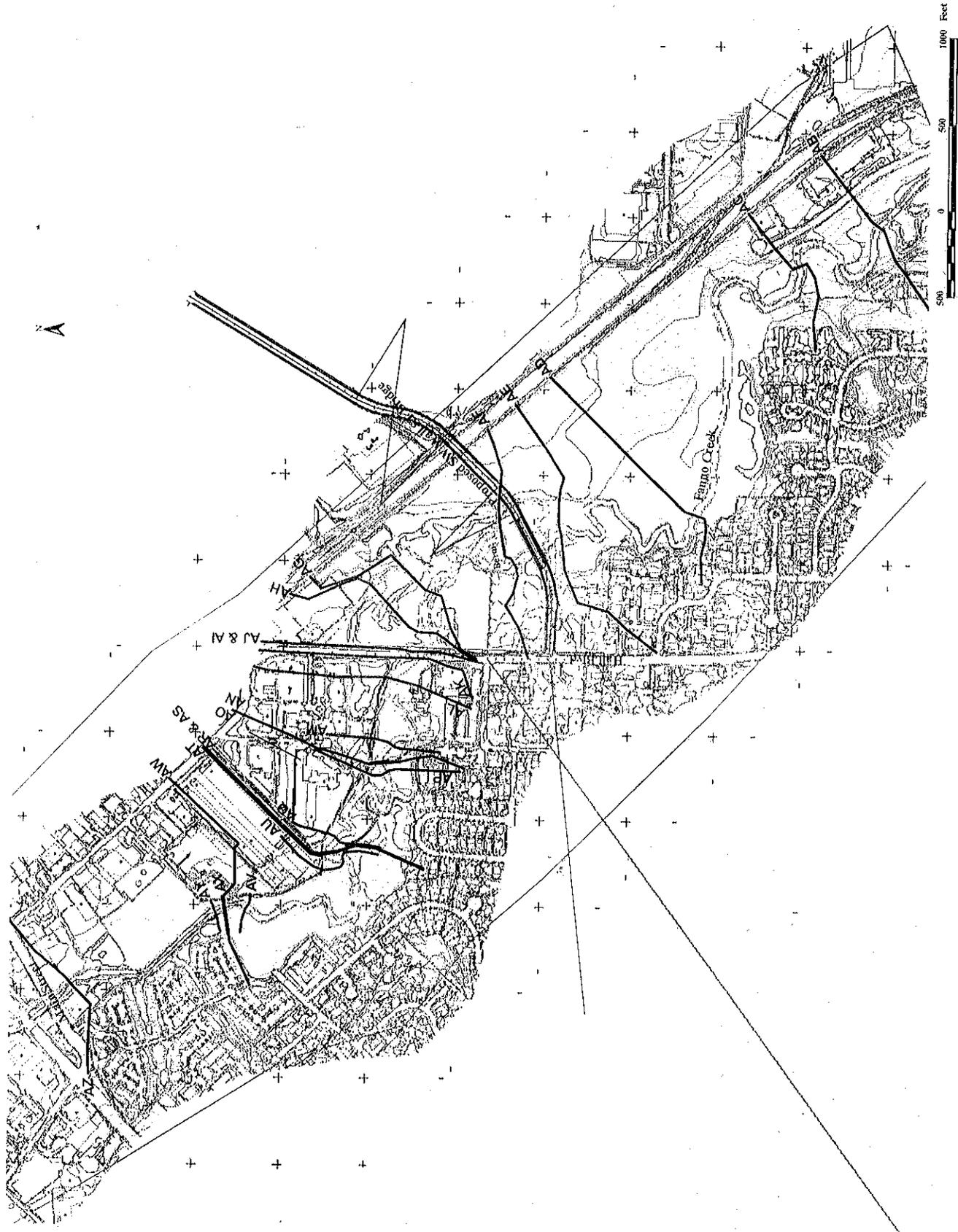
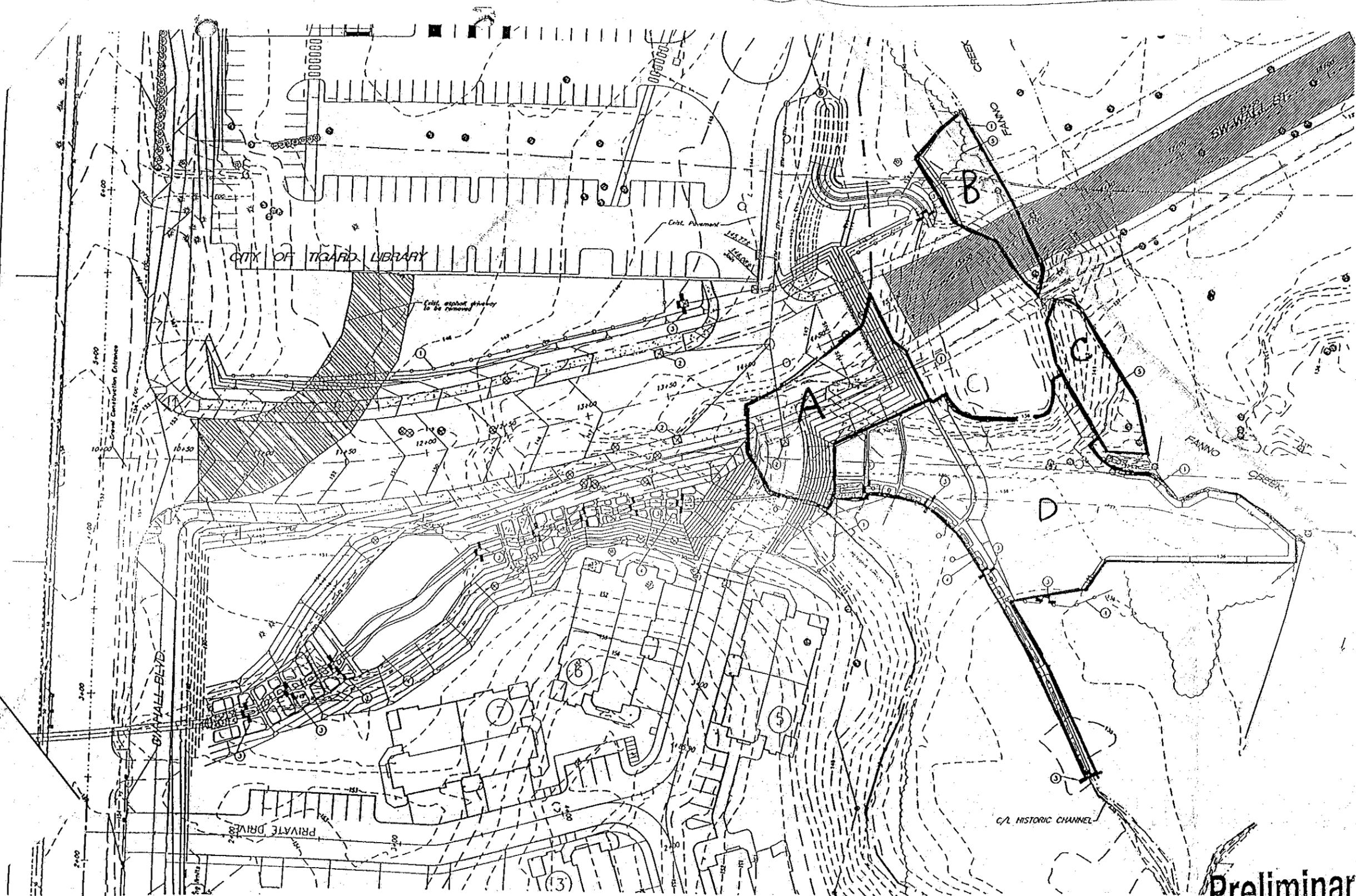


FIGURE 2 - Cross Section Layout.





**PLAN**  
Scale: 1"=30'

- LEGEND**
- Check dam
  - Bio filter bag
  - Sediment fence
  - Inlet protection
  - Proposed inlet
  - Exist. manhole
  - Exist. storm drain
  - Proposed storm drain
  - Proposed manhole
  - Exist. sanitary sewer
  - Remove exist. tree

- ① Construct sediment fence
- ② Construct inlet protection
- ③ Construct check dam  
Bio filter bag
- ④ See sheet R2, R3 & R4 for  
grading outside of roadway
- ⑤ Cut to elev. 138

Note  
Erosion control measures shall  
comply with:  
Erosion Prevention and Sediment  
Control Planning and Design  
Manual, Revised December 2000.  
Developed in partnership with:  
Clean Water Services (CWS),  
(formerly USA) of Washington  
County, Oregon  
Water Environment Services (WES)  
of Clackamas County, Oregon  
City of West Linn, Oregon  
AND  
Field Manual  
Erosion & Sediment Control,  
November 2000.  
Prepared by:  
ODOT  
CEO/HYDRO UNIT  
HARZA ENGINEERING

**Preliminary** **SCHEDULE G**

DATE	REVISION	NO.	BY	DESIGNED BY: MJD			<b>DEHAAS</b> & <b>Associates, Inc.</b> Consulting Engineers & Surveyors Suite 300 - AOC Center 9450 S.W. Commerce Circle Wilsonville, Oregon 97070 PHONE: (503) 682-2450 FAX: 682-4018		<b>WALL STEET EXTENSION (PH. 1)</b> <b>STREET &amp; UTILITIES IMPROVEMENTS</b>	<b>SHEET</b> R2 22 OF 34
				DRAWN BY: BPD, LM						
				CHECKED BY: MJD						
				DATE: X						
				SCALE: AS SHOWN						
03/05/03	per ODOT & City	1	HAI	PROJECT NO. 629	DATE MARCH, 2004	FILE 02.629.118			GRADING AND EROSION CONTROL	

7/30/04

## Service Provider Letter

**This form and the attached conditions will serve as your Service Provider Letter in accordance with Clean Water Services Design and Construction Standards (R&O 07-20).**

<b>Jurisdiction:</b> <u>Tigard</u>	<b>Review Type:</b> <u>Allowed Use/ Tier 2 (All Tier 2 Requirements Met under SPL 4203)</u>
<b>Site Address / Location:</b> <u>Tigard, OR 97223</u>	<b>SPL Issue Date:</b> <u>October 01, 2009</u>
	<b>SPL Expiration Date:</b> <u>October 01, 2011</u>

**Applicant Information:**

Name \_\_\_\_\_  
 Company GROUP MACKENZIE  
 Address 1515 SE WATER AVENUE  
PORTLAND OR 97293  
 Phone/Fax (503) 224-9560  
 E-mail: rkonrad@grpmack.com

**Owner Information:**

Name FRED FIELDS  
 Company \_\_\_\_\_  
 Address 1149 SW DAVENPORT AVENUE  
PORTLAND OR 97201  
 Phone/Fax (503) 228-7084  
 E-mail: \_\_\_\_\_

**Tax lot ID**

2S102DD00100,  
2S102DD00200,  
2S102DA00690,  
2S1010001200

**Development Activity**

Wall Street Road Crossing; Phase 2

**Pre-Development Site Conditions:**

Sensitive Area Present:  On-Site  Off-Site  
 Vegetated Corridor Width: Variable; 0-50  
 Vegetated Corridor Condition: Marginal/Degraded

**Post Development Site Conditions:**

Sensitive Area Present:  On-Site  Off-Site  
 Vegetated Corridor Width: Variable; 0-50+

**Enhancement of Remaining Vegetated Corridor Required:**

**Square Footage to be enhanced:** 24,012

**Encroachments into Pre-Development Vegetated Corridor:**

Type and location of Encroachment:	Square Footage:
<u>Road Crossing</u>	<u>28,383</u>

**Mitigation Requirements:**

Type/Location	Sq. Ft./Ratio/Cost
<u>On-site (2S102DD00100 and 2S102DD00200); Off-site (2S1010001200)</u>	<u>28,383/1:1</u>

Conditions Attached  Development Figures Attached (2)  Planting Plan Attached  Geotech Report Required

**This Service Provider Letter does NOT eliminate the need to evaluate and protect water quality sensitive areas if they are subsequently discovered on your property.**

**In order to comply with Clean Water Services water quality protection requirements the project must comply with the following conditions:**

1. No structures, development, construction activities, gardens, lawns, application of chemicals, uncontained areas of hazardous materials as defined by Oregon Department of Environmental Quality, pet wastes, dumping of materials of any kind, or other activities shall be permitted within the sensitive area or Vegetated Corridor which may negatively impact water quality, except those allowed in R&O 07-20, Chapter 3.
2. Prior to any site clearing, grading or construction the Vegetated Corridor and water quality sensitive areas shall be surveyed, staked, and temporarily fenced per approved plan. During construction the Vegetated Corridor shall remain fenced and undisturbed except as allowed by R&O 07-20, Section 3.06.1 and per approved plans.
3. **Prior to any activity within the sensitive area, the applicant shall gain authorization for the project from the Oregon Department of State Lands (DSL) and US Army Corps of Engineers (USACE). The applicant shall provide Clean Water Services with copies of all DSL and USACE project authorization permits.**
4. An approved Oregon Department of Forestry Notification is required for one or more trees harvested for sale, trade, or barter, on any non-federal lands within the State of Oregon.
5. Prior to ground disturbance an Erosion Control permit will be required with the City or Clean Water Services. Appropriate Best Management Practices (BMP's) for Erosion Control, in accordance with Clean Water Services' Erosion Prevention and Sediment Control Planning and Design Manual, shall be used prior to, during, and following earth disturbing activities.
6. Prior to construction, a Stormwater Connection Permit from Clean Water Services or its designee is required pursuant to Ordinance 27, Section 4.B.
7. Activities located within the 100-year floodplain shall comply with R&O 07-20, Section 5.10.
8. Removal of native, woody vegetation shall be limited to the greatest extent practicable.
9. **Should final development plans differ significantly from those submitted for review by Clean Water Services, the applicant shall provide updated drawings, and if necessary, obtain a revised Service Provider Letter.**

**SPECIAL CONDITIONS**

10. The Vegetated Corridor width for sensitive areas within the project site shall be a minimum of 50 feet wide, as measured horizontally from the delineated boundary of the sensitive area.
11. **For the on-site and off-site Vegetated Corridors proposed for enhancement (30,332 sq ft; See SPL Attachment 2) the applicant shall enhance the entire Vegetated Corridor and mitigated Vegetated Corridor to meet or exceed good corridor condition as defined in R&O 07-20, Section 3.14.2, Table 3-3.**
12. Removal of invasive non-native species by hand is required in all Vegetated Corridors rated "good." Replanting is required in any cleared areas larger than 25 square feet using low impact methods. The applicant shall calculate all cleared areas larger than 25 square feet prior to the preparation of the required Vegetated Corridor enhancement/restoration plan.
13. Prior to any site clearing, grading or construction, the applicant shall provide Clean Water Services with a Vegetated Corridor enhancement/restoration plan. Enhancement/restoration of the Vegetated Corridor shall be provided in accordance with R&O 07-20, Appendix A, and shall include planting specifications for all Vegetated Corridor, including any cleared areas larger than 25 square feet in Vegetated Corridor rated "good."
14. Prior to installation of plant materials, all invasive vegetation within the Vegetated Corridor shall be removed per methods described in Clean Water Services' Integrated Vegetation and Animal Management Guidance, 2003. During removal of invasive vegetation care shall be taken to minimize impacts to existing native tree and shrub species.

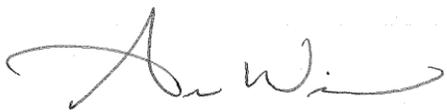
15. Clean Water Services or the jurisdictional city shall be notified 72 hours prior to the start and completion of enhancement/restoration activities. Enhancement/restoration activities shall comply with the guidelines provided in Landscape Requirements (R&O 07-20, Appendix A).
16. Maintenance and monitoring requirements shall comply with R&O 07-20, Section 2.11.2. If at any time during the warranty period the landscaping falls below the 80% survival level, the owner shall reinstall all deficient planting at the next appropriate planting opportunity and the two year maintenance period shall begin again from the date of replanting.
17. Performance assurances for the Vegetated Corridor shall comply with R&O 07-20, Section 2.06.2, Table 2-1 and Section 2.10, Table 2-2.
18. Clean Water Services shall require an easement over the existing and mitigated Vegetated Corridor conveying storm and surface water management to Clean Water Services that would prevent the owner of the Vegetated Corridor from activities and uses inconsistent with the purpose of the corridor and any easements therein.

#### **FINAL PLANS**

19. **Final construction plans shall include landscape plans.** In the details section of the plans, a description of the methods for removal and control of exotic species, location, distribution, condition and size of plantings, existing plants and trees to be preserved, and installation methods for plant materials is required. Plantings shall be tagged for dormant season identification and shall remain on plant material after planting for monitoring purposes.
20. **A Maintenance Plan shall be included on final plans** including methods, responsible party contact information, and dates (minimum two times per year, by June 1 and September 30).
21. **Final construction plans shall clearly depict the location and dimensions of the sensitive area and the Vegetated Corridor** (indicating good, marginal, or degraded condition). Sensitive area boundaries shall be marked in the field.
22. **Protection of the Vegetated Corridors and associated sensitive areas shall be provided by the installation of signage** between the development and the outer limits of the Vegetated Corridors. Signage details to be included on final construction plans.

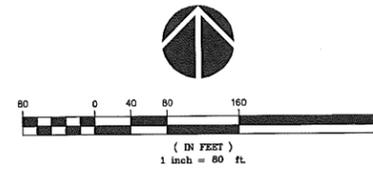
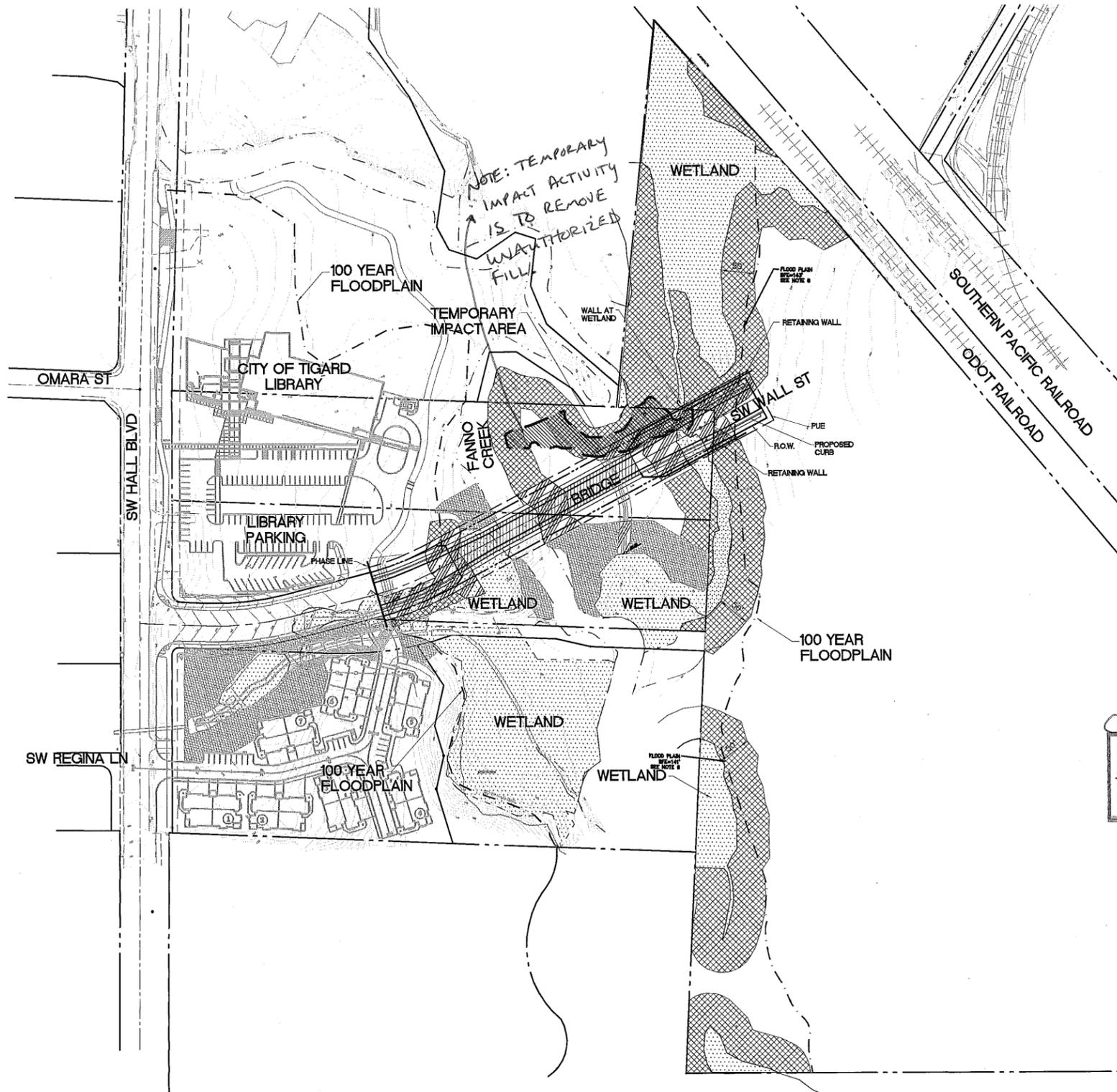
**This Service Provider Letter is not valid unless CWS-approved site plan is attached.**

**Please call (503) 681-3653 with any questions.**



**Amber Wierck  
Environmental Plan Review**

**Attachments (2)**



**LEGEND**

- SENSITIVE AREA
- REGULATED VEGETATED CORRIDOR
- PHASE 1 MITIGATION AREA
- ENCROACHMENT AREA (PHASE 2) (28,383 SF)
- TEMPORARY IMPACT AREA (APPROX 10,800 SF)
- 50' WETLAND BUFFER

**GROUP MACKENZIE**  
 Architecture  
 Interior Design  
 Land Use Planning  
 Civil Engineering  
 Structural Engineering  
 Transportation Planning  
 Landscape Architecture  
 Portland OR 503.224.9580  
 Vancouver WA 360.695.7878  
 Seattle WA 206.746.9898

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
**FIELDS**  
 PROPERTY  
 WALL STREET

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 WITHOUT PRIOR WRITTEN PERMISSION.

REVISIONS:

NO.	REVISIONS	DATE

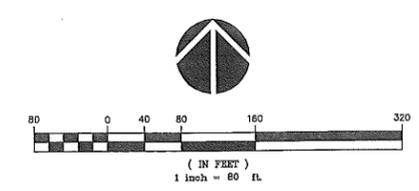
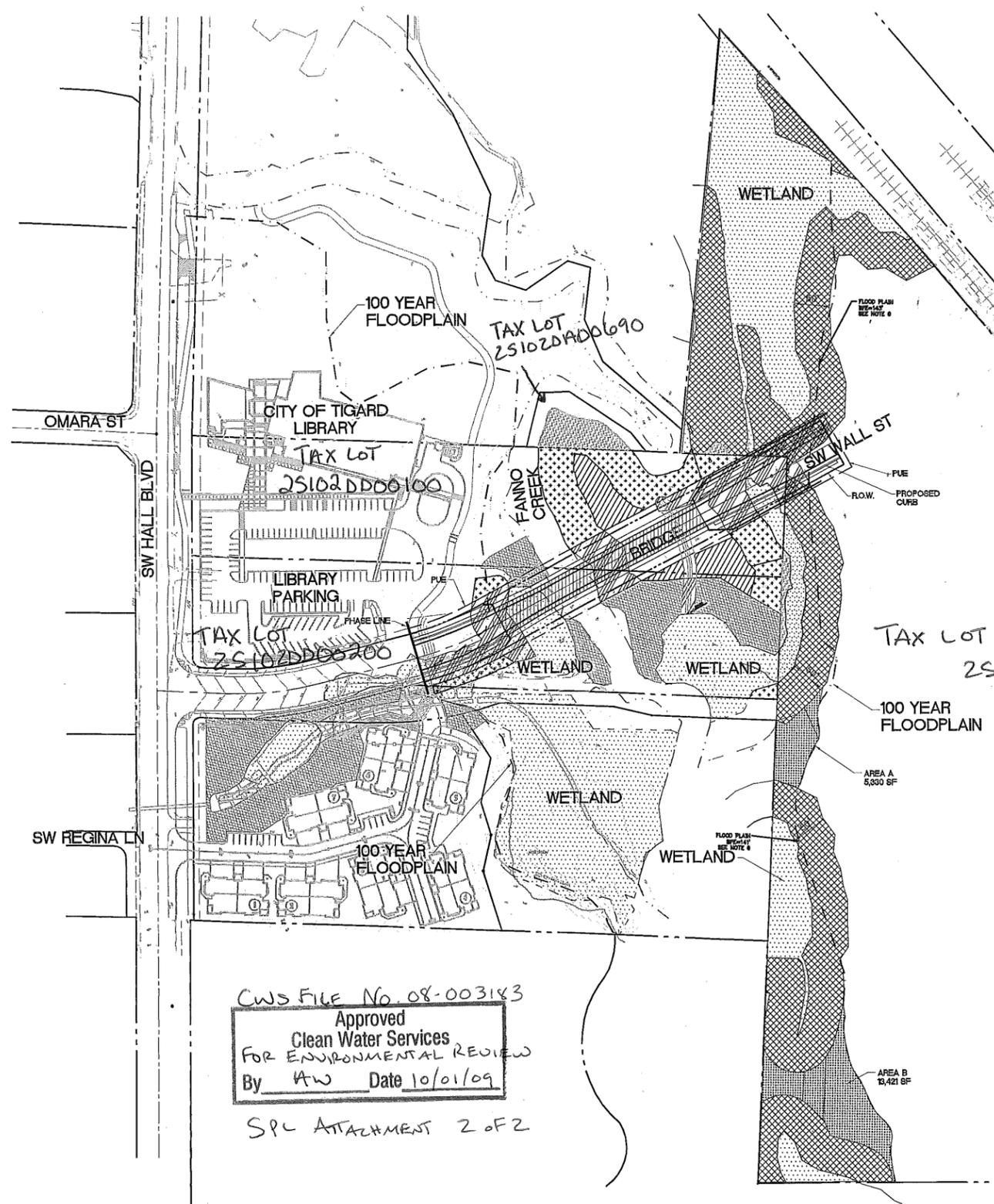
SHEET TITLE:  
**SENSITIVE AREA  
 IMPACT PLAN**

DRAWN BY: **BDN**  
 CHECKED BY: **MWB**  
 SHEET:

**R2.4A**

JOB NO. **2070334.00**

CWS FILE NO. **08-003183**  
 Approved  
 Clean Water Services  
 FOR ENVIRONMENTAL REVIEW  
 By **AW** Date **10/01/09**  
 SPL ATTACHMENT 1 of 2



**LEGEND**

- SENSITIVE AREA
- REGULATED VEGETATED CORRIDOR (PHS) (28,383 SF)
- ENCROACHMENT (PHASE 2) (9,832 SF)
- ON-SITE MITIGATION (PHASE 2) (18,751 SF)
- PROPOSED VEGETATED CORRIDOR -OFF-SITE MITIGATION AREA (PHS) (24,012 SF)
- ON-SITE ENHANCEMENT (PHASE 2) (6,320 SF)
- OFF-SITE ENHANCEMENT (PHASE 2) (6,320 SF)
- PHASE 1 ENHANCEMENT - NOTE: APPROXIMATELY 28,000 sq. ft. OF ENHANCEMENT CONDUCTED UNDER PHASE 1 / CWS FILE # 4203
- 50' WETLAND BUFFER

**NOTE:** ON AND OFF-SITE ENHANCEMENT PLANTINGS SHALL BE EQUAL TO AT LEAST 303 TREES AND 1,517 SHRUBS. ONLY MITIGATION PLANTINGS.

**Table 1. Proposed mitigation plantings**

Botanical Name	Common Name	Minimum rooting size	Plant Quantity	
			Area A	Area B
<b>TREES</b>				
<i>Acer circinatum</i>	Vine maple	2 gallon		
<i>Acer macrophyllum</i>	Big leaf maple	2 gallon		14
<i>Crataegus douglasii</i>	Douglas hawthorn	2 gallon	16	13
<b>SHRUBS</b>				
<i>Amelanchier alnifolia</i>	Western serviceberry	1 gallon	25	90
<i>Mahonia aquifolium</i>	Tall Oregon grape	1 gallon	15	85
<i>Oemleria cerasiformis</i>	Indian plum	2 gallon		50
<i>Polystichum munitum</i>	Sword fern	2 gallon	10	55
<i>Rubus parviflorus</i>	Thimbleberry	1 gallon		50
<i>Sambucus racemosa</i>	Red elderberry	1 gallon		75
<i>Symphoricarpos albus</i>	Snowberry	1 gallon	30	100
<i>Vaccinium parviflorum</i>	Red huckleberry	1 gallon		50
<b>HERBACEOUS</b>				
<i>Bromus carinatus</i>	California brome	Seed	Seed all bare areas > 25ft <sup>2</sup> in size	
<i>Elymus glaucus</i>	Blue wild-rye	Seed		
<i>Gaultheria shallon</i>	Salal	1 gallon		100

CWS FILE No. 08-003183  
 Approved  
 Clean Water Services  
 FOR ENVIRONMENTAL REVIEW  
 By AW Date 10/01/09  
 SPL ATTACHMENT 2 OF 2

**GROUP MACKENZIE**  
 Architecture  
 Interior Design  
 Land Use Planning  
 Civil Engineering  
 Structural Engineering  
 Transportation Planning  
 Landscape Architecture  
 Portland OR 503.224.9550  
 Vancouver WA 360.888.7879  
 Seattle WA 206.746.9593

Client  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project  
**FIELDS PROPERTY**  
 WALL STREET

REVISIONS:

NO.	REVISIONS	REVISION DATE	CLOSING DATE

SHEET TITLE:  
**WETLAND MITIGATION AREA PLAN**

DRAWN BY: MAZ  
 CHECKED BY: MWB  
 SHEET:

**R2.4**

JOB NO. 2070334.00



## PACIFIC HABITAT SERVICES, INC

9450 SW Commerce Circle, Suite 180  
Wilsonville, OR 97070

(800) 871-9333 • (503) 570-0800 • Fax (503) 570-0855

September 22, 2009

**Amber Wierck**  
**Environmental Plan Review**  
Clean Water Services  
2550 SW Hillsboro Highway  
Hillsboro, Oregon 97123

**Re: Wall Street Bridge, Tigard; Conceptual off-site vegetated corridor mitigation planting plan**  
**Clean Water Services File Number 08-003183**  
**PHS Project # 4365**

Amber:

As detailed in previous submittals associated with this project, the original plan included construction in two phases. All necessary VC mitigation and enhancements for Phase I have been satisfied, as has sensitive areas mitigation for both Phases. In order to meet current CWS regulations, VC mitigation and enhancement associated with Phase II have been reassessed.

Following your review of project information submitted on March 4, 2009, you indicated via email to Rhys Konrad of Group Mackenzie (on March 25, 2009) that the application needed to investigate off-site mitigation opportunities. You also noted that a delineation of sensitive areas in the vicinity of proposed off-site enhancement or mitigation would be required. This submittal includes a discussion of the results of a delineation along the western boundary of lot 1200. The delineation has enabled the applicant to identify viable vegetated corridor (VC) mitigation opportunities. The overall mitigation plan for project related impacts to regulated VC now includes 9,632 square feet of on-site VC mitigation and 18,751 square feet of off-site VC mitigation on lot 1200. On-site and off-site VC mitigation areas are now equivalent to the proposed area of impact (28,383 square feet).

### **Sensitive Areas Delineation**

Sensitive areas on the western portion of lot 1200 include, from north to south; the southern extent of floodplain wetlands that extend off-site to the west; a short section of the east bank of Fanno Creek located in the north-central portion of the lot; the eastern limits of a backwater channel of Fanno Creek that is connected to the northern floodplain wetland via a short culvert (identified in the original delineation for Wall Street); a second section of the east bank of Fanno Creek and high flow overbank channel in the south-central portion of the lot; and the northern extent of a large floodplain wetland that extends off-site to the south (see Figure 1). Documented sample points associated with the delineation are included with this submittal.

### **Condition of Regulated Vegetated Corridors and Mitigation Areas**

Given that Fanno Creek is a perennial stream, and that each wetland is at least one-half acre in size and/or hydrologically connected to Fanno Creek, all delineated sensitive areas will have regulated corridors 50 feet in width. Slopes east of the creek and wetlands vary between 5 to 10 percent, so wider corridors are not required.

Existing regulated VC on lot 1200 range from degraded fields of mixed grasses and forbs east of the floodplain wetland on the north end of the lot, to native riparian forest in the west-central and southwest portions of the lot. Forested areas typically maintain a tree canopy ranging from 70 to 100 percent canopy cover. The understory is characterized by a very dense shrub layer that includes a predominance of native species, though Himalayan blackberry is locally present to dominant. As a result of the density of shrub cover, groundcover is limited in most areas of the VC.

The locations of proposed VC mitigation provide continuity between existing sections of VC. Area A (5,330 square feet) is located on a “bench” with Fanno Creek to the south, and an overflow channel to the north. The area is characterized by an Oregon ash overstory with snowberry, nootka rose, trailing blackberry, and Himalayan blackberry. Area B (13,421 square feet) also maintains an overstory of Oregon ash, but the understory is dominated by Himalayan blackberry and reed canarygrass. Natives such as Douglas spirea, nootka rose, cascara and white fringe-cup are also present. Photos of Area B are included with this submittal.

### **Conceptual Mitigation Plan**

Due to the presence of a well developed tree canopy, enhancement of the VC mitigation areas will focus on the establishment of small trees, shrubs, and herbaceous species. Plant installation will not occur until after invasive species removal measures have been completed. The shrub and herbaceous layers throughout portions of Areas A and B are currently dominated by Himalayan blackberry. English ivy and reed canarygrass are also present.

Due to the presence of native shrub and herbaceous species throughout the mitigation areas, invasive species removal and control methods will generally be limited to manual methodologies, though mowing of blackberries in portions of Area B maybe necessary and appropriate. Regardless of the technique, suggested methodologies will follow the *Integrated Vegetation and Animal Management Guide* (Clean Water Services, 2003).

Table 1 lists the size and estimated number of native plantings to be installed within the mitigation areas (see Figure A). The quantities of proposed plantings take into account existing plant cover in Areas A and B. Within Area A it is assumed that following invasive species removal that only 30% of the mitigation area will require replanting. Within Area B it has been assumed that no trees or deep rooting shrubs will be planted directly over the existing CWS sanitary line. It is also anticipated that following invasive species removal, 20% of Area B will require additional trees, while 70% of the same area will require shrub and herbaceous replanting.

Figure A includes the location of off-site VC mitigation Areas A and B. Plants as listed in Table 1 are to be randomly distributed throughout the mitigation areas, with location dependent upon planting areas made available following invasive species removal. The landscape contractor will,

Wall Street Extension  
 Off-site VC mitigation  
 7/21/09

as necessary, receive prior authorization from Clean Water Services before making significant alterations or species substitutions from this conceptual landscape plan. In addition to the woody plants, salal, as well as a seed mix of native grasses will be applied in bare areas following invasive species removal.

Based upon the species lists for riparian and upland forest plant communities, detailed in *Appendix A: Planting Requirements of Clean Water Services' Design and Construction Standards Resolution and Order 07-20; 2007*), the following species were selected:

**Table 1. Proposed mitigation plantings**

Botanical Name	Common Name	Minimum rooting size	Plant Quantity	
			Area A	Area B
<b>TREES</b>				
<i>Acer circinatum</i>	Vine maple	2 gallon		
<i>Acer macrophyllum</i>	Big leaf maple	2 gallon		14
<i>Crataegus douglasii</i>	Douglas hawthorn	2 gallon	16	13
<b>SHRUBS</b>				
<i>Amelanchier alnifolia</i>	Western serviceberry	1 gallon	25	90
<i>Mahonia aquifolium</i>	Tall Oregon grape	1 gallon	15	85
<i>Oemleria cerasiformis</i>	Indian plum	2 gallon		50
<i>Polystichum munitum</i>	Sword fern	2 gallon	10	55
<i>Rubus parviflorus</i>	Thimbleberry	1 gallon		50
<i>Sambucus racemosa</i>	Red elderberry	1 gallon		75
<i>Symphoricarpos albus</i>	Snowberry	1 gallon	30	100
<i>Vaccinium parviflorum</i>	Red huckleberry	1 gallon		50
<b>HERBACEOUS</b>				
<i>Bromus carinatus</i>	California brome	Seed	Seed all bare areas > 25ft <sup>2</sup> in size	
<i>Elymus glaucus</i>	Blue wild-rye	Seed		
<i>Gaultheria shallon</i>	Salal	1 gallon		100

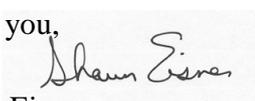
**VC Enhancement, Impact and Mitigation Summary (Phase II)**

The following is a summary of project related VC enhancements, impacts, and mitigation associated with Phase II of the Wall Street Extension Project.

On-site VC enhancement (lots 100 & 200)	24,012 ft <sup>2</sup>	
Off-site VC enhancement (lot 690 & 1200)	6,320 ft <sup>2</sup>	
Total VC impacts	28,383 ft <sup>2</sup>	
On-site VC mitigation (lots 100 & 200)	9,632 ft <sup>2</sup>	} 28,383 ft <sup>2</sup>
Off-site VC mitigation (lot 1200)	18,751 ft <sup>2</sup>	

Please confirm that the proposed VC enhancement and mitigation elements associated with Phase II are sufficient to satisfy CWS requirements.

Thank you,



Shawn Eisner  
 Wetland Scientist



**Pacific Habitat Services, Inc.  
9450 SW Commerce Circle, Suite 180  
Wilsonville, Oregon 97070**

**Telephone number: (503) 570-0800      Fax number: (503) 570-0855**

**Transmittal**

**Date:                                  June 9, 2010**  
**To:                                        Amber Wierck  
    Clean Water Services**  
**From:                                  Shawn Eisner**  
**Re:                                        Wall Street; landscape plan details  
    Clean Water Services File Number 08-003183  
    PHS project no.: 4365**

---

The construction of Wall Street and Wall Street Bridge is to occur in two phases. Phase 1, which consisted of the construction of Wall Street and associated utilities west of the bridge, has been completed. Phase 2 includes construction of the bridge and a short section of Wall Street east of the bridge. The proposed bridge will span Fanno Creek, wetlands west of the creek, and much of the 100 year floodplain, however construction will result in some impacts to wetlands and regulated vegetated corridors west and east of the creek. Structural fill in the floodplain (from both phases) will be balanced by the removal of an equivalent volume of material. Other submittals associated with this application include the details of the location of proposed balanced cut and fill areas and project related impacts to vegetated corridors regulated by Clean Water Services (CWS). This submittal includes details of proposed on and off-site vegetated corridor enhancements and mitigation, as well as the details of landscaping associated with the establishment of vegetation in an area of floodplain excavation north of the Tigard Library.

**Vegetated corridor enhancement, impact and mitigation summary (Phase II)**

The following is a summary of project related vegetated corridor (VC) enhancements, impacts, and mitigation associated with Phase II of the Wall Street Extension Project.

On-site VC enhancement (lots 100 & 200)	24,012 ft <sup>2</sup>
Off-site VC enhancement (lot 690 & 1200)	6,320 ft <sup>2</sup>
Permanent VC encroachment	28,383 ft <sup>2</sup>
On-site VC mitigation (lots 100 & 200)	9,632 ft <sup>2</sup>
Off-site VC mitigation (lot 1200)	18,751 ft <sup>2</sup>

### **Restoration of impact areas associated with excavation in the floodplain**

The western floodplain removal area is located north of the existing Tigard Library. It is located entirely beyond regulated VC and as such, restoration will simply consist of replanting bare areas with a native grass seed mix.

A second excavation area is located south and east of Fanno Creek, just north of the proposed bridge alignment. Though some of this excavation will occur within regulated VC, excavation will restore historic native grades by removing non-native fill material. As such this removal will facilitate enhancement of the VC.

### **Vegetated corridor enhancement and mitigation planting areas**

Proposed enhancement and mitigation areas within the landscape plan have been designated based upon their plant community and/or the need for enhancement. As the focus in all areas is to bring the plant community up to “good” condition, it does not matter whether proposed weed control and plant installation are for enhancement or mitigation purposes. The locations of proposed impacts, as well as VC enhancement and mitigation have been detailed. In all planting areas, the focus is on the restoration of a native riparian forest community.

Due to the presence of native species throughout existing and proposed VC's, invasive species removal and control methods will generally be limited to manual methodologies. The exception is Area A, where mowing of blackberries prior to removal of the existing berm maybe necessary and appropriate. Regardless of the technique, suggested methodologies will follow the *Integrated Vegetation and Animal Management Guide* (Clean Water Services, 2003).

Planting areas have been designated based upon the general similarity of plant community and community condition. Table 1 includes a list plantings proposed for installation within each of the identified planting areas. The location of each area is shown on Sheet R2.5. The quantities of proposed plantings take into account existing native plant cover and anticipated coverage following removal of noxious invasive species.

#### Area A

Within Area A (5,330 square feet) it is assumed that following invasive species removal that only 30% of the proposed mitigation area will require replanting. A previous submittal to CWS (date July 21, 2009) identified 3,748 square feet of mitigation in this area. The new area reflects small modifications to the development plan and the corresponding need for additional off-site mitigation.

#### Area B

Within Area B (13,421 square feet) it has been assumed that no trees or deep rooting shrubs will be planted directly over the existing CWS sanitary line. It is also anticipated that following invasive species removal, 20% of Area B will require additional trees, while 70% of the same area will require shrub and herbaceous replanting.

### Area C

A very small area at the southeast corner of lot 100, Area C (613 square feet) is defined by the tax lot boundaries to the south and east, with a wetland located to the northwest. Though there are no trees in the designated enhancement area, there is reasonable tree canopy from adjacent ash, hawthorn, and red alder trees. Shrub cover is 70 percent Himalayan blackberry, and 30 percent snowberry. Groundcover is comprised of sword fern and white fringecup. Enhancements are proposed at 40 percent of the CWS required density for trees, and 50 percent for shrubs.

### Area D

Though proposed for completion as part of Phase 1, enhancement is ongoing in this area and no further work is proposed for Phase 2. This area is 1,023 square feet in size.

### Area E

Due to its proximity to the proposed alignment, Area E (1,525 square feet) will require enhancement following completion of bridge construction. Enhancements are proposed at 100 percent of required CWS densities. Due to its proximity to the bridge, no tall trees are proposed.

### Area F

Area F (9,467 square feet) borders approximately 350 feet of Fanno Creek. Trees include Oregon ash, Oregon white oak, and English hawthorn. Himalayan blackberry makes up nearly 50 percent of the shrub layer, and ground cover is as a result, discontinuous. Enhancement is proposed at 20 percent of the CWS required density for trees, and 50 percent for shrubs.

### Area G

Area G (15,551 square feet) includes not only the location of grading for removal of the existing berm, but all areas north of the proposed bridge. The east bank of Fanno Creek in the vicinity of the berm has few trees and is dominated by Himalayan blackberry. Though a few small to medium sized trees, and “pockets” of native shrubs will likely remain after grading and invasive species removal, plantings are proposed at 100 percent of CWS densities.

### Area H

Located south of the proposed bridge, Area H (11,785 square feet) includes enhancement and mitigation. One half of a large black cottonwood has fallen through the center of this area, taking out at least one other large tree, resulting in a very open canopy. The vicinity of the tree fall is dominated by English ivy. The eastern limits of this area have variable tree canopy, including Oregon ash, cottonwood, and English hawthorn. The shrub layer only 50 percent native, including primarily red osier dogwood and nootka rose; the remainder is Himalayan blackberry. Given the variability of tree and shrub cover, enhancements are proposed at 70 percent of the CWS required density for trees, and 65 percent for shrubs.

## Proposed plantings

Based upon the species lists for riparian and upland forest plant communities, detailed in *Appendix A: Planting Requirements of Clean Water Services' Design and Construction Standards Resolution and Order 07-20*; 2007), the following species were selected:

**Table 1. Proposed species composition by planting area**

Botanical Name	Common Name	Minimum rooting size	Plant Quantity						
			Area A	Area B	Area C	Area E	Area F	Area G	Area H
<b>TREES</b>									
<i>Acer circinatum</i>	Vine maple	2 gallon				10		20	30
<i>Acer macrophyllum</i>	Big leaf maple	2 gallon		14			5	10	
<i>Crataegus douglasii</i>	Douglas hawthorn	2 gallon	16	13		5	5	30	20
<i>Populus trichocarpa</i>	Black cottonwood	2 gallon			3			50	32
<i>Quercus garryana</i>	Oregon white oak	2 gallon					10	20	
<i>Rhamnus purshiana</i>	Cascara	2 gallon						26	
<b>SHRUBS</b>									
<i>Amelanchier alnifolia</i>	Western serviceberry	1 gallon	25	90		21	20	100	58
<i>Mahonia aquifolium</i>	Tall Oregon grape	1 gallon	15	85			37	68	
<i>Holodiscus discolor</i>	Oceanspray	1 gallon				20		50	25
<i>Oemleria cerasiformis</i>	Indian plum	2 gallon		50			40	100	50
<i>Polystichum munitum</i>	Sword fern	2 gallon	10	55			40	80	50
<i>Ribes sanguineum</i>	Red flowering currant	1 gallon				15			
<i>Rosa nutkana</i>	Nootka rose	1 gallon			6		50	140	100
<i>Rubus parviflorus</i>	Thimbleberry	1 gallon		50				40	
<i>Sambucus racemosa</i>	Red elderberry	1 gallon		75		20	40	50	
<i>Symphoricarpos albus</i>	Snowberry	1 gallon	30	100	10		40	150	100
<i>Vaccinium parviflorum</i>	Red huckleberry	1 gallon		50					
<b>HERBACEOUS</b>		Seed rate							
<i>Bromus carinatus</i>	California brome	15 lbs/acre	*	*	*	*	*	6 lbs	*
<i>Elymus glaucus</i>	Blue wild-rye	8 lbs/acre	*	*	*	*	*	3 lbs	*
<i>Gaultheria shallon</i>	Salal	1 gallon		100	10		100	200	50

\* In Areas A, B, C, E, F, and H; Seed all bare areas > 25ft<sup>2</sup> in size

## Planting Notes

The following details will be incorporated into the planting plan and will be used as guidelines by the landscape contractor.

1. The vegetated corridor shall be staked and protected during construction. Contractor shall review the limits of the vegetated corridor with the project biologist prior to starting planting.
2. Planting areas and plant locations shown are approximate and subject to modification based on actual site conditions. Plants will be planted in singles or clusters of the same species to provide a natural planting scheme.
3. Plant materials shall be free of disease, injury, and insect infestation.

4. Plantings shall be installed between February 1 and May 1 or between October 1 and November 15. When plantings must be installed outside these times, additional measures may be needed to ensure survival and shall be specified on the plans.
5. Irrigation: Unless site hydrology is currently adequate, a District/City approved irrigation system or other water practice (i.e., polymer, plus watering) shall be installed and used during the two-year plant establishment period. Watering should be provided at a rate of at least one inch per week between June 15 and October 15.
6. Grading, soil preparation, and seeding shall be performed during optimal weather conditions and at low flow levels to minimize sediment impacts. Site disturbance shall be minimized and desirable vegetation retained, where possible.
7. Where seeding is used for erosion control, either Regreen (or its equivalent) or sterile wheat shall be used to stabilize slopes until permanent vegetation is established. Biodegradable fabrics (coir, coconut or approved jute matting (minimum ¼" square holes)) may be used to stabilize slopes and channels. See Clean Water Services' Erosion Prevention and Sediment Control Planning and Design Manual for additional information.
8. As appropriate, measures such as wrapping the stems of trees and shrubs should be taken to limit wildlife related damage. No plastic mesh that can entangle wildlife shall be permitted. See Clean Water Services *Integrated Vegetation and Animal Management (IVAM) Guidance*.
9. Trees, shrubs, and groundcovers planted in upland areas shall be mulched a minimum of three inches in depth and 18 inches in diameter, to retain moisture and discourage weed growth around newly installed plant material. Appropriate mulches include those made from composted bark or leaves that have not been chemically treated. The use of mulch in frequently inundated areas shall be limited, to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways.
10. Access for plant maintenance will be provided for Sensitive Areas and Vegetated Corridors via an easement or shared boundary with Storm Water Infrastructure (as provided in Appendix B: Water Quality and Quantity Facility Design.)
11. Maintenance of the site will occur a minimum of two times per year by June 1 and September 30. Plants that fail to meet the acceptance criteria (see Clean Water Services Administrative Provisions Chapter 2.11.1 b) must be replaced during the two-year maintenance period. Prior to replacement, the cause for loss (wildlife damage, poor plant stock, etc.) shall be documented, corrected and the plants replaced. If at any time during the warranty period the landscaping falls below the 80% survival level, the responsible party shall reinstall all deficient planting at the next appropriate planting period and the two-year maintenance period shall begin again from the date of replanting. The responsible party will be: Marc Jenquin, 6521 SE Crosswhite Way, Portland, Oregon 97206, (503) 761-4523.
12. The removal of non-native, invasive weeds shall be necessary prior to planting and throughout the two-year maintenance period, or until a healthy stand of desirable vegetation is established (see *IVAM Guidance*).
13. *Rubus discolor*, *Clematis ligusticifolia*, and *Hedera helix* will be removed from all vegetated corridor enhancement and mitigation areas by manual/mechanical management strategies via hand or with equipment (weed whips, movers, tillers). Pesticides approved by the Clean Water Services should only be used when manual/mechanical efforts have failed (see *IVAM Guidance, 2003*). During removal of invasive vegetation, care will be taken to minimize impacts to existing native tree and shrub species.

14. Site visits for maintenance will be scheduled for the months of February, May, July, and September for the duration of the maintenance period.
15. All new plantings in the vegetated corridor must be tagged to facilitate identification.
16. All areas within the vegetated corridor are to be seeded with a dry area seed mix. All percentages are based on pure live seed. The hydroseed method is preferred over the broadcast application. If the broadcast application is used, increase the percentage of seeds/sf by 40% to prevent wind drift of the smaller, native seeds.
17. CWS will be notified 72 hours prior to the start and completion of vegetated corridor enhancement/mitigation activities.

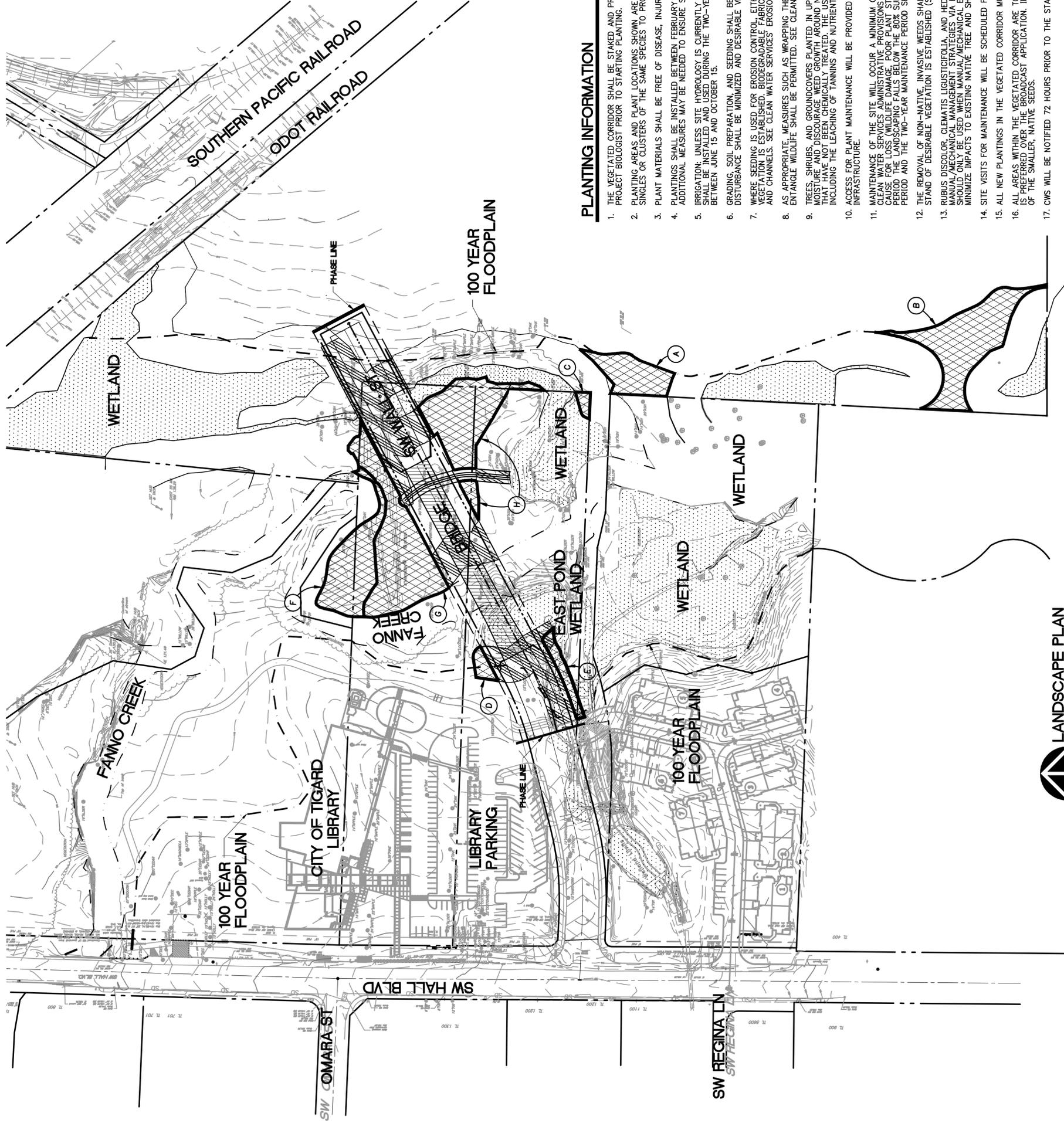
### **Adaptive management plan**

Due to the array of variables that can affect plant growth, it may be necessary to adapt management efforts over the course of monitoring and maintenance. Issues that may require changes to how the wetland plantings are managed include, but are not limited to: competition from non-native species; predation from rodents and/or deer; impacts from human; and insufficient or excessive watering regime.

Adaptive management methodologies considered as they relate to the above mentioned variables include the following:

1. Non-native/invasive species control - Though manual methodologies are preferred, if dominating species become widespread, limited use of an appropriate chemical control may be necessary.
2. Predation - Though not specified in existing plans, plastic tree guard/grow tubes could be fitted around at risk plantings and/or added to necessary supplemental plantings.
3. Human impact - Though visitation within the enhancement area is currently infrequent, due to difficulty of access, and the presence of Himalayan blackberry, invasive species control will make the site more accessible. If vandalism becomes a problem, the mitigation area and vegetated corridors could be fenced to further limit access.
4. Watering – As required by contract, a temporary irrigation system will be provided. It will be the applicant's responsibility to monitor and inspect the irrigation system to ensure functionality.

Though consideration has been given to these issues addressed in the mitigation plan, additional management strategies for this and other unforeseen variables may have to be considered.



### PLANTING AREAS

AREA I.D.	PLANTING AREA
A	5,330 SF
B	13,421 SF
C	613 SF
D	1,023 SF
E	1,878 SF
F	9,467 SF
G	15,550 SF
H	11,785 SF

### LEGEND

	SENSITIVE AREA
	REGULATED VEGETATED CORRIDOR (PHS)
	ENCROACHMENT (PHASE 2)

NOTE: AREA D PLANTING HAS BEEN COMPLETED AS PART OF PHASE 1 CONSTRUCTION.

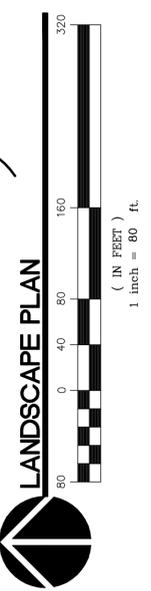
### PLANTING SCHEDULE (PROVIDED BY PACIFIC HABITAT SERVICES, OCT. 1, 2009)

Botanical Name	Common Name	Minimum Rooting size	Plant Quantity												
			Area A	Area B	Area C	Area E	Area F	Area G	Area H						
<b>TREES</b>															
<i>Acer circinatum</i>	Vine maple	2 gallon				10									
<i>Acer macrophyllum</i>	Big leaf maple	2 gallon				14									
<i>Crataegus douglasii</i>	Douglas hawthorn	2 gallon	16			5									
<i>Populus trichocarpa</i>	Black cottonwood	2 gallon													
<i>Quercus garryana</i>	Oregon white oak	2 gallon													
<i>Quercus parviflora</i>	Cascade	2 gallon													
<b>SHRUBS</b>															
<i>Amelanchier alnifolia</i>	Western serviceberry	1 gallon	25			21									
<i>Malvastrum angustifolium</i>	Tall Oregon grape	1 gallon	15			85									
<i>Hesperis matronalis</i>	Common night	1 gallon													
<i>Chamaenerion</i>	Indian paintbrush	2 gallon													
<i>Prodracis montanum</i>	Sweet fern	2 gallon													
<i>Ribes sanguineum</i>	Red flowering currant	1 gallon	10			55									
<i>Rosa nutkana</i>	Nootka rose	1 gallon													
<i>Rubus parviflorus</i>	Thimbleberry	1 gallon													
<i>Sambucus racemosa</i>	Red elderberry	1 gallon													
<i>Symphoricarpos albus</i>	Snowberry	1 gallon	30			100									
<i>Ulex europaeus</i>	Black locust	1 gallon													
<b>HERBACEOUS</b>															
<i>Bromus cernuus</i>	California brome	Seed rate				*	*	*	*	*	*	*	*	*	*
<i>Elymus glaucus</i>	Blue wild-eye	15 lbs/acre													
<i>Cantharata sibirica</i>	Sisal	8 lbs/acre													
		1 gallon	100			10									

NOTES: 1. AREA D PLANTING COMPLETED AS PART OF PHASE 1 CONSTRUCTION.  
2. IN AREAS A, B, C, E, F AND H: SEED ALL BARE AREAS >25 SF

### PLANTING INFORMATION

- THE VEGETATED CORRIDOR SHALL BE STAKED AND PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL REVIEW THE LIMITS OF THE VEGETATED CORRIDOR WITH THE PROJECT BIOLOGIST PRIOR TO STARTING PLANTING.
- PLANTING AREAS AND PLANT LOCATIONS SHOWN ARE APPROXIMATE AND SUBJECT TO MODIFICATION BASED ON ACTUAL SITE CONDITIONS. PLANTS WILL BE PLANTED IN SINGLES OR CLUSTERS OF THE SAME SPECIES TO PROVIDE A NATURAL PLANTING SCHEME.
- PLANT MATERIALS SHALL BE FREE OF DISEASE, INJURY, AND INSECT INFESTATION.
- PLANTINGS SHALL BE INSTALLED BETWEEN FEBRUARY 1 AND MAY 1 OR BETWEEN OCTOBER 1 AND NOVEMBER 15. WHEN PLANTINGS MUST BE INSTALLED OUTSIDE THESE TIMES, ADDITIONAL MEASURES MAY BE NEEDED TO ENSURE SURVIVAL AND SHALL BE SPECIFIED ON THE PLANS.
- IRRIGATION: UNLESS SITE HYDROLOGY IS CURRENTLY ADEQUATE, A DISTRICT/CITY APPROVED IRRIGATION SYSTEM OR OTHER WATER PRACTICE (I.E. POLYMER PLUS WATERING) SHALL BE INSTALLED AND USED DURING THE TWO-YEAR PLANT ESTABLISHMENT PERIOD. WATERING SHOULD BE PROVIDED AT A RATE OF AT LEAST ONE INCH PER WEEK BETWEEN JUNE 15 AND OCTOBER 15.
- GRAZING, SOIL PREPARATION, AND SEEDING SHALL BE PERFORMED DURING OPTIMAL WEATHER CONDITIONS AND AT LOW FLOW LEVELS TO MINIMIZE SEDIMENT IMPACTS. SITE DISTURBANCE SHALL BE MINIMIZED AND DESIRABLE VEGETATION RETAINED, WHERE POSSIBLE.
- WHERE SEEDING IS USED FOR EROSION CONTROL, EITHER REGREEN (OR ITS EQUIVALENT) OR STERILE WHEAT SHOULD BE USED TO STABILIZE SLOPES UNTIL PERMANENT VEGETATION IS ESTABLISHED. BIODEGRADABLE FABRICS (COIR, COCONUT OR APPROVED JUTE MATTING (MINIMUM 4" SQUARE HOLES)) MAY BE USED TO STABILIZE SLOPES AND CHANNELS. SEE CLEAN WATER SERVICES' EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL FOR ADDITIONAL INFORMATION.
- AS APPROPRIATE, MEASURES SUCH AS WRAPPING THE STEMS OF TREES AND SHRUBS SHOULD BE TAKEN TO LIMIT WILDLIFE RELATED DAMAGE. NO PLASTIC MESH THAT CAN ENTANGLE WILDLIFE SHALL BE PERMITTED. SEE CLEAN WATER SERVICES INTEGRATED VEGETATION AND ANIMAL MANAGEMENT (IVAM) GUIDANCE.
- TREES, SHRUBS, AND GROUNDCOVERS PLANTED IN UPLAND AREAS SHALL BE MULCHED A MINIMUM OF THREE INCHES IN DEPTH AND 18 INCHES IN DIAMETER. TO RETAIN MOISTURE AND DISCOURAGE WEED GROWTH AROUND NEWLY INSTALLED PLANT MATERIAL, APPROPRIATE MULCHES INCLUDE THOSE MADE FROM COMPOSTED BARK OR LEAVES THAT HAVE NOT BEEN CHEMICALLY TREATED. THE USE OF MULCH IN FREQUENTLY INUNDATED AREAS SHALL BE LIMITED, TO AVOID ANY POSSIBLE WATER QUALITY IMPACTS INCLUDING THE LEACHING OF TANNINS AND NUTRIENTS, AND THE MIGRATION OF MULCH INTO WATERWAYS.
- ACCESS FOR PLANT MAINTENANCE WILL BE PROVIDED FOR SENSITIVE AREAS AND VEGETATED CORRIDORS VIA AN EASEMENT OR SHARED BOUNDARY WITH STORM WATER INFRASTRUCTURE.
- MAINTENANCE OF THE SITE WILL OCCUR A MINIMUM OF TWO TIMES PER YEAR BY JUNE 1 AND SEPTEMBER 30. PLANTS THAT FAIL TO MEET THE ACCEPTANCE CRITERIA (SEE CLEAN WATER SERVICES ADMINISTRATIVE PROVISIONS CHAPTER 2.11.1 B) MUST BE REPLACED DURING THE TWO-YEAR MAINTENANCE PERIOD. PRIOR TO REPLACEMENT, THE CAUSE FOR LOSS (WILDLIFE DAMAGE, POOR PLANT STOCK, ETC.) SHALL BE DOCUMENTED, CORRECTED AND THE PLANTS REPLACED. IF AT ANY TIME DURING THE WARRANTY PERIOD FOR LOSS OF PLANTS, THE TWO-YEAR MAINTENANCE PERIOD SHALL BE RESTARTED. THE TWO-YEAR MAINTENANCE PERIOD SHALL BEGIN AGAIN FROM THE DATE OF REPLANTING.
- THE REMOVAL OF NON-NATIVE, INVASIVE WEEDS SHALL BE NECESSARY PRIOR TO PLANTING AND THROUGHOUT THE TWO-YEAR MAINTENANCE PERIOD, OR UNTIL A HEALTHY STAND OF DESIRABLE VEGETATION IS ESTABLISHED (SEE IVAM GUIDANCE).
- RUBUS DISCOLOR, CLEMATIS LIQUIDIFOLIA, AND HERPES HELY WILL BE REMOVED FROM ALL VEGETATED CORRIDOR ENHANCEMENT AND MITIGATION AREAS BY MANUAL MECHANICAL MANAGEMENT STRATEGIES BY HAND OR WITH EQUIPMENT. WEED MOVES, TIEUPS, PRECIPITATES APPROVED BY THE CLEAN WATER SERVICES SHOULD ONLY BE USED WHEN MANUAL/MECHANICAL EFFORTS HAVE FAILED (SEE IVAM GUIDANCE, 2003). DURING REMOVAL OF INVASIVE VEGETATION, CARE WILL BE TAKEN TO MINIMIZE IMPACTS TO EXISTING NATIVE TREE AND SHRUB SPECIES.
- SITE VISITS FOR MAINTENANCE WILL BE SCHEDULED FOR THE MONTHS OF FEBRUARY, MAY, JULY, AND SEPTEMBER FOR THE DURATION OF THE MAINTENANCE PERIOD.
- ALL NEW PLANTINGS IN THE VEGETATED CORRIDOR MUST BE TAGGED TO FACILITATE IDENTIFICATION.
- ALL AREAS WITHIN THE VEGETATED CORRIDOR ARE TO BE SEEDED WITH A DRY AREA SEED MIX. ALL PERCENTAGES ARE BASED ON PURE LIVE SEED. THE HYDROSEED METHOD IS PREFERRED OVER THE BROADCAST APPLICATION. IF THE BROADCAST APPLICATION IS USED, INCREASE THE PERCENTAGE OF SEEDS/SF BY 40% TO PREVENT WIND DRIFT OF THE SMALLER, NATIVE SEEDS.
- CWS WILL BE NOTIFIED 72 HOURS PRIOR TO THE START AND COMPLETION OF VEGETATED CORRIDOR ENHANCEMENT/MITIGATION ACTIVITIES.



**MACKENZIE**  
 GROUP  
 Civil Engineering  
 Structural Engineering  
 Transportation Planning  
 Landscape Architecture  
 Interior Design  
 Land Use Planning  
 Seattle WA 206.749.9993  
 Vancouver WA 360.999.7879  
 Portland OR 503.224.9660

Client:  
**FRED FIELDS**  
 149 SW DAVENPORT AVE  
 PORTLAND, OREGON  
 97201

Project:  
**FIELDS PROPERTY**  
**WALL STREET**  
**EXTENSION PHASE 2**

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REVISIONS:  
 NO. 2 REVISIONS  
 DATE 11/13/09  
 BY MMB  
 REVISION DELTA  
 CLOSING DATE

SHEET TITLE:  
**LANDSCAPE PLAN**

DRAWN BY: MAZ  
 CHECKED BY: MMB  
 SHEET:

**R2.5**  
 JOB NO. **2070334.00**

## Narrative Demonstrating Compliance with 18.775.130

### Description of the Goal 5 ESEE process

The Goal 5 process follows three steps. The first step is to identify significant fish and wildlife habitat. The economic, social, environment and energy (ESEE) analysis is the second step. The third step is to develop a program to protect significant fish and wildlife habitat.

Specifically, the rule requires the following steps:

1. Identify conflicting uses;
2. Determine the impact area;
3. Analyze the ESEE consequences; and
4. Develop a program to achieve Goal 5.

First, governments must identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites (fish and wildlife habitat). A conflicting use is a land use or activity that may negatively impact the resource site. Second, the rule requires a determination of the impact area, representing the extent to which land uses or activities in areas adjacent to resources could negatively impact the resource. The impact area identifies the geographic limits within which to conduct the ESEE analysis for significant resource sites. Third, the ESEE consequences analysis considers the impact of a decision to fully protect the resource, fully allow conflicting uses, or limit the conflicting uses.

Jurisdictions that choose to limit conflicting uses must do so in a way that “protects the resource to the desired extent.” The standards identified by the state for completing the ESEE analysis are procedural rather than substantive. Findings must show that the steps of the ESEE analysis are met, but OAR 660-23-040 states that: *“[t]he ESEE analysis need not be lengthy or complex, but should enable reviewers to gain a clear understanding of the conflicts and consequences to be expected.”*

In this case, the inventory has been completed and the impact area has been defined. This application does provide more accurate inventory information, but it is a refinement of the existing inventory completed in 2005 rather than a new inventory.

For the purpose of this application, the “conflicting use” proposed is the wetland impacts necessary to provide access to the applicant’s property that appear on Tigard’s Sensitive Lands map. The City of Tigard’s zoning ordinance, specifically Section 18.775, which implements Oregon’s Goal 5 does not permit these changes to occur. In order to propose these changes, the application includes an ESEE as required by 18.775.130.

The ESEE tables below present ESEE consequences similar to what was done for Phase 1 of the Wall Street extension project. These tables contemplate the potential impacts of constructing a 662’ extension of Wall Street including a 320’ bridge across Fanno Creek as described in Phase 2 of the Wall Street extension project, and the comparative positive and negative consequences of the project. As articulated in this proposal, the intent of extending Wall Street in this case is to provide access to undeveloped property owned by Fred Fields (applicant). Nevertheless, this extension is shown on the City’s Transportation System Plan as a future collector street that would provide additional improved east-west access across rail lines that essentially bisect Tigard. Note that the subject property is currently designated for industrial uses. This analysis therefore identifies the potential industrial development of Mr. Fields’ property. Regardless of the zoning designation for this property, the proposed bridged access is necessary and the conclusions of this analysis are essentially similar.



<b>Wall Street Phase 2 ESEE Analysis (Assumed Industrial Zoning)</b>		
	<b>Positive Consequences</b>	<b>Negative Consequences</b>
<b>ALLOW</b>		
<b>Economic</b> (Allow)	<ul style="list-style-type: none"> <li>▪ Employment and income related to construction and development activities would not be negatively affected by a reduced land supply due to additional Goal 5 regulations.</li> <li>▪ Potential for residential development of the subject property, contributing to and economic development and housing density goals.</li> <li>▪ Positive impact on value of benefiting property.</li> <li>▪ Potential of future connection with Hunziker Rd. is preserved.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Private costs of construction.</li> <li>▪ Moderately increased municipal service costs.</li> </ul>
<b>Social</b> (Allow)	<ul style="list-style-type: none"> <li>▪ No change in property rights due to Goal 5 requirements.</li> <li>▪ No takings concerns for resource property owners due to Goal 5 requirements.</li> <li>▪ Resource property owners not disproportionately impacted by resource protection requirements.</li> <li>▪ Adjacent properties may be better maintained and monitored, limiting potential criminal activities in the area.</li> <li>▪ Reduced public safety concerns of homeless inhabitants after property is developed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Potential loss of some passive recreational and educational opportunities.</li> <li>▪ Potential loss of some scenic and aesthetic benefits.</li> <li>▪ Temporary disruptions to adjacent properties due to noise and light related to facility construction.</li> <li>▪ Potential negative livability impacts to residential areas from future industrial activities.</li> </ul>
<b>Environmental</b> (Allow)	<ul style="list-style-type: none"> <li>▪ Restoration, enhancement or creation of natural resource functions and values from Title 3 water quality regulations.</li> <li>▪ Provision of wetland buffers and conservation easements in accordance with CWS requirements.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Potential for construction-related erosion.</li> <li>▪ Increased noise, light and glare.</li> <li>▪ Temporary disruption to species habitat during construction.</li> <li>▪ Functionality of some habitat area may be compromised.</li> </ul>
<b>Energy</b> (Allow)	<ul style="list-style-type: none"> <li>▪ Potential improvement in transportation conditions or reduction in energy use due to reducing congestion by eventually connecting Hall and Hunziker via Wall Street.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Temporary high energy uses levels related to construction.</li> <li>▪ Energy used for street lighting.</li> </ul>
<b>PROHIBIT</b>		
<b>Economic</b> (Prohibit)	<ul style="list-style-type: none"> <li>▪ Developer avoids cost of construction.</li> <li>▪ No future public costs related to maintaining the facility.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Employment and income related to construction of project is eliminated.</li> <li>▪ Affected property remains undeveloped, eliminating the chance for residential land use.</li> <li>▪ Property does not fulfill its function as intended by zoning.</li> </ul>

<b>Wall Street Phase 2 ESEE Analysis (Assumed Industrial Zoning)</b>		
	<b>Positive Consequences</b>	<b>Negative Consequences</b>
<b>Social</b> (Prohibit)	<ul style="list-style-type: none"> <li>▪ No reduction in potential open space preservation in the affected area.</li> <li>▪ No impact to surrounding properties and residents from construction activities.</li> <li>▪ No impact to scenic and aesthetic quality of the affected area.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No potential for Wall Street linkage, thereby eliminating potential congestion reduction and travel time benefits.</li> <li>▪ Potential change in property rights creating a takings concern.</li> <li>▪ Resource property owners potentially disproportionately impacted by resource protection requirements.</li> <li>▪ Surrounding property remains inaccessible, increasing the chances for illegal activities.</li> </ul>
<b>Environmental</b> (Prohibit)	<ul style="list-style-type: none"> <li>▪ No or extremely low potential for additional impacts to natural resources.</li> <li>▪ Avoided potential for erosion.</li> <li>▪ No resulting increase in noise, light or glare.</li> <li>▪ Avoided potential downstream water quality impacts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lost ability to gain enhancement or restoration through development mitigation.</li> <li>▪ Some lost opportunity for voluntary property owner stewardship.</li> <li>▪ No wetland buffers or conservation easements in accordance with CWS requirements provided on adjacent industrial property.</li> </ul>
<b>Energy</b> (Prohibit)	<ul style="list-style-type: none"> <li>▪ No energy resources utilized to construct or maintain project.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No potential improvement in transportation conditions or reduction in energy use due to reducing congestion by eventually connecting Hall and Hunziker via Wall Street.</li> </ul>

## **ESEE: Summary of Conclusions**

An ESEE analysis typically includes an ESEE recommendation or conclusion. This ESEE conclusion applies to single resource site and surrounding area for a specific project in the City of Tigard. The consideration of the ESEE consequences is specific in this sense, but the arguments apply to the entire City. The arguments contemplate competing needs, from economic development to ecological preservation.

The ESEE analysis is not a purely objective exercise that follows a known set of rules. There is no guidance in state law that provides a formula for execution of the analysis and corresponding results. The interpretation of and acting upon ESEE results is therefore an area subject to alternative viewpoints and values. Nevertheless, as a proxy for the City, the applicant believes that selection of the “Allow” alternative should be adopted. This recommendation is based on an “on-balance” review of the comparative benefits, costs, and drawbacks of adopting the “Allow” alternative.

Development of Fred Fields’ property has been the subject of much negotiation with the City over the last five years. While not directly factored into the ESEE analysis, attempts to develop Fields’ property must be acknowledged as the context for the proposed transportation facility. Allowing the Phase 2 expansion (a bridge over Fanno Creek and related facilities) will enable the future development of the Fields’ property, whereas denying the request for the expansion would have the ultimate affect of essentially rendering the parcel undevelopable. Clearly, the central question is: on balance, does the potential harm to affected wetlands and streams outweigh the potential economic and social benefits that will likely result from the proposed Phase 2 expansion?

With respect to ESEE findings, one must look at the temporary and long-term impacts of constructing the proposed extension. There would be temporary disturbance to the riparian habitat surrounding the creek during construction and the potential for stream bank erosion and accidental impacts to water and resource quality. The likelihood of such impacts are rather low; however, most ground disturbing activities will occur well away from Fanno Creek and wetland permits will require that work occur during the summer, when water flows are lower and the potential for significant rainfall events is diminished. In addition, , sufficient development regulations and best management practices (BMP’s) and associated performance standards are in place such that if they are followed, no permanent damage to the waterway or wetlands will occur. Any construction activities would necessitate extensive erosion control measures and environmental “best practices,” and no stream modification or permanent impacts to water quality are likely to occur. If adverse impacts to the stream occur despite these protective measures, such impacts would be temporary. Long-term impacts to the stream and adjacent habitat areas could very well have positive aspects. First, the extension and bridge will maintain the existing wildlife corridor that parallels Fanno Creek by allowing animal species to travel underneath the bridge, which would represent no significant habitat degradation to most aquatic species such as fish and amphibians. Larger species may have more trouble traversing the roadway, but the proposed span and height of the bridge will promote passage beneath it, as opposed to forcing wildlife to cross the roadway. The presence of other roads up and downstream along this wildlife corridor, suggests that the affect of one more crossing would be minimal. More importantly, mitigation requirements imposed by the City and Clean Water Services would require significant mitigation of wetland impacts, suggesting that the ultimate condition of the Fanno Creek corridor would improve as a result of the roadway extension. Such was the case in Phase 1, which resulted in significantly improved fish habitat and water quality in both Pinebrook Creek and Fanno Creek.

While any potentially negative environmental affects have already been mitigated in accordance with agency permits (ie. ODSL and Army Corps), the social and economic consequences are vastly different between the “allow” and “prohibit” alternatives. If allowed, development of the facility would have two very clear benefits. First, it would help accomplish the eventual connection of Hall Blvd. and Hunziker Road, via Wall Street, which is called for in the City’s Transportation System Plan. It would also allow development of the Fields site,

providing temporary construction jobs and housing density goals to be achieved. Alternatively, prohibiting construction of the facility would prevent any potential disruptions to surrounding properties from the project itself, but would preclude effective development of the subject property and any related public and private benefits, including related economic and social benefits.

The decision between the two alternatives can be cast in relatively simple terms: to allow would result in relatively minor impacts to the identified resource (which have already been mitigated resulting in a better post-development condition), or the Fields property could be used as designated. Prohibiting the facility would preclude any further potential impacts to the Goal 5 resource, but would also preclude development of the Fields parcel. This would also limit opportunities for wetland/stream corridor enhancement stemming from development-related mitigation requirements. While the physical condition of the resource and the surrounding area may be preserved in the latter scenario, all potential economic growth would be negated and legal questions related to takings may arise. An on-balance analysis indicates that the “allow” alternative should be adopted because it will result in significantly more potential economic and social benefits, while the potential environmental and energy consequences would be minimal.



January 14, 2010

**Rhys Konrad**

Group Mackenzie

1515 SE Water Avenue, Suite 100

Portland, OR 97214

**Re: Wall Street Bridge/Fields Property; Resource and Habitat Documentation Review  
Clean Water Services File Number 08-003183  
PHS Project # 4365**

Rhys:

By your request, PHS has revisited many of the natural resource related documents that have been prepared as part of previous and ongoing analyses of the potential affects of the construction of the Wall Street extension onto the Fred Fields property in Tigard. Though by no means an exhaustive list, I have reviewed all or a portion of each of the following documents:

- *Fanno Creek Master Plan Summary*
- *Biological Assessment of the effects of the City of Tigard Wall Street Extension* (February 2004)
- City of Tigard Wall Street Alternatives Analysis (March 2005)
- Original and modified versions of the Joint Permit Applications for fill and removal associated with Phases 1 and 2 of the proposed Wall Street extension
- Department of State Lands and US Army Corps of Engineers permits and correspondence
- Natural Resource Assessment documentation provided to Clean Waters Services for Phases 1 and 2
- *Stream Restoration and Mitigation Plan for the Wall Street/Hall Boulevard Project* (June 2007)

As you know, the extent of natural resource analyses associated with this project is exhaustive. The above information spans six years of documentation and analysis of the location and condition of wetlands and waterways; of fish and wildlife habitat; and of riparian condition (including vegetated corridors assessments for CWS). I have found all the data to be well documented and the analysis and conclusions well thought out.

This memo includes a general review of habitat info previously produced in association with earlier phases of the this project, but more specifically this review includes information as it relates to select goals and policies of the City of Tigard's Comprehensive Plan: including *Natural Resources and Historic Areas* (Goal 5.1); and *Parks, Recreation, Trails, and Open Space* (Goal 8.1).

### **Existing Conditions**

As mentioned above, some of these assessments occurred several years ago, and there has been subsequent development in the general vicinity of the proposed extension of Wall Street; namely the construction of the Tigard Library and Fanno Pointe Condominiums. However, these developments were designed to avoid impacting resources associated with Fanno Creek and its adjoining riparian, wetlands, and floodplain environments. As a result, habitat areas as described in previous analyses remain an accurate presentation of conditions east of the library and the current terminus of Wall Street. Furthermore, required enhancements and mitigation in riparian and wetland areas have begun to produce results as intended; that is, riparian conditions west of Fanno Creek are improving as a result of the control of invasive and non-native plant species and the addition of hundreds of native plantings within regulated vegetated corridors. Mitigation required for impacts to wetlands and waterways has resulted in a new alignment for Pinebrook Creek and modification to wetland habitats west of Fanno Creek. Maintenance and monitoring of these mitigation areas is ongoing.

### Vegetation

As detailed in earlier analyses, the alignment of the proposed extension of Wall Street will pass through/across a forested portion of the Fanno Creek floodplain. Though the forest canopy (where present) is predominantly composed of native species including black cottonwood, Oregon ash, big leaf maple, Douglas fir, and red alder, the understory is in large part dominated by non-native and/or invasive species. The most common include Himalayan blackberry, English ivy, Western Virgin's-Bower (*Clematis*), reed canarygrass, and English hawthorn. The presence of these species has resulted in the overall degradation of wildlife habitat, and to some extent, water quality along this reach of Fanno Creek. Himalayan blackberry, which dominates groundcover, including forested areas, reduces the diversity of groundcover by shading low growing species, and smothering taller herbs and small shrubs. It often prohibits seedlings of shrubs and trees from establishing and alters the natural succession of species, which is what is currently happening in some areas. For example, deciduous tree species, such as red alder and black cottonwood, are dying but are not being replaced by saplings. This provides openings in the tree canopy that allow for increased sunlight, which in turn favors the non-native species over native riparian species that favor shady conditions. This trend could be turned around with removal and control of non-natives and conjunction with the installation of native plant species.

### Fish & Wildlife habitat

The size and structural diversity of the forested areas and perennial water source (Fanno Creek) that are located within the vicinity of the proposed alignment, and extending beyond, provide good quality habitat and migratory corridors for a variety of wildlife, including birds, herptiles (amphibians and reptiles), small and large mammals, and fish. The Oregon Department of Fish and Wildlife (ODFW) has surveyed Fanno Creek and documented the presence of cutthroat trout and winter steelhead, and no fish passage barriers are present downstream from the bridge site to the Tualatin River. The site's contiguous nature with undeveloped land to the north and southeast provide habitat connectivity within an urban setting.

The only federally listed threatened plant or animal species known to exist in the vicinity of the project is Upper Willamette River steelhead (*Oncorhynchus mykiss*) in Fanno Creek. A biological assessment (BA) of the potential effects of the project on steelhead was prepared in 2004. As project elements have not changed since compilation of the BA, the analysis and results

as discussed at that time are still applicable to the project moving forward. The bridge will free span Fanno Creek and most of the adjoining riparian and floodplain habitats. Also, the minimal extent of wetland fill necessary for bridge footings will have no affect on fish habitat.

The *Fanno Creek Master Plan Summary* includes a list of “sensitive species” that may be present within the project site. Of greatest concern regarding species on that list are those that are by their very nature, not a transient species. Bird and mammal species that may be disturbed by construction of the bridge will have the capacity to move out of the construction area(s) into adjoining habitats of like kind and quality. Species such as reptiles or amphibians, which are perhaps more sensitive to habitat disturbance will none-the-less also have an opportunity to migrate into adjacent habitats.

### **Proposed Impacts and Mitigation**

Based upon my review, given that the alignment of Wall Street begins at a fixed point west of Fanno Creek, and no other viable access alternatives to the Fields property currently exist, I feel that existing documentation provides an accurate assessment of proposed impacts, how those impacts have been avoided and minimized where possible, and in the more recent documents, how unavoidable impacts will be mitigated for. Project elements such as a bridge that free-spans Fanno Creek and most of the 100 year floodplain and existing wetlands, the minimization of structural fill embankment, and a narrow bridge width provide the proper balance between the need for access to the Fields property, and minimization of impact to natural resources.

### Wetlands

I have had conversation with representatives of both the Oregon Department of State Lands (DSL) and the US Army Corps of Engineers (Corps). Both agencies have confirmed that moving forward entails submittal of a new permit application addressing wetland impacts associated with completion of the Wall Street extension. Both agencies have also confirmed that ongoing mitigation efforts can be applied to impacts associated with Phase 2, since the original permits identified that wetland mitigation would be adequate for the entire project, not just Phase 1. The granting of permits from the DSL will however be contingent upon receipt of the necessary deed restriction over the existing wetland mitigation area, as is part of the conditions of the existing permit for Phase 1.

### Vegetation

Mitigation for impacts to regulated vegetated corridors has been assessed and a Service Provider Letter from CWS attests to the fact that all impacts to riparian areas within 50 feet of Fanno Creek or wetlands have been assessed and can be properly mitigated for. All mitigation will occur on-site, within a few hundred feet of Wall Street, providing the benefit of mitigation within the immediate vicinity of proposed impacts. In addition to vegetated corridor and wetland mitigation, project elements include more than one-half acre of enhancement to riparian areas along Fanno Creek and associated wetlands. These vegetative enhancements will do more than just remove invasive and non-native species, they will result in increased plant diversity, which often leads to enhanced wildlife habitat and an increase in animal species abundance. Vegetative improvements also tend to increase water quality by increasing nutrient uptake and filtering capacity of floodwaters.

Wildlife

The greatest potential impacts to animal species in the vicinity of the bridge will be associated with the actual construction of the bridge. Since this is a bridge project, the end result will not be separation or segregation of habitats; existing habitats may be impacted, but they will be maintained, and by intent, improved. The physical presence of human and equipment, construction noise, erosion control and other fencing, and most important, select removal of vegetation, will result in a temporal loss of wildlife habitat during construction. However, following completion of the project, there is not likely to be any permanent loss of habitat specific to any rare species that may be found in the project area. In fact, restoration of riparian habitats in the vicinity of the bridge totals more than 1.25 acres. Restoration elements include removal of noxious invasive species and the installation of nearly 3,000 native trees, shrubs and herbaceous plants. The restoration of native plants, providing habitat and food sources will not only serve to restore habitats disturbed during bridge construction, it will also support habitat in adjoining areas.

**Conclusion**

Based upon my extensive review of project related documents, I believe that there has been, and continues to be, an adequate assessment of project related impacts and associated mitigation and enhancement. Moving forward I anticipate that previous analyses will need to be revisited and repackaged to address specific concerns of the City, regulatory agencies, or concerned citizens. PHS will continue to work with you as necessary to provide responses when appropriate.

Please call with any questions or concerns regarding my review and assessment of existing information.

Sincerely,



Shawn Eisner  
Wetland Scientist



Exhibit T

T H E P A C I F I C R E S O U R C E S G R O U P  
LAND MANAGERS • URBAN FORESTERS • PLANT APPRAISERS • NATURAL RESOURCE CONSULTANTS

January 8, 2010

Mr. Rhys Konrad, Planner  
Group Mackenzie  
1515 SE Water Avenue, Suite 100  
PO Box 14310  
Portland, Oregon 972293

Reference: Tree Assessment for Wall Street Extension site in Tigard, Oregon

Dear Mr. Konrad,

This report is a supplement to my report of 7/15/04 related to the first phase of the Wall Street and Tigard Public Library development project, a copy of which accompanies this report. As you requested, I have visited the site of the Wall Street Extension Bridge, located across the creek from the Tigard Public Library, on several occasions over the last 15 months. The purpose of my visits was to assess the 21 trees, 20 on the east side of the creek and one on the west side. Descriptions of these trees are shown on the attached tree chart. (See my earlier report for descriptions of trees 1 to 54, located on the Library side of the creek.) There are a total of 26 trees that I have inventoried within the boundaries of the proposed second phase extension of Wall Street. All but 5 of these trees are located on City owned property.

**FINDINGS** - The trees on the accompanying chart are numbered from 55 to 75 and correspond to the accompanying Tree Removal Exhibit Group Mackenzie prepared. Of the 26 trees, 9 were either dead and have toppled over or they have such serious defects that they are too hazardous to leave standing regardless of what kind of development proceeds. An additional 12 trees have poor form, internal decay or other defects that make them poor specimens, unsuitable for retention in the landscape or potential hazard trees as they continue to deteriorate. I recommend that all of the 26 trees be removed if development proceeds. However, if the area adjacent to the proposed bridge remains undisturbed and undeveloped and if grade changes near the trees are minimal, I may reconsider my recommendation to trees 56, 57 and 58. A final recommendation will have to wait until construction plans are complete and proposed improvements are precisely located on site prior to commencement of construction.

If the elevated portion of the street extension is placed on piers, then it is possible that some of the trees outside of areas to be excavated and without serious defects might be preserved (i.e. trees 56, 57 and 58). These trees have been recommended for removal because they are located very close to proposed excavation or grade changes and therefore are very unlikely to avoid mechanical damage or unlikely to survive expected changes in growing conditions. I will reserve judgment as to the probability of retaining any trees until construction documents are completed, proposed improvements are staked and excavation is underway. I also recommend that all the hazard trees be removed prior to commencing construction. During my site visits, I saw enough evidence of recent and frequent human use of the area, which makes these trees an unacceptable liability. Given the information I have at the present time, I recommend removal of trees 17, 26,

27, 41, 42 and 55 on the west side of the creek and trees 59 through 75 on the east side of the creek. It is also likely that trees 56, 57 and 58 will also need to be removed, but as stated previously, this decision can be delayed until construction details are clear and construction is underway.

**TREE PROTECTION** - Any of the trees that are going to be retained within the work limits and those not included in my assessment but near the construction area, should be protected from inadvertent damage during construction with tree protection fencing. If you wish to attempt to preserve trees near excavations, I recommend that you consider exploratory excavation for any improvements within 10' of the base of such trees. If needed, the exploratory excavation can be done either by hand or by using other equipment to expose any roots that are in or under the proposed improvements. If roots larger than 1.5" in diameter are exposed, I recommend that you contact me to make a determination on preserving or removing the trees involved.

In addition to protecting the trees from inadvertent physical injury, the tree protection fencing should serve to minimize any soil compaction that might occur within the trees' critical root zone, as defined by the City's Tree Manual. This will require keeping construction materials, soil, foot traffic and equipment out of the area within the critical root zone to the extent practical. In cases where excavation must take place within the critical root zone, the tree protection fencing should be installed no closer than 4' to 5' off the base of the tree. It should protect as much of the critical root zone as possible, without including the excavation for the utilities, foundation walls, etc. If it is necessary to work closer to the tree than this or to work inside the tree protection fencing, you should notify me. Either chain link or orange plastic construction fencing, staked every 8' to 10', will meet the functional requirement for tree protection, however I suggest checking with the appropriate City official as to the current standard.

**FERTILIZATION** – For any trees that are preserved within or near the construction area, I recommend a fertilization program. This will help any trees being preserved to overcome the adverse effects of construction and may help those that might be planted as mitigation or as part of proposed landscape improvements. I recommend taking soil samples for analysis to determine the appropriate amounts of nutrients and soil amendments needed for optimum growth. Until a soil analysis is available, I can suggest a generic fertilization program. The fertilization program would be applied to all those trees that are retained on the site, particularly for those located within 20' of excavations or grading for any site improvements. The fertilization recommended is simple, inexpensive, and can be done with the assistance of a tree service, or landscape maintenance firm or with general field labor. It requires that a highly soluble high nitrogen fertilizer be applied at a time prior to installing the landscape improvements or when surface vegetation is dormant and tree roots are still growing. The optimum time for application is during the dormant period in early to mid November or early February. At both times I recommend using Ammonium Sulfate (21-0-0 or 23-0-0) at a rate of 2 lbs. of Nitrogen per 1000 square feet. This equates to applying 9 lbs. of the fertilizer to each 1000 square feet of area within the drip line of each tree. The fertilizer can be applied to the surface of the ground with a cyclone or "whirly" type spreader. The fertilization program should begin within the first year following construction and continue annually, for a period of three years. The area to be fertilized is within the drip line and approximately 10' outside the drip line of the trees.

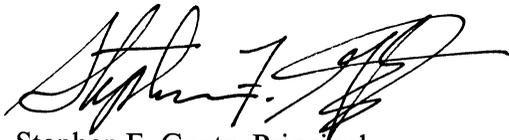
**PRUNING** - Almost all of the trees whose crowns over hang the construction area have dead branches in them. These branches vary in size from less than 1/4" to over 3" in diameter. As these dead branches decay their connection to the tree will deteriorate and they will fall. Given that the crowns of some of the trees may overhang the proposed street, the risk of leaving the

large dead wood in the trees is unacceptable. I recommend that any trees retained be pruned for hazard reduction and to improve their general health and condition consistent with the ANSI 300 Standard for tree work. Any reputable tree care firm will be familiar with this specification. At the time of pruning, the trees should be inspected for defects that were not visible from the ground. Any that are found should be reported and correctable defects should be repaired at that time.

**MONITORING** - In spite of all the best efforts to preserve trees, some may decline in health over time. If any trees are preserved, to protect the investment in tree preservation, I recommend some extra effort to assess any changes in their condition over time. Even when trees are in the best of health there is always some unpredictability associated with their presence. Preserving these trees is not without risk, but this risk is reasonable if their care is managed properly. I recommend that the trees' health and condition be monitored for several years. Monitoring should include annual inspection to assess the effectiveness of the fertilization program, the tree protection measures, stability and other landscape maintenance practices. If any root cutting occurs within the dripline of the trees during construction, it would be wise to check the stability of the trees, particularly during high winds.

This completes my report. If any additional information, which would effect these recommendations, becomes available I would welcome the opportunity to consider it and revise this report accordingly. If I omitted any information or if you have any questions please do not hesitate to contact me.

Respectfully yours,



Stephen F. Goetz, Principal  
American Society of Consulting Arborists, Reg #260  
American Society of Landscape Architects, Oregon Lic. #80  
Society of American Foresters

SG:mac  
Attachment:

**ARBORIST DISCLOSURE STATEMENT:** Arborists are tree specialists who use their education, knowledge training and experience to examine trees, recommend measures to enhance their health and beauty and to attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist or to seek additional advice. Trees and other plant life are living, changing organisms affected by innumerable factors beyond our control. Trees fail in ways and because of conditions we do not fully understand. Arborists cannot detect or anticipate every condition or event that could possibly lead to the structural failure of a tree. Conditions are often hidden within the trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, for any specific period or when a tree or its parts may fail. Further, remedial treatments, as with any treatment or therapy, cannot be guaranteed. Treatment, pruning, bracing and removal of trees may involve considerations beyond the scope of the arborist's skills and usual services such as the boundaries of properties, property ownership, site lines, neighbor disputes and agreements and other issues. Therefore, arborists cannot consider such issues unless complete and accurate information is disclosed in a timely fashion. Then, the arborist can be expected, reasonably, to rely upon the completeness and accuracy of the information provided. Trees can be managed but not controlled. To live near trees, regardless of their condition, is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

**HAZARD/HAZARD POTENTIAL:** For the purposes of this evaluation and report, a tree or tree part that presents a threat to humans, livestock, vehicles, structures, landscape features or other entity of civilization from uprooting, falling, breaking or growth development (e.g., roots). While all large landscape trees in proximity to such targets present some degree of hazard regardless of their condition, such inherent hazard is not intended as within this definition and its usage in this evaluation and report.

**INSPECTION LIMITATIONS:** The inspection of these trees consisted solely of a visual inspection from the ground. While more thorough techniques are available for inspection and evaluation, they were neither requested nor considered necessary or appropriate at this time. Because trees and other plant life are living, changing organisms effected by innumerable factors beyond our control, The Pacific Resources Group and it's personnel offer no guarantees, stated or implied, as to tree, plant or general landscape safety, health, condition or improvement, beyond that specifically stated in writing in accepted contracts.

## WALL STREET EXTENSION TREE ASSESSMENT

Tree No.	Dbh Inches	Species	Cond.	Comments
1	15"	Hawthorn	<b>NO TREE</b>	No tree found, previously removed for construction
2	24"	Black Locust	<b>NO TREE</b>	No tree found, previously removed for construction
3	10"	Common Hawthorn	Fair	Poor structure, partially correct problems with pruning, marginal for preservation
4	12"	Common Hawthorn	Fair	Poor structure, partially correct problems with pruning, marginal for preservation
5	18"	<i>Pacific Willow</i>	<i>Poor</i>	<i>Poor form, one stem broken down to ground, remaining stem broken top &amp; off balance. Do not preserve</i>
6	8, 6, 6"	Russian Olive	Fair	Thin crown, lots of fine deadwood, poor annual twig growth
7	12, 11"	<i>European White Birch</i>	<i>Poor</i>	<i>2 stems at 4', very thin crown, growing out of bank, lots of deadwood, dying tree, do not preserve</i>
8	31"	Deodar Cedar	Good	Has some structural problems, correct with pruning
9	32"	Deodar Cedar	Fair	Multiple tops at 45', moderate amount of dead wood in lower crown
10	10"	Black Locust	Fair	Partial crown
11	10"	Black Locust	Fair	Large tall thin wound 3' long on south side 2' off ground, callusing over, but may have internal decay
12	9"	Black Locust	Fair	
13	11, 6"	Black Locust	Fair	Stems have poor connection at base, remove smaller stem
<b>14</b>	<b>10"</b>	<b>Black Locust</b>	<b>Hazard</b>	<b>Leaning against tree 13, Hazard Remove</b>
15	26"	Black Locust	Fair/ Poor	Declining health, large amount of fine dead wood in crown, check for possible decay at stem union
16	15"	Black Locust	<b>NO TREE</b>	<b>NO TREE FOUND</b>
<b>17</b>	<b>15"</b>	<b>Black Locust</b>	<b>Hazard</b>	<b>Dead tree, Hazard Remove</b>
18	10"	Western Red Cedar	Fair	Thin crown, failing health, suspect saturated soil
19	14"	Douglas Fir	Fair	Thin crown, poor twig growth, fine dead wood throughout crown, failing health, suspect saturated soil
20	24"	<i>Corkscrew Willow</i>	<i>Poor</i>	<i>Severely declining health, poor structure, lots of dead wood, possible internal decay, Do Not Preserve</i>

## WALL STREET EXTENSION TREE ASSESSMENT

Tree No.	Dbh Inches	Species	Cond.	Comments
21	12, 12, 10, 8, 7, 6"	Common Hawthorn	Fair	Several wounds on different stems, defects and dead wood can be removed with pruning
22		Part of tree 21		
23		Part of tree 21		
24		Part of tree 21		
Tree No.	Dbh Inches	Species	Cond.	Comments
25		Part of tree 21		
26	12"	Oregon Ash	Poor	<i>Poor structure, poor growth, poor health, unlikely to survive changes from development</i>
27	12"	Red Alder	Fair	Below average specimen, unlikely to survive grade changes from development
28	12"	Crabapple	Fair	Thin crown, moderate amount of deadwood, decay in several stems, growing out of creek bank
29	15"	Sitka Willow	Fair	Thin crown, moderate amount of deadwood, decay in several stems, growing out of creek bank
30	20"	Oregon Ash	Good	Small amount of fine to medium dead wood in crown, growing out of creek bank
31	12"	<b>Bigleaf Maple</b>	<b>Poor</b>	<b>Dying from top down, small leaves, crown 3/4 dead, Possible Hazard, Do Not Preserve</b>
32	12"	Oregon Ash	Fair	Minor defects, growing out of creek bank
33	12"	<b>Red Alder</b>	<b>Dead</b>	<b>Dead Snag, Hazard, Remove</b>
34	8"	Oregon Ash	Fair	Partial crown
35	12, 8"	Oregon Ash	Fair	Partial crown
36		Part of tree 35		
37	18"	Oregon Ash	Fair	Partial crown
38	15"	Oregon Ash	Fair	Leans to north, partial & thin crown
39	16, 14"	<b>Pacific Willow</b>	<b>Poor</b>	<b>Decay in both stems, fungal fruiting bodies on smaller stem, top broken out of larger stem, Potential Hazard, Do Not Preserve</b>
40		Part of tree 39		
41	8, 6"	Common Hawthorn	Fair	Has some structural problems which can be repaired by pruning
42	9, 8, 3, 3, 3"	Common Hawthorn	Fair	Has some structural problems which can be repaired by pruning
43	15"	Pine	<b>NO TREE</b>	No tree found, probably removed to construct apartments
44	19"	European White Birch	Fair	Tree is part of landscaped area for adjacent apartments

## WALL STREET EXTENSION TREE ASSESSMENT

Tree No.	Dbh Inches	Species	Cond.	Comments
45	10"	Black Locust	Fair	
46	10"	Black Locust	Fair	Wound on south side of trunk
47	10"	Black Locust	Fair	
48	16,11, 11,10, 10"	Pacific Willow	Fair	Low branched
49	14"	Red Alder	Good	
50	13,11"	<i>Pacific Willow</i>	<i>Poor</i>	<i>Main stem broken and fallen over at 5', Remove broken stem &amp; decayed limbs</i>
Tree No.	Dbh Inches	Species	Cond.	Comments
51	10"	Pacific Willow	Fair	
52	9,7,6,6 ,5,4"	Pacific Willow	Fair	Poor form, main stems close to ground will not allow grading within dripline
53	28, 12"	<b>Oregon Ash</b>	<b>Hazard</b>	<b>Main stem hollow &amp; girdled by beaver both stems have extensive internal decay. Remove</b>
54	24"	Red Alder	Fair	Growing at angle from creek bank, top previously broken out and regrown, next to main beaver access to creek

NOTE:

**Trees that are dead, dying or potential hazards and recommended for removal are indicated in Bold**

*Trees recommended for removal due to poor condition or that are unlikely to survive changes due to construction are indicated in Italics*

**Trees highlighted are within the Phase 2 boundary of the Wall Street extension**

## WALL STREET EXTENSION TREE ASSESSMENT

Tree No.	Dia. Inches	Species	Crown Ht/Width	Health	Condition	Comments
55	22	Red Alder	0	Dead	Dead	Toppled over. <b>Dead</b>
56	27	Oregon Ash	75 x 32	Good	Major defects or problems	Crown off balance, heavy to northwest. Tree sits 6' from edge of undercut creek bank and may not be stable. Inspect further before preserving.
57	18	Big Leaf Maple	40 x 25	Fair	Major defects or problems	Top broken out and regrown to multiple 3" to 6" sucker tops, suspect internal decay in broken top and in main stem. Partial crown is unbalanced. Very Poor Specimen. Do Not Preserve.
58	5, 8, 10, 12	Common Hawthorn	35 x 25	Good	Major defects or problems	Main trunk is splitting from 4' to 21' & is separating. Largest stem is will break off. Internal decay inside split. Very Poor Specimen. Do Not Preserve.
59	37, 38	Oregon Ash	80 x 20	Good	Hazard	2 stems, one has toppled to north. Remaining stem has defect and internal decay in base. <b>Hazard Remove.</b>
60	13, 15	Sitka Willow	30 x 30	Fair	Major defects or problems	2 stems at 2', 7 stems at 6'. Larger stem has extensive internal decay, smaller stem contains 60% of crown volume and leans to the east. Stem covered with English Ivy and is invested by borers or bark beetles evidenced by large amount of sawdust on Ivy leaves. Moderate amount of dead wood in crown. Poor specimen. Do Not
61	5, 6, 7, 13	Sitka Willow	35 x 20	Fair	Hazard	4 stems at 30", larger stem has exposed and internal decay from 1.5' to 6', leans to east. <b>Hazard Remove</b>
62	25	Black Cottonwood	90 x 1	Good	Major defects or problems	Top broken out in '08' winter storm left tree a standing stump. Poor specimen recommended for removal.
63	17	Oregon Ash	25 x 25	Poor	Hazard	Leans at 45°, off balance & not correctable. Decay in lower part of trunk with open wound at base. <b>Hazard Remove</b>
64	21, 23	Oregon Ash	80 x 40	Fair	Major defects or problems	Formerly 3 stems at 3' with included bark. One stem has toppled. Remaining stems off balance to south & west. Large wound from stem failure has exposed decay. Very poor callous tissue formation shows poor vigor. Poor specimen & potential hazard if remaining stems fail. Invasive examination needed if considering retention. Do Not Preserve.
65	7, 7, 8	Common Hawthorn	30 x 35	Fair	Major defects or problems	3 stems at ground leaning out from center at 25° to 35°. Very Poor Specimen. Do Not Preserve.
66	10	Oregon Ash	45 x 25	Good	Major defects or problems	Several old wounds at base from beaver, possible internal decay. Recent beaver damage. Marginal for preservation due to ongoing beaver damage.
67	18	Oregon Ash	55 x 35	Fair	Major defects or problems	Off balance to south & leans to south at 35° which is not correctable. Located 4' from edge of cut bank & is not stable. Poor specimen is marginal for preservation.
68	6, 7, 7, 8	Plum	30 x 35	Fair	Major defects or problems	15" at 1', 2 stems at 2', 4 stems at DBH. Poor connections at all stem unions. Poor specimen, do not preserve.

## WALL STREET EXTENSION TREE ASSESSMENT

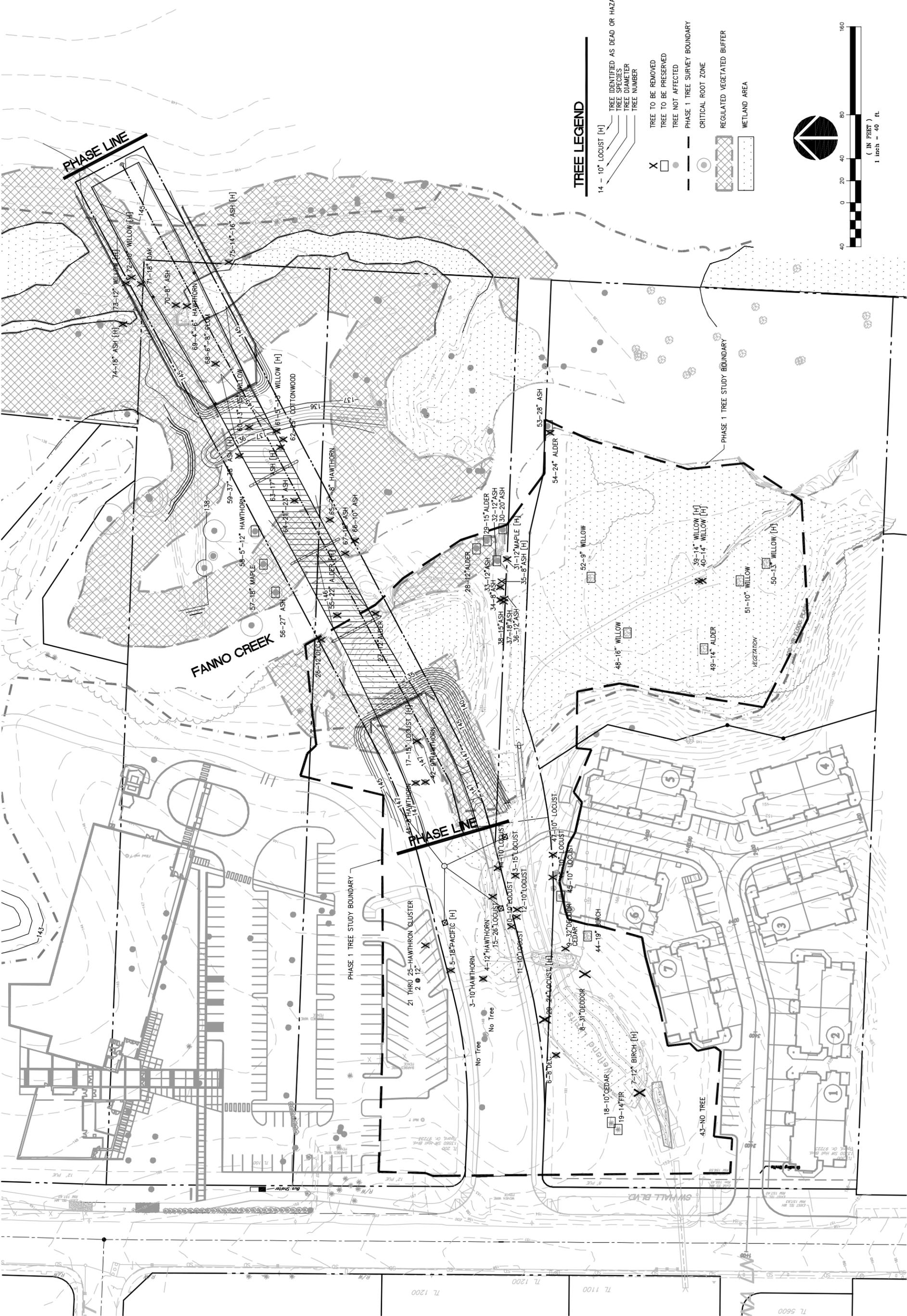
Tree No.	Dia. Inches	Species	Crown Ht/Width	Health	Condition	Comments
69	4, 5, 6	<i>Common Hawthorn</i>	15 x 20	Poor	<i>Major defects or problems</i>	<i>Multiple stems with poor connections at base, partially engulfed in Blackberry canes. Poor specimen, marginal for preservation.</i>
70	8	Oregon Ash	35 x 15	Good	Moderate and non-correctable defects	Tree is a root sucker from a dead stump. Typical form and growth habit.
71	18	Oregon White Oak	75 x 35	Good	Minor correctable defects	Partial lower crown due to crowding
72	10	Scouler Willow	45 x 15	Poor	<b>Hazard</b>	4 stems at 4' to 6', 3 of the 4 are dead. Decay in main stem. <b>Hazard Remove.</b>
73	12	Scouler Willow	0	<b>Dead</b>	Toppled Over	Tree toppled in winter storm of '08'. <b>Dead.</b>
74	18	Oregon Ash	0	<b>Dead</b>	Toppled Over	Tree toppled in winter storm of '08'. <b>Dead.</b>
75	14, 15, 15, 16	Oregon Ash	60 x 45	Poor	<b>Hazard</b>	4 stems at 2', 3 of 4 stems are dead with no tops. Two north stems lean at 30° to 45°. Possible decay at base. <b>Hazard Remove.</b>

### Notes

Trees that are dead, dying, hazardous, potentially hazardous or have serious defects and are recommended for immediate removal are shown in **BOLD**.

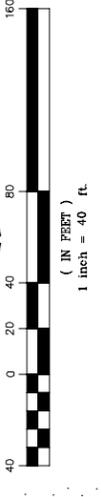
Trees that have significant defects, have been damaged beyond recovery or are such poor specimens that they should not be preserved, are shown in *ITALICS*.

Trees highlighted are not located on City of Tigard property.



**TREE LEGEND**

- 14 - 10" LOCUST [H]
- TREE IDENTIFIED AS DEAD OR HAZARD
- TREE SPECIES
- TREE DIAMETER
- TREE NUMBER
- X TREE TO BE REMOVED
- TREE TO BE PRESERVED
- TREE NOT AFFECTED
- PHASE 1 TREE SURVEY BOUNDARY
- CRITICAL ROOT ZONE
- ▨ REGULATED VEGETATED BUFFER
- ▤ WETLAND AREA



**Mossberger, Laura**

---

**From:** Mossberger, Laura  
**Sent:** Tuesday, December 01, 2009 4:13 PM  
**To:** 'Cheryl Caines (cherylc@tigard-or.gov)'  
**Subject:** Fields Access Application: Letter and attachments from Phil Grillo  
**Attachments:** Sharp33NE@millernash.com\_20091201\_162627.pdf



**MILLER NASH** LLP  
ATTORNEYS AT LAW

PORTLAND, OREGON  
SEATTLE, WASHINGTON  
VANCOUVER, WASHINGTON  
CENTRAL OREGON  
WWW.MILLERNASH.COM

Exhibit U

**Phillip E. Grillo**  
phil.grillo@millernash.com  
(503) 205-2311 direct line

December 1, 2009

**BY FIRST-CLASS MAIL AND  
ELECTRONIC MAIL**

Ms. Cheryl Caines  
Associate Planner  
City of Tigard  
Department of Community Development  
Current Planning Division  
13125 S.W. Hall Boulevard  
Tigard, Oregon 97223

**Subject:** Fred Fields' Access Application (CPA2009-00004, SLR2009-00004, & SLR2009-00005)

Dear Cheryl:

I am writing on behalf of the applicant, Fred Fields, to provide you with additional information concerning TDC 18.775.070(B)(2), as it applies in this case.

As you know, this standard has been the subject of ongoing discussions between the City and the applicant's team. Based on our recent discussions, I am uncertain what your current position is with regard to the meaning of this standard and how you would interpret and apply it in our case. Your letter dated October 30, 2009, to Mr. Konrad indicates that you are interpreting TDC 18.775.070(B)(2) to prohibit the proposed access bridge in the floodplain, because the site is zoned for residential use.

The surface of Mr. Fields' access street and the bridge will be located well above the floodplain elevation and will therefore be located outside the floodplain. I believe this complies with your position that under TDC 18.775.070(B)(2), the street cannot be located in the floodplain. The only development or landform alterations that are proposed to occur in the floodplain are the support facilities that extend below the street and bridge, and that are necessary to elevate the street and bridge above the floodplain. These supports constitute "public support facilities," which under TDC 18.775.070(B)(2) are allowed in residentially zoned floodplains.



Ms. Cheryl Caines  
December 1, 2009  
Page 2

As you know, Wall Street is a public street shown in the Tigard Transportation Systems Plan ("TSP"). The planned extension of that street will be located exclusively on City-owned land or within the public right-of-way, as will the support needed to elevate those facilities (e.g., footings and fill). These footings and fill are necessary to support the principal development, namely the planned extension of Wall Street as described in the City's TSP.

The proposed Wall Street extension and bridge were designed by an engineering firm (DeHass) that was employed by the City for that purpose. As part of the process of selecting a design for the bridge and street, the City looked at many alternatives and selected the design prepared by DeHass. This design was selected by the City to minimize impacts to the natural area and the floodplain, while at the same time ensure that the roadway extension could reasonably be constructed. Overall, this planned street extension has been anticipated for many years. It is not only required by the City's TSP, it is also necessary for Mr. Fields to access his property.

The supports that are needed to elevate this planned street extension above the floodplain constitute "public support facilities," and are therefore allowed in residential zones pursuant to TDC 18.775.070(B)(2). Without the exception for "public support facilities," it would be impossible to build planned transportation facilities in residentially zoned lands, unless the floodplains were relatively narrow. That being said, we agree that the surface of planned transportation facilities should be located above the floodplain elevation, especially in residentially zoned lands. Locating the surface of streets or pathways above the floodplain elevation is necessary for public safety to facilitate access during flood emergencies. But "public support facilities," such as footings and fill, often need to be located in the floodplain in order to elevate planned transportation facilities, like public streets and pathways, above the floodplain. As you know, many planned transportation facilities already cross, or are planned to cross, the floodplain. Accordingly, any ambiguities in TDC 18.775.070(B)(2) should be interpreted in a way that makes planned public transportation facility crossings possible by allowing them to be elevated by footings and fill in the floodplain, when needed.

The issue of whether footings and fill can be located in the floodplain under TDC 18.775.070, if they are used to elevate a planned transportation facility above the floodplain, came before you and the City's land use hearings officer earlier this year in the Fanno Creek Trail & Bridge case (SLR 2009-00002, decided July 22, 2009, attached). By coincidence, the planned pathway extension proposed in the Fanno Creek Trail & Bridge case is located on the same City-owned property as the proposed Wall



Ms. Cheryl Caines  
December 1, 2009  
Page 3

Street extension, namely Tax Lot 2S102DA-0041. The similarities in the two projects do not end there. For example:

- The Fanno Creek Trail & Bridge case involved a proposed extension of a planned transportation facility on residentially zoned land, just as the planned Wall Street extension project does in our case.

- The Fanno Creek Trail & Bridge case involved a proposed crossing of the creek with a bridge. The travel surface of the bridge is located above the floodplain and is supported by footings and fill located in the floodplain, just as the planned Wall Street extension project does in our case.

- The Fanno Creek Trail & Bridge case involved the extension of a planned transportation facility shown on the City's TSP, just as the planned Wall Street extension project does in our case.

In the City's staff report in the Fanno Creek case, staff noted that "Most of the work is proposed within the 100-year floodplain and floodway." (Staff report at 2 of 15.) Grading is shown in the floodplain on the maps attached to the staff report. Even though most of the work proposed in that case would occur within the floodplain, staff clearly stated that: "Land form alterations within the 100-year floodplain are permitted within the commercial and industrial zones. Community Recreation and Public Support Facilities are permitted within residential zones as an exception. The trail and sidewalk therefore, are permitted within the R-12 zoning. This standard is met." (Staff report at 6 of 15.) The staff report definitively states that "The proposed improvement on this site (sidewalk widening and signal installation) is classified as a Public Support Facility." (Staff report at 11 of 15.) In the hearings officer's detailed opinion, he agreed with staff's conclusion and elaborated on the issue in response to opposing testimony provided at the hearing.

The hearings officer's findings are particularly noteworthy and highly relevant to our case because they explain the City's interpretation of the sensitive lands provisions in TDC 18.775.070 as they relate to planned transportation facilities located in the floodplain. In that case, the hearings officer carefully explained how the provisions in the sensitive lands section of the code work together with the City's TSP to allow planned transportation facilities to be constructed through the floodplain, even on residentially zoned lands. With regard to planned transportation facilities located in the floodplain, the hearings officer found as follows:



Ms. Cheryl Caines  
December 1, 2009  
Page 4

"i. The opponents interpretation that the elevation standard of TDC 18.775.070.B(5) applies to the entire boardwalk structure, would likely preclude all pathways that cross any portion of the floodplain below the average annual flood elevation. With the exception of relatively narrow floodplain areas, it would be impossible to extend a bridge or boardwalk over such areas without using support that extend below the elevation of the average annual flood. However the City's adopted transportation plan clearly shows pathways crossing floodplain areas." (See hearings officer decision at 20, attached.)

"ii. The appellants argue that, because this criterion is included in the sensitive lands section of the Code, it must be intended to protect sensitive lands by prohibiting structures that could catch debris or increase flood levels. However, this standard is not necessary to achieve those purposes. A surface pathway below the elevation of the average annual flood would have no effect on flood levels or debris flows. These problems only arise with elevated pathways located on fill or a boardwalk, bridge or other structure. Compliance with the "no-rise" standard of TDC 18.775.070.B(1) is sufficient to ensure that any structure supporting a pathway will not impact flood heights." (See hearings officer decision at 20.)

"d. Therefore the hearings officer finds that the elevation requirement of TDC 18.775.070 B(5) only applies to the surface of the boardwalk, where the "pathway" is located. As discussed above, the surface of the boardwalk can be located above the average annual flood. Therefore the applicant can comply with TDC 18.775.070.B(5)." (See hearings officer decision at 21.)

In other words, when dealing with planned transportation facilities in floodplains, the hearings officer made a clear distinction between the need to locate the surface of planned public transportation facilities above the floodplain elevation and the competing need for public support facilities to extend below the floodplain elevation to support these transportation facilities. As he correctly concluded, unless the provisions of TDC 18.775.070 are interpreted in this way, it would be "impossible" to construct planned transportation facilities through the floodplain, except in relatively narrow floodplain areas.

Roads are treated the same under the TDC as pathways. Both the staff report and the hearings officer decision in the Fanno Creek Trail & Bridge case treat pathways as roads under the TDC. Regarding nonresidential construction in the floodplain, the staff report concludes that "[t]his standard does not apply as this development is for roadway purposes." (Staff report at 6 of 15.) Staff testified before the



Ms. Cheryl Caines  
December 1, 2009  
Page 5

hearings officer that "[t]rails are treated as streets" under the TDC. (See hearings officer decision at 13.) The hearings officer found that "trails \* \* \* are treated as transportation facilities, similar to a road" under the TDC. (See hearings officer decision at 15.) Mr. Fields' bridge proposal should be treated the same as the City's bridge proposal.

In the Fanno Creek Trail & Bridge case, the width of the floodplain was approximately 400 feet. Even so, the City approved a 60-foot span bridge, and allowed the applicant (itself) to place footings and fill within the floodplain under TDC 18.775.070 in order to support the bridge. (See attached photos.) In our case, the width of the floodplain is wider. The width of the floodplain at the planned crossing is approximately 500 feet. Likewise, the span of our proposed bridge is approximately 320 feet, which is much longer than the relatively short bridge proposed in the Fanno Creek case. Forcing Mr. Fields to remove the needed footings and fill from the floodplain and build a much longer bridge without footings or fill in the floodplain, in order to span this extremely wide floodplain, would be completely inconsistent with the hearing officer's reasoning and decision in the Fanno Creek Trail & Bridge case, and would be in direct conflict with the applicable law.

The purpose of TDC 18.775.070(B)(2) is not to make required transportation facilities impossible to build on residentially zoned land, or to make them so costly that they cannot be built. Nor is its purpose to keep all development and landform disturbances out of the floodplain. Its purpose is to keep the transportation facility safe by keeping the surface above the floodplain elevation in residentially zoned areas so that people and emergency vehicles can access homes during flood emergencies. As is explained by the hearings officer, other provisions in TDC 18.775 expressly protect the floodplain, such as the "no-rise" standard of TDC 18.775.070(B)(1) and the "anchoring" requirements of TDC 18.775.040(I). (See hearings officer decision at 21.)

In closing, we ask that you interpret and apply any ambiguous provision in TDC 18.775.070 in a way that is consistent with the hearings officer's reasoning in the above-mentioned case. The hearings officer's decision is consistent with the applicable law. That decision was not appealed by the City or by any other party. In fact, City staff argued persuasively in favor of the position ultimately adopted by the hearings officer. Issues raised in that case have already been resolved. The hearings officer's reasoning in that case is practical, lawful, and applicable to Mr. Fields' application. We should not be treated any differently by the City in this case, than the City treated itself in that case. Mr. Fields is trying to do precisely what the City just did in the Fanno Creek case, namely extend a long-planned transportation facility through a floodplain by using a



**MILLER NASH**<sup>LLP</sup>  
ATTORNEYS AT LAW

PORTLAND, OREGON  
SEATTLE, WASHINGTON  
VANCOUVER, WASHINGTON  
CENTRAL OREGON  
WWW.MILLERNASH.COM

Ms. Cheryl Caines  
December 1, 2009  
Page 6

design that keeps the roadway surface out of the floodplain. Such a design is implemented by elevating the surface of the planned transportation facility and the bridge itself above the floodplain by locating some footings and fill inside the floodplain, but outside the stream channel.

As the hearings officer concluded, the ambiguous provisions of TDC 18.775.070 should be and have been interpreted and applied in a way that enables the travel surface of transportation facilities to be above the floodplain, but allows footings and fill ("public support facilities") to be located in the floodplain as needed to support a reasonably sized bridge that protects the stream channel. As the attached photos clearly show, that is exactly what the hearings officer approved in the Fanno Creek case, and it is exactly what Mr. Fields is asking for in this case. The hearings officer recognized that planned transportation facilities must be allowed to cross floodplains in a practical and financially viable way, and interpreted ambiguous provisions in TDC 18.775.070 consistent with that purpose. We hope that you will too.

Please let me know if you have any further questions with regard to this issue, and thank you again for your careful consideration.

Very truly yours,

Phillip E. Grillo

cc: Mr. Fred Fields  
Mr. Tim Ramis, City Attorney



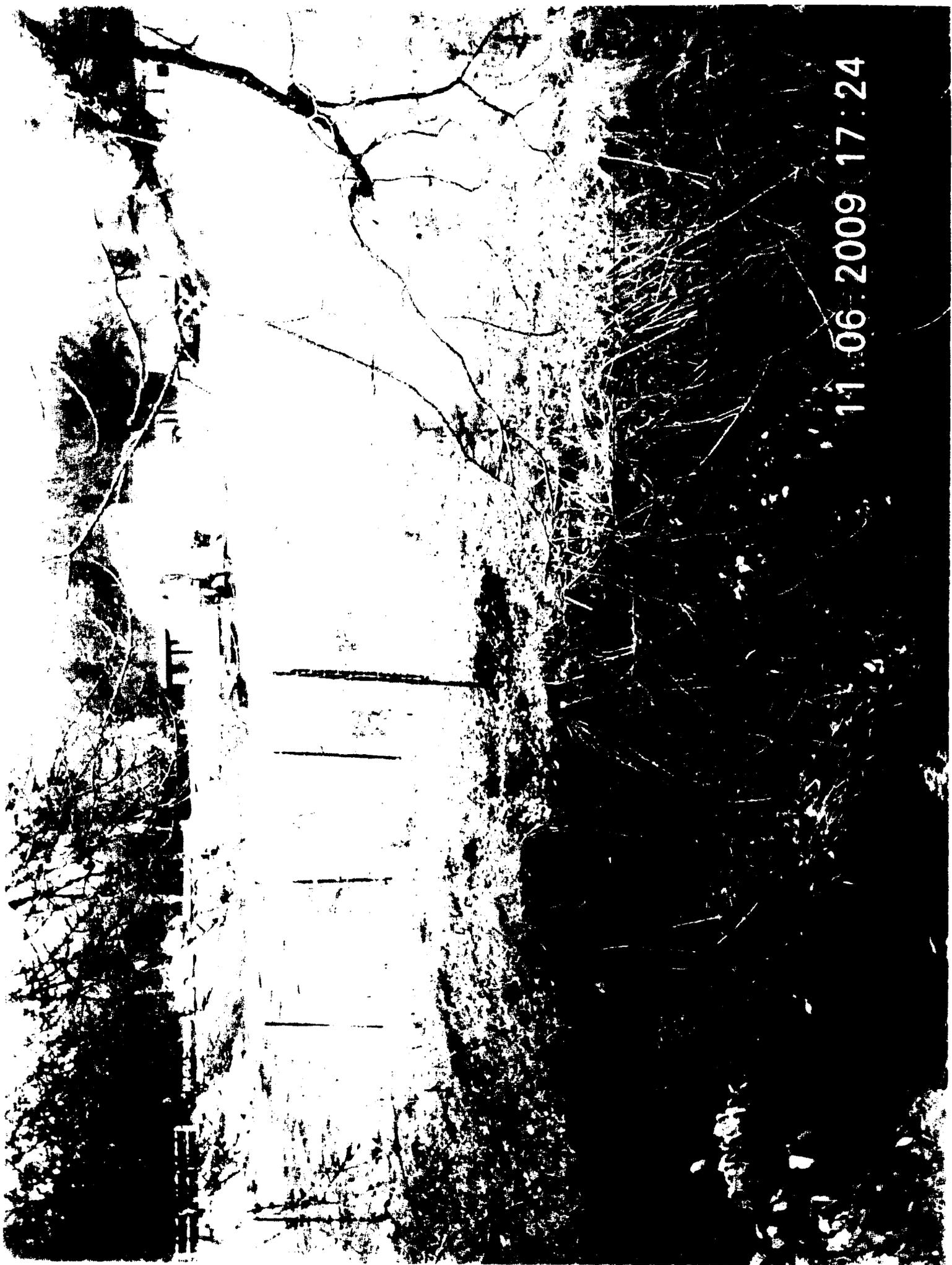
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120 DAYS = 12/22/2009 (139 day extension)  
DATE OF FILING: 6/22/2009  
DATE MAILED: 6/22/2009



**CITY OF TIGARD**  
Washington County, Oregon  
**NOTICE OF FINAL ORDER BY THE HEARINGS OFFICER**

Case Numbers:	<u>SENSITIVE LANDS REVIEW (SLR) 2009-00002</u> <u>SENSITIVE LANDS REVIEW (SLR) 2009-00003</u> <u>MINOR MODIFICATION (MMD) 2009-00007</u> <u>MINOR MODIFICATION (MMD) 2009-00013</u>
Case Name:	<u>FANNO CREEK TRAIL &amp; BRIDGE/HALL BLVD. CROSSING</u>
Applicant's Name/Address:	<u>City of Tigard 13125 SW Hall Boulevard Tigard, OR 97223</u>
Owner's Name/Address:	<u>City of Tigard 13125 SW Hall Boulevard Tigard, OR 97223</u>
Address of Property:	<u>13125 and 13500 SW Hall Boulevard Tigard, OR 97223</u>
Tax Map/Lot Nos.:	<u>Washington Co. Tax Assessor's Map No. 2S102DA, Tax Lots 00401 and 00600.</u>

A FINAL ORDER INCORPORATING THE FACTS, FINDINGS AND CONCLUSIONS APPROVING A REQUEST FOR SENSITIVE LANDS REVIEW AND MINOR MODIFICATIONS, THE CITY OF TIGARD HEARINGS OFFICER HAS REVIEWED THE APPLICANT'S PLANS, NARRATIVE, MATERIALS, COMMENTS OF REVIEWING AGENCIES, THE PLANNING DIVISIONS STAFF REPORT AND RECOMMENDATIONS FOR THE APPLICATION DESCRIBED IN FURTHER DETAIL IN THE STAFF REPORT. THE HEARINGS OFFICER HELD A PUBLIC HEARING ON MAY 11, 2009 TO RECEIVE TESTIMONY REGARDING THIS APPLICATION. THIS DECISION HAS BEEN BASED ON THE FACTS, FINDINGS AND CONCLUSIONS CONTAINED WITHIN THIS FINAL ORDER.

**Request:** ➤ The applicant requested approval to construct portions of the Fanno Creek trail. Construction involves installation of a sidewalk and signalized crosswalk on Hall Boulevard north of the Fanno Creek Bridge. A boardwalk is approved through the floodplain and vegetated corridor of nearby wetlands and Fanno Creek on the eastern side of Hall Boulevard, and a pedestrian bridge over Fanno Creek is approved east of Hall Boulevard to connect the new boardwalk with the existing trail north of the Tigard library. **At the May 11, 2009 public hearing, the Hearings Officer ultimately held open the record until July 13, 2009 (9 weeks), and then approved the request, subject to conditions of approval.**

Zones: CBD: Central Business District; I-L: Light Industrial District; and R-12: Medium-Density Residential District.  
Applicable Review Criteria: Community Development Code Chapters 18.330, 18.360, 18.390, 18.510, 18.520, 18.530, 18.745, 18.775 and 18.810.

**Action:** ➤  Approval as Requested  Approval with Conditions  Denial

**Notice:** Notice was published in the newspaper and mailed to:  
 Owners of Record within the Required Distance  Affected Government Agencies  
 Interested Parties  The Applicants and Owners

The adopted findings of fact and decision can be obtained from the Planning Division/Community Development Department at the City of Tigard Permit Center at City Hall.

**Final Decision:**

**THIS DECISION IS FINAL ON JULY 22, 2009 AND BECOMES EFFECTIVE ON AUGUST 6, 2009 UNLESS AN APPEAL IS FILED.**

**Appeal:**

The decision of the Review Authority is final for purposes of appeal on the date that it is mailed. Any party with standing as provided in Section 18.390.040.G.1. may appeal this decision in accordance with Section 18.390.040.G.2. of the Tigard Community Development Code which provides that a written appeal together with the required fee shall be filed with the Director within ten (10) business days of the date the notice of the decision was mailed. The appeal fee schedule and forms are available from the Planning Division of Tigard City Hall, 13125 SW Hall Boulevard, Tigard, Oregon 97223.

**THE DEADLINE FOR FILING AN APPEAL IS 5:00 PM ON AUGUST 5, 2009.**

**Questions:** If you have any questions, please call the City of Tigard Planning Division at (503) 639-4171.

**BEFORE THE LAND USE HEARINGS OFFICER  
FOR THE CITY OF TIGARD, OREGON**

Regarding an application by the City of Tigard for ) **FINAL ORDER**  
sensitive lands review and other approvals for construction)  
of a section of the Fanno Creek, trail north of Fanno Creek) **SLR2009-00002**<sup>1</sup>  
and east of Hall Boulevard, in the City of Tigard, Oregon ) **(Fanno Creek Trail)**

**A. SUMMARY**

1. The applicant, City of Tigard, requests sensitive lands review and minor modification of the Conditional Use Permit ("CUP") approval for the Tigard Library to construct a segment of the Fanno Creek trail located north of Fanno Creek and east of Hall Boulevard, at 13125 and 13500 SW Hall Boulevard; also known as tax lots 401 and 600, WCTM 2S102DA (the "site"). The proposed trail segment will connect the existing trail sections north of the Library, which currently ends at the south bank of Fanno Creek, with the existing trail section on the west side of Hall Boulevard, north of Fanno Creek and south of the Tigard City Hall. The applicant proposed to install a bridge across Fanno Creek, an elevated boardwalk through the floodplain and vegetated corridor of nearby wetlands north of Fanno Creek, a sidewalk on the east side of Hall Boulevard north of Fanno Creek and a signalized crosswalk on Hall Boulevard between the end of the proposed sidewalk and the existing trail section west of Hall Boulevard. Additional basic facts about the site and surrounding land and applicable approval standards are provided in the Staff Report to the Hearings Officer dated April 29, 2009 (the "Staff Report"), incorporated herein by reference.

2. Tigard Hearings Officer Joe Turner (the "hearings officer") held a duly noticed public hearing on May 11, 2009 to receive and consider public testimony in this matter. At the public hearing City staff recommended conditional approval of the application. Representatives of the applicant testified in support of the application. Two persons testified in opposition. At the end of the hearing, the hearings officer ordered the record held open. Ultimately, at the parties' request, the hearings officer held open the record until July 13, 2009. See the June 26, 2009 "Order Opening the Record." Exhibit 9. The principal issues in this case include the following:

- a. Whether the City is required to include copies of prior development approvals on and near this site in the record for this case;
- b. Whether changes to the design of the bridge supports constitute a significant change in the application;
- c. Whether changes in the plans require additional review by DSL;

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<sup>1</sup>This decision also addresses SLR2009-00003, MMD2009-00007 and MMD2009-00013.

- d. Whether this application qualifies as a minor modification of the CUP approval for the library;
- e. Whether a traffic study and/or access report is required for this project;
- f. Whether the pathway will be located above the elevation of the average annual flood;
- g. Whether the boardwalk and bridge are subject to the flood proofing requirements of TDC 18.775.040.M;
- h. Whether the boardwalk and bridge can comply with the anchoring requirements of TDC 18.775.040.I;
- i. Whether the City is required to find that the project complies with CWS's Design and Construction Standards;
- j. Whether Goal 5, the Tualatin Basin "Limit" Decision and the City's "Significant Habitat Areas Map" are applicable approval criteria for this application;
- k. Whether the wildlife assessment is adequate;
- l. Whether the applicant is required to stabilize the banks of Fanno Creek on the site;
- m. Whether the applicant is required to remove the trees on the site;
- n. Whether the provisions of the comprehensive plan are an applicable approval criteria for this application;
- o. Whether the applicant is required to construct frontage improvements on Hall Boulevard abutting the site; and
- p. Whether the hearings officer can limit grading on the site.

3. Based on the findings and discussion provided or incorporated in this final order, the hearings officer concludes that the applicant sustained the burden of proof that the proposed sensitive lands review and minor modifications do or will comply with the applicable criteria of the Community Development Code, provided development that occurs after this decision complies with applicable local, state, and federal laws and with conditions of approval warranted to ensure such compliance occurs in fact. Therefore those applications should be approved subject to such conditions.

## B. HEARING AND RECORD HIGHLIGHTS

1. The hearings officer held a duly noticed public hearing on May 11, 2009 to receive and consider public testimony in this matter. The record includes a witness list, materials in the casefile as of the close of the record, including materials submitted after the hearing, and an audio record of the hearing. At the beginning of the hearing, the hearings officer made the declaration required by ORS 197.763. The hearings officer disclaimed any *ex parte* contacts, bias or conflicts of interest. The following is a summary by the hearings officer of selected relevant testimony offered at the hearing.

2. City planner Cheryl Caine summarized the Staff Report and responded to testimony from the parties.

a. She noted that the City approved a 1,090-foot segment of the trail south of Fanno Creek and north of the Tigard Library in 2005. Final Order SLR 2005-00016/MMD 22005-00015. The approved trail segment terminated at the south bank of Fanno Creek. With this, 2009, application the City proposes to extend the trail over Fanno Creek and connect it with an existing section of trail located on the west side of Hall Boulevard.

b. She noted that Condition of approval 5 of the 2005 decision required that the applicant conduct a wildlife assessment to address the impact of the project within the area north of Fanno Creek and design the section of the trail north of the creek to “[r]espond to and take into account the results of the wildlife assessment.” She argued that the proposed trail alignment strikes a balance between safe and convenient trail access and the preservation of wildlife habitat.

c. She noted that there are wetlands on both sides of Hall Boulevard. Therefore Sensitive Lands Review is required for this section of the trail. No work is proposed within the wetlands, but the trail will be located within the vegetative corridor associated with Fanno Creek and the wetlands. Clean Water Services (“CWS”) issued a letter approving the proposed work in the vegetative corridor. The trail meets the no net rise standard for the floodway. She recommended the hearings officer approve the application subject to the conditions of approval in the Staff Report.

3. City project planner Duane Roberts, consulting wetland scientist Caroline Rim and City engineer Vannie Nguyen testified in support of the application.

a. Mr. Roberts summarized the design of the proposed trail segment.

i. He testified that this section of the trail is designed to achieve two competing goals; safety of the trail users and protection of turtles and other wildlife. The field on the north side of Fanno Creek provides important breeding habitat for western pond turtles. The proposed trail will impact turtle habitat. But the applicant designed the project to minimize such impacts to the maximum extent possible.

ii. The trail must cross Fanno Creek to connect the two existing trail sections and provide a signalized crossing over Hall Boulevard. The existing Hall Boulevard bridge across Fanno Creek does not meet ADA requirements for pedestrian accessibility.

(A) Hall Boulevard currently carries more than 14,000 vehicle trips per day, making it difficult for pedestrians to cross the street at unsignalized intersections. Hall Boulevard is subject to the jurisdiction of the Oregon Department of Transportation ("ODOT"). ODOT approved a signalized pedestrian crossing on Hall Boulevard at the proposed location north of Fanno Creek. The approval is site specific. ODOT will not allow a signalized pedestrian crossing south of Fanno Creek or elsewhere on Hall Boulevard.

(B) There is an existing signalized crossing at the intersection of Wall Street and Hall Boulevard south of the site, at the southwest corner of the Library site. However trail users would be forced to undertake out of direction travel to use this crossing to access the remainder of the trail. Under existing conditions the majority of pedestrians run or walk across Hall Boulevard at unsignalized locations.

iii. He testified that the majority of the boardwalk will be elevated 30-inches above the ground. The railing will be 42-inches above the boardwalk. The different elevations listed in the text of the application are typographical errors.

iv. He testified that the CWS mitigation project on the site is only required to mitigate impacts to offsite wetlands. Although CWS performed mitigation activities throughout the site, the upland mitigation areas are not part of the required mitigation project. The trail development will have no impact on the mitigated wetlands on the site.

v. He noted that compliance with Metro's Fanno Creek Trail guidelines is not an approval criterion. Metro's preferred alignment extends through wetland areas north of Fanno Creek and east of Hall Boulevard. CWS approved the proposed alignment. The City's original alignment was located closer to the creek, in the southwest corner of the site as suggested by the Wildlife Assessment. However CWS required that the City move the trail to the northeast in order to reduce its impact on the vegetative corridors.

vi. He argued that the alternative trail alignment proposed by Mr. Frewing is not a reasonable alternative alignment. The alternative route will provide an equally direct route for pedestrians traveling through the area on the trail. However it will not accommodate other trail users.

(A) The alternative alignment will force westbound and northbound bike riders to make a difficult, unprotected, left turn across Hall Boulevard in order to rejoin the trail north of Fanno Creek. There is no center left turn lane on Hall Boulevard at that location.

(B) The alternative alignment proposed by Mr. Frewing does not provide a direct connection between the trail and the Library. Therefore those trail users are likely to cross Hall Boulevard at the unsignalized intersection of Hall Boulevard and O'Mara Street rather than undertaking additional out of direction travel needed to access the signalized crossing at Wall Street. The Library is a primary destination for many trail users.

vii. He testified that he may have been mistaken about the posted speed limit on Hall Boulevard. However there is no substantial evidence of traffic traveling at 50 mph as alleged by the appellants.

viii. He argued that the trail was designed to protect turtles. The application addresses all of the applicable approval criteria in the Code.

b. Ms. Rim testified that the City conducted a habitat review of the site three years ago, which was recently updated. The Oregon Department of Fish and Wildlife ("ODFW") and CWS undertook habitat mitigation activities on the site to enhance its value as turtle habitat. The updated analysis did not note any other significant changes on the site.

c. Ms. Nguyen testified that she designed the trail and other engineers and experts reviewed the project. The stream bank is stable and capable of supporting the proposed bridge footings. The City does not have design standards for trails. The City relies on a case-by-case design process.

i. She argued that the combined, two-way, bike path proposed by Mr. Frewing only serves bicyclists who are traveling on the trail. It will create a hazard for riders traveling northbound on Hall Boulevard. Those riders will be forced to turn left across Hall Boulevard at Wall Street to access the two-way path on the west side of Hall Boulevard, then cross Hall Boulevard again at an unprotected location in order to access the existing bike path on the east side and continue north on Hall Boulevard.

ii. She testified that the City considered Ms. Beilke's and ODFW's concerns about impacts to turtles and their habitat. The City proposed the elevated boardwalk to allow turtles to cross under the trail, reducing the trail's impact on turtle habitat and the potential for contact between humans and turtles. CWS reviewed the project and approved the proposed alignment. The trail is located in the corner of the site in order to minimize impacts to the habitat value of the site. The remainder of the site will remain protected and undisturbed.

4. John Frewing summarized his written testimony. Exhibit 1. He testified that, although he generally supports enhanced pedestrian amenities and connectivity, he is opposed to the specific trail alignment proposed in this application. The proposed trail alignment does not meet City standards and it will have cause impacts to turtles and turtle habitat that cannot be avoided or mitigated with conditions of approval.

a. He outlined an alternative trail alignment that avoids impacts to the turtle habitat north of Fanno Creek. His alternative trail alignment would utilize a new trail segment connecting the existing trail sections south of the Library with the existing trail section south of City Hall, on the west side of Hall Boulevard. The City cannot rely on the existence of the trail section on the Library site to justify approval of the proposed trail section north of Fanno Creek. The condition of approval of the 2005 decision approving the trail on the Library site required that the applicant complete a wildlife assessment of this site. The hearings officer's decision approving that trail segment site specifically stated that construction of the trail on the south side of Fanno Creek was "at the City's own risk."

b. He argued that the proposed trail constitutes a major modification of the Conditional Use Permit ("CUP") approval for the Library, CUP 2003-001. Therefore TDC 18.330.020.B(2) requires that the applicant submit a new CUP application. This application constitutes a major modification of the prior CUP approval based on the following:

i. CUP 2003-001 approved a public Library as a "cultural institution." Inclusion of a boardwalk and regional trail constitutes a change in the approved land use. TDC 18.330.020.B(2)(a).

ii. This application changes the design of the Hall Boulevard crossing and sidewalk, "A change in the type and/or location of access ways and parking areas where off-site traffic would be affected." TDC 18.330.020.B(2)(c).

iii. This application reduces the width of the trail from ten feet to eight feet, "An elimination of project [recreational] amenities by more than 10%..." TDC 18.330.020.B(2)(g).

iv. The City has not fulfilled conditions of approval 21 and 28 of CUP 2003-001, which require that the City fund the on-site portion of the Fanno Creek Trail and Hall Boulevard frontage improvements for the balance of the subject site frontage and a portion of the Fanno Creek bridge replacement costs prior to final occupancy of the library.

c. He argued that the record in this case is incomplete, because it does not include the prior land use and site development approvals for development on this site and the City Hall site across Hall Boulevard. Those decisions must be included in the record to determine whether approval of this application constitutes a major modification of those prior approvals.

i. In addition, the record does not include a copy of the information provided to the Division of State Lands ("DSL") based on which DSL concluded that DSL permits were not required for the trail project.

d. He argued that the proposed trail will not comply with TDC 18.775.070.B(5), which prohibit pathways below the elevation of an average annual flood. He argued that the Code uses the terms "pathway" and "trail" interchangeably.

i. He argued that this criterion should be construed to require that the entire trail, including its foundation, support structure, decking and railings, must be above the annual flood level. The 2003 Metro Design Guidelines for the Fanno Creek Trail include all of those elements. In addition, the elevation requirement is listed in the Sensitive Lands section of the Code, which indicates this requirement is intended to protect sensitive lands. This criterion would be included elsewhere in the Code if it was intended to ensure that the trail is usable/accessible for transportation and recreation year-round.

ii. He further argued that even the walking surface of the trail is located below the elevation of an average annual flood. The applicant's Average Annual Flood Certification Letter is based on the two-year flood. However the Certification is based on an estimate of an estimate, a statistical extrapolation of stream flow from a 100-year floodplain model, which itself is based on the Santa Barbara Urban Hydrograph, with questionable applicability to the site.

iii. He testified that, based on USGS stream flow data for the past eight years, the actual average annual flood elevation at the site is equal to or higher than 1996 flood, when Fanno Creek was flowing 18-inches above the curb level on the Hall Boulevard bridge, a flood elevation of roughly 143.87 feet msl.

iv. He noted that the applicant's plans do not show the elevation of the proposed boardwalk structure, making it impossible to review the application for compliance with this criterion.

e. He argued that the boardwalk is a "nonresidential structure" subject to TDC 18.775.040.M This section requires that the lowest floor of the structure must be elevated to the level of the base flood elevation, the 100 year flood, or that the structure be flood proofed in compliance with TDC 18.775.040.M(1) and (2). Based on the City's floodplain maps, the boardwalk is "several feet" below the base flood elevation on the site.

f. He argued that the trail cannot comply with CWS Design and Construction Standards, which require that "the path shall avoid the Vegetated Corridor where possible." It is possible to avoid the vegetated corridor along Fanno Creek by utilizing a combination of the City's "Option 2" and "Option 3," what he titled the "habitat protection alternative." This trail alignment uses the existing pedestrian bridge over Fanno Creek north of the Senior Center, south to O'Mara Street, then east to Hall Boulevard, as shown in the applicant's "Alignment Option 2," then south along the west side of Hall Boulevard to the signalized intersection at Wall Street, connecting to the existing trail near the Fanno Point Condominiums, as shown in the applicant's "Alignment Option 3." There are existing bicycle lanes on both sides of these streets. This alignment provides an equally direct trail alignment that avoids impacts to the vegetative corridor and the turtle habitat on the site.

i. This alignment is consistent with the range of alternatives shown in Metro's 2003 Fanno Creek Greenway Trail Action Plan (Attachment D of Exhibit 1) and Metro's guidelines for the trail (Attachment A of Exhibit 1). Although portions of this alignment are on street, it is consistent with Metro policy that calls for 75-percent of the trail length to be off-street. Over 90-percent of the overall trail is off-street. This alignment also provides access to several Tigard neighborhoods, which the City's alignment does not provide.

ii. This alignment is safer than the City's alignment, since pedestrians will cross at an existing signalized intersection. The pedestrian actuated signal proposed by the City north of Fanno Creek is located at the bottom of a dip in Hall Boulevard. Vehicles are accelerating as they travel downhill approaching this crossing. The posted speed limit on Hall Boulevard is 40 mph, not 35 mph as stated in the Staff Report.

(A) The majority of trail users have no incentive to cross Hall Boulevard at O'Mara Street. This crossing only provides a shorter route for trail users traveling to and from the Library. The habitat protection alignment provides an equally direct route for all other trail users. The City should not base its trail design on the assumption that citizens will ignore traffic laws. However the City can eliminate this hazard by installing a fence at the east end of O'Mara Street to direct pedestrians to the signalized crossing at Wall Street.

iii. The habitat protection alternative is equally scenic compared to the alignment proposed by the City. It also avoids the noise and exhaust generated by vehicles on Hall Boulevard and the railroad. It also avoids putting trail users in close proximity to the recently identified hazardous waste site north of the Library.

iv. This alignment is also cheaper for the City, since it avoids utilizing existing streets, sidewalks and bridges. New construction is limited to the installation of signage to identify the route of the trail.

v. The City cannot rely on the existing trail north of the Library to justify a stream crossing in this location. The City built that trail section at its own risk.

g. He argued that a traffic study is required for the proposed trail development:

i. TDC 18.810.030.AC(1)(c) requires a traffic study where “high traffic volumes on the adjacent roadway that may affect movement into or out of the site,” TDC 18.810.030.AC(1)(c)(1), or “the proposal requires a conditional use permit...” TDC 18.810.030.AC(1)(c)(5).

ii. TDC 18.810.030.AC(2) provides that a traffic study may be required “when the site is within 500 feet of an ODOT facility.” Hall Boulevard is an ODOT facility.

iii. The traffic study for the Library noted that the O’Mara/Hall intersection is operating at Level Of Service (“LOS”) F, a failing condition, during the PM peak hour. ODOT policy prohibits new development that makes a failing condition worse. The addition of a pedestrian actuated signal across Hall Boulevard will make the failing conditions at the O’Mara/Hall intersection worse.

h. He argued that the applicant should be required to submit an access report to ensure that all applicable state, county, city and AASHTO standards are met. TDC 18.705.030.H(1) requires an access report for all new development.

i. He noted that the existing bike lanes on Hall Boulevard at the Fanno Creek Bridge do not meet City standards. Therefore they should be eliminated and bicycle traffic rerouted to the “habitat protection alignment” of the trail. Elimination of the bike lanes would “free up” space on Hall Boulevard to provide a two-way bike lane on the west side of Hall Boulevard between O’Mara and Wall Streets, eliminating the need for cyclists to make an unprotected left turn across Hall Boulevard to access the trail. The City can also restripe O’Mara Street to provide two-way bike lanes on the south side of the street.

j. He argued that the applicant is required to construct frontage improvements along the section of Hall Boulevard abutting the site.

i. TDC 18.810.030.A(3) prohibits new development unless the adjacent streets are improved to City standards, including a required planter strip. The existing Hall Boulevard frontage does not comply with City standards. Frontage improvements were required as a condition of the Library approval, but the City has not constructed them.

k. He argued that this development "makes a commitment to further development" that will impact sensitive lands in the area. Those "committed developments" have not been evaluated for compliance with applicable approval criteria. In addition, construction of those committed developments may exceed the deadlines for phased developments set out in TDC 18.330.020.D.

l. The proposed boardwalk is located in a sensitive lands area designated "highest value habitat" on the City's "Significant Habitat Areas Map." TDC Table 18.775.3 classifies this area as "Strictly Limit." Therefore CWS's "avoid where possible" standard applies. The proposed trail is not an outright permitted use in this area, because TDC 18.775.020.B(3) lists outright permitted uses as "community recreation uses, excluding structures..." TDC 18.775.020.B(3) also excludes areas designated Vegetated Corridor, as defined in the CWS "Design and Construction Standards." The proposed boardwalk is a "structure" as defined by the Code. Therefore it is not an outright permitted use in this area and is not allowed if it can be avoided. The Library approval only authorized stormwater and sanitary sewer lines in the 100-year flood plan.

m. He argued that the proposed trail alignment will impact and disturb an existing wetland mitigation site, in violation of state standards for such sites.

n. He noted that the application classifies the proposed development as a "community recreation" facility. However the Staff Report refers to the development as community recreation facility, a "public support facility" and "development...for roadway purposes." The facility should be reviewed under the classification designated by the application. Staff should not be allowed to change the classification of the development to avoid applicable approval criteria.

o. He noted that the application requests CUP approval. P 12 of the application narrative. However the Staff Report does not identify or review compliance with the CUP criteria. In addition, the application narrative, in response to TDC 18.330.020.C(3)(a), only claims compliance with the CUP criteria. p 13. This section requires that the applicant demonstrate compliance with the entire Code, not just the CUP standards.

p. He noted that there are two trees on the site whose roots are severely undercut by erosion of the stream bank. Attachment L of Exhibit 1. Construction of the proposed bridge abutments will likely cause these trees to fail, reducing shade cover on the stream. In addition, construction of the bridge will prevent Fanno Creek from continuing to meander.

5. Professional biologist Sue Beilke testified on behalf of herself and Fans of Fanno Creek. She summarized her written testimony, Exhibit 2.

a. She argued that there is no evidence the development can comply with the anchoring standard of TDC 18.775.040. The Staff Report notes that the applicant did not address this standard. A condition of approval requiring the applicant to address this standard later in the process does not allow for public review and comment on this issue.

b. She noted that the banks of Fanno Creek are failing under existing conditions and cannot support a bridge. ODFW staff stated that this project contributes to deteriorating stream function, which impacts federally listed steelhead. ODFW staff recommend repair and restoration of the stream bank before the bridge or any other structure is constructed in this area. The City is required to consult with ODFW on this issue, since it relates to a federally listed species and its habitat.

c. She reiterated Mr. Frewing's testimony about the average annual flood elevation of Fanno Creek. Determination of the average annual flood elevation should be based on measured stream flow data rather than modeling of the two-year storm event. Based on the stream flow data the average annual flood elevation is roughly 142.37 feet msl, above the elevation of the proposed boardwalk. Therefore the application does not comply with TDC 18.775.070.B(5).

i. She noted that the "flashiness" of the stream is increasing over time as upstream development adds more impervious surface area and increases the rate and volume of stormwater runoff flowing into the creek. The stream flow data demonstrates that the average annual flood elevation has been increasing in recent years. Future increases are likely to impact the proposed bridge and trail. Stream bank erosion is currently impacting portions of the existing trail that were built too close the stream. Attachment C of Exhibit 2.

d. She argued that CWS's Design and Construction Standards prohibit the proposed development within the vegetative corridor because it is possible to avoid impacts to the vegetative corridor as demonstrated by the alternative alignments proposed by the applicant or the "habitat protection alignment" described by Mr. Frewing.

i. This site is very unique and important. The western pond turtle is declining throughout its range and is now considered rare within the Portland Region Urban Growth Boundary ("UGB"). This site is the only turtle nesting habitat within the Portland UGB and the only nesting site in public ownership. The turtles are highly sensitive to disturbance. The habitat on the site is designated for the highest level of protection. Therefore the applicant should "go the extra mile" to protect this site.

ii. ODFW opposes the proposed trail alignment due to its potential impacts to turtles and their nesting habitat. Construction of the trail will impact habitat and human activities on the trail, including noise, dogs etc. within the turtle habitat area will disturb the turtles and preclude use of the nesting habitat. In addition, people and their pets will travel off of the trail and enter the turtle habitat, causing additional disturbance to turtles and their habitat. The City should address ODFW's concerns to ensure compliance with statewide planning Goal 5, Metro Titles 3 and 13 and the City's comprehensive plan.

e. She argued that the application failed to adequately address the relevant comprehensive plan policies.

i. The application did not address Policy 4 of the Natural Resources section of the comprehensive plan, which requires that the City actively coordinate and consult with certain persons and agencies regarding the inventory, protection and restoration of natural features. The City failed to actively coordinate with ODFW over impacts to turtles, listed fish and other species, especially in light of ODFW's letter in opposition to the proposed trail alignment.

ii. Policy 6 of the Parks, Recreation, Trails and Open Space section of the comprehensive plan requires that the City acquire and manage some open spaces to solely provide protection of natural resources. Policy 17 of this section requires that the City maintain and manage its parks and open space resources in ways that preserve, protect, and restore the City's natural resources, including rare or state and federal listed species. The application failed to adequately address either of these policies by proposing a trail that will impact rare and listed species and their habitats.

iii. The application states that the project "minimizes the impact on natural areas." But it does not provide any evidence demonstrating what the potential impacts may be, how they were measured and how they have been reduced.

f. She noted that the conditions on the site have changed significantly since the habitat assessment was completed in 2006. For the past two years ODFW and Fans of Fanno Creek have been working with CWS and TriMet to protect and create turtle nesting habitat on this site as part of TriMet's mitigation project. The applicant should be required to perform a new habitat assessment of the site to take into account the recent mitigation project.

g. She argued that the wildlife assessment should address all wildlife that may use the site, including turtles, federally protected migratory birds that nest on the site, federally listed fish etc. and provide evidence demonstrating how the project has attempted to avoid or minimize these impacts.

h. She argued that a buffer of at least 150 meters is recommended to be maintained between nesting habitat and any trail in order to minimize disturbance from trail users. The proposed trail alignment does not maintain the recommended buffer width.

i. She noted that Metro moved an entire parking lot at Smith and Bybee Lakes to reduce disturbance to turtles and their nesting habitat. The City of Gresham relocated a segment of a regional trail to avoid turtle nesting habitat.

6. City planning director Dick Bewersdorff argued that this is a difficult project due to the location of the stream and turtle habitat and the existing trail. The City must evaluate the impact of the trail on the natural resources on the site. He argued that a trail is not listed as a land use requiring approval as defined by the Code. Trails are treated as streets, which are not subject to land use review unless sensitive lands or other development is involved. The trail is not part of the CUP approval for the Library.

7. At the end of the hearing, the hearings officer ordered the public record held open for three weeks to allow the applicant and City staff an opportunity to submit additional testimony and evidence regarding the issue raised at the hearing. The hearings officer held the record open for an additional two weeks to allow the public to respond to the new evidence. The hearings officer held the record open for a final two weeks to allow the City to respond to the information submitted by the public and to submit a final argument.

a. The City submitted additional evidence during the third open record period. Mr. Frewing requested an opportunity to respond to that new evidence as allowed by TDC 18.390.050.D(4). Therefore the hearings officer issued an Order Opening the Record, Exhibit 9, allowing the public an additional week to respond to the new evidence submitted by the City and a final week for the applicant to respond in writing to the comments submitted during the first week and to submit a final argument, without any new evidence. The record in this case closed at 5:00 p.m. July 13, 2009.

### C. DISCUSSION

1. City staff recommended that the hearings officer approve the application, based on the affirmative findings and subject to conditions of approval in the Staff Report. The applicant accepted those findings and conditions without objection.

2. The hearings officer finds that the Staff Report accurately identifies all of the applicable standards for the application and contains sufficient findings showing the application does or can comply with those standards subject to conditions of approval, based on substantial evidence in the record. The hearings officer adopts the affirmative findings in the Staff Report as his own except as otherwise provided herein.

3. The hearings officer finds that the applicant is not required to include copies of prior development approvals on and near this site, because those documents are not included in the list of application requirements for Type III review, which set out in TDC 18.390.050.B. The prior approvals and associated documents should be on file at the City and the hearings officer can take official notice of those approvals where necessary. Some of those documents may be missing, based on Mr. Frewing's un rebutted testimony. But there is no evidence that those documents are necessary for review of this application.

4. The applicant revised the design of the bridge supports during the review process. The applicant replaced the proposed poured concrete "spread footing" with 8-inch diameter steel piles driven into the ground to anchor the bridge. See p 5 and Attachment 13 of Exhibit 7.

a. The hearings officer finds that this change does not constitute a change in the application that requires additional notice or opportunity for public review. The revised supports will not alter the proposed use, a pedestrian/bicycle trail, or the alignment or footprint of the facility. The new supports may reduce the impact on the project, by reducing the amount of excavation required for installation of the bridge.

b. The applicant is not required to provide detailed engineering designs at this stage of review. The purpose of the preliminary plans is to determine whether it is feasible to comply with applicable criteria. The preliminary plans are conceptual, and analysis of all technical details is not required. See *Meyer v. City of Portland*, 67 Or App 274, n 6, 678 P2d 741, rev den 297 Or 82 (1984). ([C]onditions of approval may include conditions that specific technical solutions to identified development problems be submitted and reviewed and approved by the government's technical staff."). To require complete, detailed engineering plans prior to preliminary approval of the application, or and to prohibit changes to those plans after preliminary approval, would require re-working the entire plan any time amendments or modifications of the plans are required. This would be highly inefficient and is not necessary to protect the public interest. City staff's review of the final plans provides adequate protection of the public interest. The law does not require an opportunity for public review and comment on the final engineering plans .

c. As the applicant noted, CWS will have an opportunity to review the final engineering design of the project, including any changes that may be required to comply with conditions of approval imposed by this decision, during its review of the Stormwater Connection Permit. CWS and other affected agencies have sufficient authority to require new or revised permit approvals to address the revised designs if required by their applicable regulations.

i. Condition of approval 12 of the CWS Service Provider Letter expressly requires that the applicant provide updated drawings, and if necessary, obtain a revised Service Provider Letter, "should final development plans differ significantly from those submitted for review by the District..."

5. The hearings officer finds that the opponents' concerns about the accuracy of the information submitted to DSL is not relevant to this review, because it does not relate to any of the applicable approval criteria. DSL has sufficient authority to ensure compliance with its regulations. The applicant can apply for a removal/fill permit if required by the applicable regulations based on the final design of the project. A condition of approval is warranted to that effect.

a. The applicant conceded that the plans submitted to DSL differed from the plans submitted with the application. The applicant modified the trail alignment to address CWS's concerns about impacts to the vegetative buffer. However the alignment changes did not impact wetlands, impact Fanno Creek or other areas within DSL's jurisdiction. Therefore additional DSL review is not required.

b. The applicant further testified that the original design of the project included minor work below the OHWL of the creek; installation of outfall pipes for the bridge abutment foundation drains. However the applicant revised the design of the bridge to eliminate need for foundation drains and the outfall pipes. The current design does not include any impacts below the OHWL of the stream. There is no substantial evidence to the contrary.

6. The hearings officer finds that this application does not constitute a major modification to the prior CUP for the Library on the site.

a. This application does not propose a change in land use. TDC 18.330.020.B(2)(a). The CUP approval for the Library expressly included the proposed trail. The decision approving the Library, Final Order CUP 2003-001, SLR 2003-001 and VAR 2003-009 and -020 (Tigard Library), discussed the trail in several sections of the decision. Condition of approval of 21 of the Final Order required that the applicant provide adequate financial assurances to ensure construction of that portion of the Fanno Creek Greenway Trail that crosses the property. The "property" in that decision included this site, tax lot 600, WCTM 2S102DA. This decision merely identifies a specific location for the trail on the library site. In addition, as Mr. Bewersdorff testified, the Code does not regulate trails as a "land use." They are treated as transportation facilities, similar to a road, which does not require City review and approval except where, as here, the alignment impacts sensitive lands. As discussed below, trails and roads constitute "development" as defined by TDC 18.120.030.A(57). However the Code does not provide for review of trails and roads as separate land uses.

b. No dwelling units were approved on the Library site and non are proposed in this application. Therefore this application will not increase the dwelling unit density. TDC 18.330.020.B(2)(b).

c. As discussed above, the Library CUP decision approved the segment of the Fanno Creek trail on the site, including a connection to the existing trail segment on the west side of Hall Boulevard. This application may change the location of the Hall Boulevard connection, but there is no substantial evidence that the change in location will affect offsite traffic. TDC 18.330.020.B(2)(c). The street crossing (crosswalk and signal) itself is subject to ODOT jurisdiction and is not relevant to this criterion.

d. This application does not include any buildings. Therefore TDC 18.330.020.B(2)(d) is inapplicable.

e. The proposed trail will not reduce the amount of open space on the site. TDC 18.330.020.B(2)(e). The proposed trail itself is "open space;" an "open space facility" as defined by TDC 18.120.030.A(102). In addition, the trail was approved on this site as part of the prior CUP for the Library.

f. The proposed trail is not subject to setback requirements. Therefore TDC 18.330.020.B(2)(f) is inapplicable.

g. This application will not eliminate the amount of amenities included in the Library CUP approval. TDC 18.330.020.B(2)(g).

i. The "amenity" in this case is a segment of the Fanno Creek Regional Trail, connecting two existing trail segments. This application retains that amenity, although in a slightly different location and width.

ii. The applicant was required to construct sidewalks and other frontage improvements along the site's Hall Boulevard frontage as a condition of the Library approval. See conditions 16 and 28 of Final Order CUP 2003-001, SLR 2003-001 and VAR 2003-009 and -020 (Tigard Library). The City did not complete construction of the frontage improvements or include the improvements in the City's 2004-2009 Five-Year Capital Improvement Plan. That appears to be a violation of the conditions of approval of the prior CUP approval. However the violation is an enforcement issue. It is not relevant to this application. Approval of this application will not alter the requirement that the City construct the required frontage improvements on Hall Boulevard.

h. The trail will not alter the density on the site. Therefore TDC 18.330.020.B(2)(h) is inapplicable.

7. The hearings officer finds that a traffic study is not required for this project.

a. TDC 18.810.030.AC(1) requires a traffic study when the proposed development will generate a 10% or greater increase in existing traffic to high collision intersections identified by Washington County, TDC 18.810.030.AC(1)(a), or when traffic generated by the development exceeds a certain percentage of existing traffic, TDC 18.810.030.AC(1)(b). There is no substantial evidence that the proposed development will meet either of these criteria.

b. TDC 18.810.030.AC(1)(c) requires a traffic study "If any of the following issues become evident to the City engineer..." The hearings officer finds that TDC 18.810.030.AC(1)(c) grants the City engineer exclusive discretion to require a traffic study in these circumstances. The City engineer did not require a traffic study in this case. Therefore the hearings officer must conclude that the cited issues were not evident to the City engineer in this case. The hearings officer has no authority to overrule the City engineer and require that the applicant provide traffic study.

c. TDC 18.810.030.AC(2) provides that a traffic study "[m]ay be required..." when certain listed conditions occur. In this case the site is located within 500 feet of an ODOT facility, Hall Boulevard. TDC 18.810.030.AC(2)(a). However there is no substantial evidence that the proposed bicycle/pedestrian trail will generate a sufficient increase in vehicle traffic on this facility to warrant a traffic study. The City, in its discretion, chose not to require a traffic study. ODOT analyzed the impacts of the pedestrian signal on the operation of Hall Boulevard when it granted a permit for the pedestrian crossing and signal.

8. The hearings officer finds that an access report is not required for this project. TDC 18.705.030.H(1) requires an access report for "[a]ll new development proposals..." As discussed above, the proposed trail was approved on this site as part of the prior Library CUP. The City reviewed an access report for that CUP application and concluded that driveways and streets serving the site are safe and meet applicable standards. This application merely approves the specific location of the trail on the site. It does not alter the location or design of streets or driveways serving the site. Therefore it does not constitute "new development" subject to TDC 18.705.030.H(1). In addition, there is nothing for the access report to address because this project does not include any streets or driveways.

9. The hearings officer finds that the surface of the proposed boardwalk will be located above the elevation of the average annual flood, based on the expert testimony of the applicant's engineer. TDC 18.775.070.B(5).

a. The applicant's engineer calculated the stream flow volume for the two-year storm as 2,000 cubic feet per second ("cfs"). This flow volume is higher than the highest volume measured in Fanno Creek over the past eight years, based on the flow data submitted by Mr. Frewing. The highest measured flow over past eight years was 1670 cfs, measured on December 3, 2007 at the USGS measuring gauge at Durham Road, downstream from the site. See p 4 of Exhibit 1. As noted by the applicant's engineer, the two-year storm event is, by definition, higher than the average annual flood. See Attachment 4 of Exhibit 4.

b. The applicant's engineer input the calculated stream flow volume for the two-year storm into the regulatory floodplain model to determine the water elevation of Fanno Creek at the location of the boardwalk. The floodplain model estimated the water level during the two-year storm at 142.22 feet National Geodetic Vertical Datum ("NGVD"). The lowest portion of the boardwalk surface is at 143.18 feet NGVD. Therefore the entire boardwalk surface is above the elevation of the average annual flood, based on the applicant's engineer's calculations.

c. The opponents dispute the results of the regulatory floodplain model, based on their observations of floodwater elevations during 1996 flood and flow volumes measured in Fanno Creek during that flood. Fanno Creek registered a peak flow of 1,090 cfs at the Durham Road USGS station during the 1996 flood, when Fanno Creek was flowing at least 18-inches above the surface of Hall Boulevard. Attachment A of Exhibit 2. The water volume in Fanno Creek during the 1996 flood was lower than the average flow volume measured over the most recent four year period and roughly equal to the average flow volume over the past eight years. P 4 of Exhibit 1. Therefore, because the average annual flow volume over the past eight years is equal to or greater than the flow volume measured during the 1996 flood, the water level during the average annual flood will equal or exceed the water levels observed during the 1996 flood. The top of the proposed boardwalk is lower than the curb level of the Hall Boulevard bridge, which was inundated during the 1996 flood. Therefore the boardwalk will be below the elevation of the average annual flood, based on recent stream flow data.

d. The hearings officer finds that the regulatory floodplain model provides the best evidence of the flood elevations in Fanno Creek for a particular storm event.

i. As the applicant's engineer testified, the regulatory floodplain model is based on "[d]etailed studies meeting high technical standards, which are subjected to very intense review by FEMA... *Use of flows other than those contained within the current regulatory model would not be acceptable to FEMA due to the level of technical review already given them.*" P 2 of Attachment 4 of Exhibit 4. (Italics in original). The regulatory floodplain model was calibrated based on the high water marks observed during the flood events of February and November 1996. The regulatory floodplain model is accepted by FEMA, the federal agency charged with regulating development in floodplains.

ii. The eight years of stream flow data submitted by the opponents is substantial evidence. But it is not sufficient to dispute the results of the regulatory floodplain model. As discussed in Attachment 4 of Exhibit 4, the average annual flood may occur more than once in a year or may not occur at all. The eight years of stream flow data submitted by the opponents may represent a statistical anomaly with higher than usual stream flows or, as the opponents allege, it may indicate that upstream development is increasing the amount of runoff flowing into Fanno Creek, which is increasing the elevation of the average annual flood. There is no substantial evidence in the record to support either conclusion. The hearings officer finds that the regulatory floodplain model, which is based on observations of water levels over a long period of time, and is accepted by all relevant regulatory agencies as the best method for predicting flood elevations, provides the best evidence of the average flood elevations in Fanno Creek.

10. There is a dispute about the meaning of the term "pathway" as used in TDC 18.775.070.B(5). The applicant argues that the elevation requirement of this provision only applies to the surface of the pathway, the top of the boardwalk. The opponents argue that TDC 18.775.070.B(5) requires that the entire boardwalk structure, including the substructure and supports, be located above the elevation of the average annual flood.

11. The hearings officer finds that the term "pathway" is ambiguous. The TDC does not define the term, and its meaning is not plain on its face when considered in context. Therefore the hearings officer must construe the term "pathway."

a. When construing the City's ordinances the hearings officer is required to follow the rules of statutory construction set out in the Oregon Supreme Court's decision in *Portland General Electric v. Bureau of Labor and Industries*, 317 Or. 606, 859 P2d 1143 (1993) (*PGE v. BOLI*). The hearings officer must attempt to discern the intent of the City Council from the text and context of the ordinance and related ordinances. In analyzing the text of the ordinance for definition, words of common usage are given their plain, natural and ordinary meanings. *Id.* at 611. The hearings officer finds that the term "pathway" should be construed consistent with its common, dictionary, usage.

i. *Webster's New World College Dictionary*, Retrieved July 20th, 2009, from [www.yourdictionary.com/pathway](http://www.yourdictionary.com/pathway), defines "pathway" as a "path."

Webster's defines "path" as:

1. a track or way worn by footsteps; trail:
2. a walk or way for the use of people on foot, as in a park or garden.

ii. *Merriam-Webster Online Dictionary*. Retrieved July 20, 2009, from <http://www.merriam-webster.com/dictionary/path>, defines "pathway" as "path, course."

*Merriam-Webster* defines "path" as:

- 1: a trodden way
- 2: a track specially constructed for a particular use

*Merriam-Webster* defines "course" as:

- 1: the act or action of moving in a path from point to point
- 2: the path over which something moves or extends

b. Based on these definitions, the hearings officer finds that the term pathway is limited to the walking surface, regardless of whether the pathway is located on the ground or on a bridge or other structure.

c. This is consistent with how the term is used in the Code.

i. The Code expressly allows raised walkways and pedestrian bridges as "passive use open space facilities" TDC 18.120.030.A(102)(b). The opponents' interpretation, that the elevation standard of TDC 18.775.070.B(5) applies to the entire boardwalk structure, would likely preclude all pathways that cross any portion of the floodplain below the average annual flood elevation. With the exception of relatively narrow floodplain areas, it would be impossible to extend a bridge or boardwalk over such areas without using supports that extend below the elevation of the average annual flood. However the City's adopted transportation plan clearly shows pathways crossing floodplain areas.

ii. The appellants argue that, because this criterion is included in the sensitive lands section of the Code, it must be intended to protect sensitive lands by prohibiting structures that could catch debris or increase flood levels. However this standard is not necessary to achieve those purposes. A surface pathway below the elevation of the average annual flood would have no effect on flood levels or debris flows. These problems only arise with elevated pathways located on fill or a boardwalk, bridge or other structure. Compliance with the "no-rise" standard of TDC 18.775.070.B(1) is sufficient to ensure that any structure supporting a pathway will not impact flood heights.

d. Therefore the hearings officer finds that the elevation requirement of TDC 18.775.070.B(5) only applies to the surface of the boardwalk, where the "pathway" is located. As discussed above, the surface of the boardwalk can be located above the average annual flood. Therefore the application can comply with TDC 18.775.070.B(5).

e. As Mr. Frewing noted, there is conflicting evidence about the height of various boardwalk components in the application materials. See pp 3 and 4 of Exhibit 1. This makes it difficult to determine the actual height of the propose boardwalk. Therefore in order to ensure compliance with TDC 18.775.070.B(5), the applicant should be required to demonstrate that the lowest portion of the boardwalk surface is higher than 142.22 feet NGVD based on the final design of the boardwalk. A condition of approval is warranted to that effect.

12. The hearings officer finds that the proposed boardwalk and bridge are not subject to the flood proofing requirements of TDC 18.775.040.M. The boardwalk and bridge are "structures" as defined by the Code.<sup>2</sup> However these "structures" do not have a "lowest floor" or "basement" that can be elevated or flood-proofed. Therefore this requirement is inapplicable.

a. Mr. Frewing argued that compliance with this standard is necessary to ensure that the structures will not wash downstream and create a hazard. p 8 of Exhibit 11. The hearings officer finds that compliance with the anchoring requirements of TDC 18.775.040.I is sufficient to address this concern.

13. The hearings officer finds that it is feasible to comply with the anchoring requirements of TDC 18.775.040.I. A certified bridge engineer designed the bridge, and support structures. See e.g., pp 18 and 19 of Exhibit 4 and Attachment 13 of Exhibit 7. The applicant is required to demonstrate actual compliance with this standard based on the final design of the structures. See condition 1. As discussed above, the applicant is not required to provide detailed engineering designs at this, preliminary, stage of review.

14. The hearings officer finds that the CWS Design and Construction Standards are not relevant to this application.

a. Mr. Frewing argued that the Intergovernmental Agreement ("IGA") between the City of Tigard and CWS, Attachment S of Exhibit 5, requires that the City apply CWS's Design and Construction Standards as part of its development review process. However the IGA, by its terms, appears to relate exclusively to the operation and maintenance of sanitary and storm sewer systems. Nothing in the sections of the IGA included in the record addresses vegetative corridors or assigns the City responsibility for

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<sup>2</sup> TDC 18.1200.030.A(136) provides " 'Structure' or 'building' - See 'Building.'" TDC 18.120.030.A(30) provides

"Building" - That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

applying the Design and Construction Standards.<sup>3</sup> There is no substantial evidence in the record to the contrary.

b. Nothing in the Code requires that the City apply CWS's Design and Construction Standards as a development approval criteria.

i. TDC 18.775010.C states that one of the purposes of the Sensitive Lands Chapter is to implement those standards. But the purpose statement is not an approval criterion. The purpose statements are implemented through compliance with the applicable approval criteria.

ii. TDC 18.775.020.A requires that all proposed "development" as defined in the CWS "Design and Construction Standards, must obtain a Stormwater Connection Permit from CWS pursuant to its Design and Construction Standards. TDC 18.775.030.A requires that the City "[r]eview all sensitive lands permit applications to determine that all necessary permits shall be obtained from those federal, state, or local governmental agencies from which prior approval is also required." However the City has no authority to determine compliance with the Design and Construction Standards or to issue the service provider letter and/or Stormwater Connection Permit. That is within the CWS's exclusive authority.

c. CWS issued a service provider letter for the proposed trail. Therefore the application complies with TDC 18.775.030.A.

i. The opponents argue that the proposed trail design is inconsistent with the conditions of the CWS service provider letter. The plans do not show permanent fencing between the development and the outer limits of the vegetated corridors as required by condition 26 of the CWS Service Provider Letter. The applicant testified that such a fence would cause the project to exceed the no-rise limitations of TDC 18.775.070.B(1). Therefore the applicant plans to negotiate with CWS to allow the use of thorny vegetation rather than metal fencing as a barrier between the trail and the vegetated corridor. P 5 of Exhibit 12.

(A) It is unclear whether this condition requires a fence behind the sidewalk on Hall Boulevard. Nothing in the Code requires such a fence. CWS's regulations, as implemented through condition 26 of the Service Provider Letter, may require such a fence. But that is up to CWS to determine.

ii. The hearings officer finds that this issue is not relevant to the applicable approval criteria for this application. Condition 26 of the CWS Service

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<sup>3</sup> Mr. Frewing's letter refers to Section IV of Appendix A of the IGA. See p 6 of Exhibit 5. However Appendix A was not included with the attachments to Exhibit 5. Attachment S of Exhibit 5 is limited to the "Council Agenda Item Summary," the odd numbered pages of the amended IGA, labeled "Attachment 1" and the odd numbered pages of "Appendix D." The hearings officer attempted to take official notice of the remainder of the document, but he was unable to locate a copy on the Internet.

Provider Letter requires that the applicant show the fence on the final plans. Failure to include the fence on the preliminary plans submitted with this application is not a violation of the Service Provider Letter.

iii. The applicant can negotiate with CWS during the ongoing design process to modify the condition. If the negotiations fail and CWS requires a fence, the applicant may need to alter the design of the project to ensure compliance with the no-rise requirement. Such changes may require additional review by the City. However the applicant can address that issue when and if it arises.

d. The parties made a number of arguments related to whether it is "possible" to design the path to avoid the vegetative corridor as required by Section 3.02.4.b(2)(d)(1) of CWS's Design and Construction Standards. The hearings officer finds that those issues are not relevant to this application, because they do not relate to any applicable approval criteria. CWS determined that this criterion is met when it issued a Service Provider Letter for the project. The hearings officer has no authority to review that decision in this proceeding. The phrase "avoid where possible" does not appear in the TDC.

15. The hearings officer finds that Goal 5, the Tualatin Basin "Limit" Decision and the City's "Significant Habitat Areas Map" are not applicable approval criteria for this application.

a. TDC 18.775.090.B provides that the Goal 5 requirements are implemented by compliance with the standard setback distance or vegetated corridor area. 18.775.090.B(5)(c) exempts pedestrian or bike paths, not exceeding 10 feet in width and meeting the CWS "Design and Construction Standards" from compliance with the standard setback distance or vegetated corridor area requirements.

b. The Tualatin Basin "Limit" Decision only relates to the Significant Habitat Areas Map Verification Procedures in 18.775.140. A map amendment/verification is not proposed in this case.

c. TDC 18.775.100.B allows adjustments to the standards in the underlying zoning district when development is proposed within or adjacent to the vegetated corridor area or within or adjacent to areas designated as "Strictly Limit" or "Moderately Limit" on the City of Tigard "Significant Habitat Areas Map." TDC 18.775.100.C allows similar adjustments to protect areas identified on the "Significant Habitat Areas Map." However these are elective standards that provide incentives to protect the identified areas. Compliance with these standards was not requested or required in this case.

16. The hearings officer finds that the applicant's wildlife assessment is sufficient to fulfill the conditions of approval of Final Order SLR 2005-00016/MMD 22005-00015(Fanno Creek Trail).

a. Condition #5 of that decision provided:

A wildlife assessment will be conducted to address the impact of the project within the area north of Fanno Creek prior to construction of the trail section north of the pedestrian bridge. The trail design north of the creek will respond to and take into account the results of the wildlife assessment. The assessment and design will be subject to a public hearing by the Hearing Officer.

The applicant did that. A professional biologist conducted the assessment, using accepted criteria and standards. The assessment identified potential impacts of the project on wildlife and wildlife habitat on the site. See the Wildlife Assessment for the Fanno Creek Trail Extension, PHS Project No.: 3693, dated November 17, 2006, by Pacific Habitat Services (the "Assessment"). The applicant modified the alignment and design of the trail in response to the results of the Assessment, incorporating the suggestions in the Assessment to the extent possible. The applicant replaced the proposed at-grade asphalt trail with an elevated boardwalk and modified the alignment to minimize encroachments into habitat areas. Therefore the applicant fulfilled this condition of approval. The applicant testified that it attempted to shift the trail alignment further into the southwest corner of the site as recommended by the assessment. However CWS required that the City alter the alignment to minimize the footprint of the project within the vegetated corridor. Pp 14-15 of Exhibit 7.

b. Although the opponents would like the applicant to conduct a broader and more detailed assessment, quantifying the extent of potential impacts and the proposed mitigation measures, the hearings officer has no authority to impose such a requirement. Neither the Code nor the conditions of the prior approval establish any minimum standards for the conduct of a wildlife assessment. The standards of other agencies are not relevant, because the City has not adopted them.

i. The Assessment primarily focused on the impact of the project on turtles, because "The Western Pond Turtle is the only SOC [Species of Concern] or SC [state-listed Critical Species] of wildlife documented within the proposed site..." p 2 of the Assessment. Turtles were also the primary wildlife concern in the prior decision approving the Library, and presumably the reason for Condition #5 of Order SLR 2005-00016/MMD 22005-00015(Fanno Creek Trail).<sup>4</sup> Therefore it was appropriate to focus the Assessment on that species. However the Assessment also listed "[o]ther species which may potentially use the site." See Table 1 of the Assessment. The Assessment also noted that the recommended modifications to the design of the trail would reduce the impact of the trail on other wildlife likely to use the site. p 3-4 of the Assessment.

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<sup>4</sup> Condition #5 was included in the Staff Report for File No. SLR 2005-00016/MMD 22005-00015(Fanno Creek Trail). The basis for the condition was not discussed at the hearing or in the Final Order.

ii. The Assessment was not required to address the fish and wildlife in Fanno Creek or the stability of the stream bank because the proposed facility will not impact the stream or the stream bank. The bridge will be supported by abutments that are setback ten feet or more from the banks of the stream. No in-water work is proposed. The opponents argue that the bridge will impact protected fish in Fanno Creek. However there is no substantial evidence to that effect. ODFW and relevant federal agencies with jurisdiction over protected fish species have sufficient authority to require additional review and mitigation if they conclude that such impacts are likely to occur.

iii. The Assessment notes that the author met with Ms. Beilke on the site and identified her as an ODFW biologist. The Assessment did not include Ms. Beilke's comments and concerns. But Ms. Beilke's concerns are clearly set out in the record in this case.

iv. The Assessment did not address recent improvements to the habitat conditions on site. However Ms. Rim testified at the hearing that those changes did not affect the conclusions in the Assessment. The site provides habitat for turtles and the trail will impact turtles and their habitat to some extent.

v. The Assessment could not consider police use of ATVs to patrol trails in the City. As the applicant noted, the City acquired the ATVs in the same month that the applicant submitted the application. See p 10 of Exhibit 12. In addition, the applicant testified that ATVs are not needed on this section of trail, which is easily visible from Hall Boulevard. On-trail patrols will be limited bicycle officers. *Id.* There is no substantial evidence to the contrary.

vi. The Assessment did not evaluate the impact of the lighted pedestrian crossing on Hall Boulevard. However the hearings officer finds that this lighting will not have a significant impact on turtles. The lights are located on Hall Boulevard, not on the site. No lights are proposed on the site. The pedestrian crossing lights are less bright than normal streetlights. The lights are off most of the time. They only turn on when a pedestrian pushes the crossing request button. See p 10 of Exhibit 12. Headlights from vehicles on Hall Boulevard are likely to have a greater impact than the pedestrian crossing. There is no substantial evidence to the contrary.

vii. The Assessment did not evaluate the potential for the cable barrier to stretch and loosen over time, reducing the effectiveness of this barrier. However any of the barriers discussed in the Assessment may become damaged over time. The City testified that the cables are designed with adequate support to prevent stretching and loosening and the City Parks Maintenance Division will inspect and maintain the cables to ensure that they continue to serve their intended purpose. P 10 of Exhibit 12. A condition of approval is warranted to that effect.

viii. The Assessment was not required to address the ponds on the site. The trail project will not impact the ponds or the water source that supplies and maintains them. See p 15 of Exhibit 7.

ix. The Assessment recommends that the City avoid construction work in the grassy field on the site between May and July, when female turtles are searching for nesting sites. The Assessment further recommends that the applicant consult with ODFW regarding construction scheduling on the site in order to avoid impacts to incubating eggs. P 4 of the Assessment. Conditions of approval are warranted to that effect.

x. The project will not impact any wetland mitigation areas on the site. The upland mitigation areas are not required to mitigate offsite impacts of the TriMet rail project. Therefore protection of these areas is not required to ensure compliance with TriMet's mitigation requirement. The City is required to replace any proposed or planted vegetation within the corridor or construction staging area damaged during construction. Condition 23 of the CWS Service Provider Letter.

c. There is no dispute that the proposed trail will impact turtles, and other wildlife, on the site. The Assessment identifies a number of impacts from the project. See p 3 of the Assessment. The Assessment recommends a number of mitigation measures to reduce those impacts, but it is not possible to eliminate all of the impacts. However the Code does not prohibit impacts to turtles or other wildlife. Protection of wildlife is just one of the many issues the City must consider. As the applicant noted "The City has broad responsibility for both resource protection and bike/pedestrian safety. No one policy can be considered separately from others. In the case of the present project, the City attempts to strike an appropriate balance between the two in meeting its dual responsibility." P 22 of Exhibit 7. The apparent purpose of the Assessment requirement was to provide the City with information about the wildlife on the site and the potential impacts of the project on that wildlife to allow the City to make an informed decision about the alignment of this segment of the trail. After considering the results of the Assessment, and information obtained through consultations with other agencies and members of the public, The City chose the proposed trail alignment and design. CWS concluded that the trail design complies with its Design and Construction standards. The hearings officer has no authority to second-guess the City's alignment choice in this proceeding. If the application complies with the relevant approval criteria it must be approved.

17. There is no dispute that the banks of Fanno Creek are subject to severe erosion impacts. Based on Ms. Beilke's testimony, erosion of the stream banks impacts protected steelhead and other fish and wildlife species in the creek. See pp 1-2 of Exhibit 2 and pp 1-2 of Exhibit 6. However this is an existing condition that will continue to exist regardless of whether this project is constructed. The applicant is not required to remedy all existing or perceived problems in the area, only those that the project creates or exacerbates. There is no substantial evidence in the record that the proposed bridge and

walkway will increase the risk of erosion or destabilize the banks of Fanno Creek. The bridge will be elevated above the stream and the supports will be setback from the stream bank. There is no substantial evidence to the contrary. Ongoing erosion in the future could eventually undercut the bridge and cause it to fail. However the City can continue to monitor the stream and bridge and close bridge or take other action if warranted based on future conditions. In addition, the City is planning to undertake a project to stabilize the banks of Fanno Creek in this area. P 4 of Exhibit 12. Completion of that project may alleviate the erosion issue.

18. There is no dispute that the trees identified in the arborist's report are being undercut by erosion of the stream bank. This is also an existing condition that the applicant is not required to remedy. The arborist's report included with the application demonstrates that the project will have no impact on the future survival of these trees. As noted in the Arborist's report, the trees are suitable for retention during construction. However, because they are hazard trees, the City can remove them at any time in the future if it concludes that the trees pose an unacceptable risk of failure and impact to people or property.

19. The hearings officer finds that the application complies with relevant comprehensive plan policies, based on the affirmative findings to that effect in the Staff Report and the application. The hearings officer adopts those findings as his own, except to the extent inconsistent with the following findings.

a. The City actively coordinated and consulted with relevant parties as required by Policy 4 of Comprehensive Plan Chapter 5, Natural Resources. The applicant held a neighborhood meeting about the application and discussed the project with the opponents on several occasions. The applicant also consulted with CWS, ODFW, DSL and other relevant agencies. Policy 4 only requires consultation. It does not require that the City agree with or adopt those agencies recommendations, merely that it consult with them. The applicant did so in this case. That is sufficient to comply with this policy.

b. Policy 6 of the Parks, Recreation, Trails and Open Space section of the comprehensive plan provides: "The City shall acquire and manage some open spaces to solely provide protection of natural resources and other open spaces to additionally provide nature-oriented outdoor recreation and trail-related activities." This requirement only applies to "some" open spaces. There is no evidence that this particular property was acquired or intended to be managed solely for resource protection.

c. Policy 17 of Comprehensive Plan Chapter 8, Parks, Recreation, Trails and Open Space, provides: "The City shall maintain and manage its parks and open space resources in ways that preserve, protect, and restore Tigard's natural resources, including rare, or state and federally listed species, and provide "Nature in the City" opportunities." This section requires that the City preserve and protect natural resources, but it does not altogether prohibit impacts to such resources. The City designed the trail project to minimize impacts on sensitive species while fulfilling other competing policies, such as

“[d]evelop[ing], and maintain[ing] a diverse system of parks, trails, open space, and recreational facilities that are safe, functional, and accessible to all of its population,” (Policy 1 of the Parks, Recreation, Trails and Open Space section of the comprehensive plan), and “[l]ocat[ing] bicycle/pedestrian corridors in a manner which provides for pedestrian and bicycle users, safe and convenient movement in all parts of the city, by developing the pathway system shown on the adopted pedestrian/bikeway plan.” (Policy 1 of Section 5 of the comprehensive plan). As the applicant stated, the City cannot consider a single policy in isolation. It must give equal weight to all, striking a balance between competing goals and policies. p 22 of Exhibit 7.

20. The hearings officer finds that this application is subject to the frontage improvement requirements of TDC 18.810.030.A(3). That section provides:

No development shall occur unless the streets adjacent to the development meet the standards of this chapter, provided, however, that a development may be approved if the adjacent street does not meet the standards but half-street improvements meeting the standards of this title are constructed adjacent to the development.

The applicant argues that trails are not listed in the Code as land use requiring approval. That may be true. However the proposed trail constitutes “development” as defined by TDC 18.120.030.A(57).<sup>5</sup> Construction of the trail will result in a material change in the use or appearance of the site; adding a public use trail, elevated boardwalk and bridge, on what is currently a vacant parcel of land. The section of Hall Boulevard abutting the site is not improved to current City standards. Therefore the applicant is required to construct frontage improvements along the site’s Hall Boulevard frontage.

21. However TDC 18.810.020.A provides that the cost of right of way dedication and frontage improvements must be roughly proportional to the impact of the development.<sup>6</sup> The city bears the burden of proof under this standard. The trail will likely attract additional pedestrian, bicycle and vehicle traffic to the area, increasing the need for sidewalks and other frontage improvements on Hall Boulevard. However there is no substantial evidence in the record that the trail will generate a sufficient amount of traffic to justify the cost of frontage improvements on Hall Boulevard. The trail will accommodate the majority of pedestrian and bicycle trips, providing a direct and convenient connection to the existing buildings on the site and to the existing trail segments to the east and west. The trail may generate some additional vehicular traffic, as

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<sup>5</sup> TDC 18.120.030.A(57) defines “Development” as:

1) A building or mining operation; 2) a material change in the use or appearance of a structure or land; or 3) division of land into two or more parcels, including partitions and subdivisions as provided in Oregon Revised Statutes 92.

<sup>6</sup> TDC 18.810.020 reflects the holding of the US Supreme Court’s opinion in *Dolan v. City of Tigard*, 114 S.Ct. 2309, 129 L.Ed.2d 304 (1994).

people drive to the site in order to access the trail. However there is no evidence that the trail will generate a significant increase in vehicular traffic sufficient to justify the cost of frontage improvements. Therefore the hearings officer finds that the City failed to bear its burden of proof that the cost of frontage improvements on Hall Boulevard would be roughly proportional to the impacts of the proposed trail.

a. Mr. Frewing argues that the Code requires a connection between the trail and the existing sidewalk on the Hall Boulevard bridge over Fanno Creek. P 3-4 of Exhibit 11. However he fails to cite to any Code section imposing such a requirement.

22. Mr. Frewing argues that the applicant should limit grading on the site to a maximum 5:1 slope in order to minimize the impact of the project. P 5 of Exhibit 5. The applicant testified that the finished slopes from the back of the sidewalk shoulder to existing ground will be graded to 5:1 slope. However a temporary reduced slope area will be provided to allow for construction vehicle access during the construction process as determined by the contractor. P 8 of Exhibit 7. The applicant further testified that it will "consider" using 3:1 slopes. P 13 of Exhibit 12. The hearings officer encourages the applicant to do so in order to minimize the impacts on the site. But the hearings officer has no authority to impose such a requirement, because it does not relate to any of the applicable approval criteria.

#### D. CONCLUSION

Based on the findings adopted and incorporated herein, the hearings officer concludes that the proposed sensitive lands review and minor modifications applications comply with the applicable criteria and standards of the Community Development Code, provided development that occurs after this decision complies with the recommended conditions of approval with changes warranted by the discussion herein and with applicable local, state, and federal laws.

#### E. DECISION

In recognition of the findings and conclusions contained herein, and incorporating the Staff Report and public testimony and exhibits received in this matter, the hearings officer hereby approves SLR 2009-00002, SLR2009-00003, MMD2009-00007 and MMD2009-00013(Fanno Creek Trail), subject to the following conditions of approval:

#### CONDITIONS OF APPROVAL

1. The applicant shall provide information from a registered engineer to certify that the design and construction of the improvements will be resistant to flood damage and anchored to prevent flotation, collapse, and lateral movement.
2. The applicant shall obtain a removal/fill permit from DSL prior to undertaking any work in areas of the site subject to DSL's jurisdictions.

3. The applicant shall demonstrate that the lowest portion of the boardwalk surface is higher than 142.22 feet NGVD based on the final design of the boardwalk.
4. The City shall periodically inspect and maintain the fences, cables, and other barriers on the site to ensure that they continue to serve their intended function of limiting access between the trail and the adjacent vegetative corridor and turtle habitat areas.
5. Unless otherwise provided by CWS, no work will be undertaken within the grassy field on the site between May 1 and August 1, when female turtles are searching for nesting sites. The applicant shall consult with ODFW regarding construction scheduling in the field at other times in order to avoid impacts to incubating eggs.

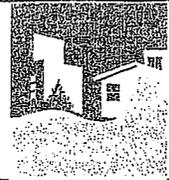
DATED this 22<sup>nd</sup> day of July 2009.



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Joe Turner, Esq., AICP  
City of Tigard Land Use Hearings Officer

STAFF REPORT TO THE  
HEARINGS OFFICER  
FOR THE CITY OF TIGARD, OREGON



120 DAYS = 8/5/2009

SECTION I. APPLICATION SUMMARY

FILE NAME: FANNO CREEK TRAIL BRIDGE/HALL BLVD. CROSSWALK  
CASE NOS.: Sensitive Lands Review (SLR) SLR2009-00002  
Sensitive Lands Review (SLR) SLR2009-00003  
Minor Modification (MMD) MMD2009-00007  
Minor Modification (MMD) MMD2009-00013

PROPOSAL: The applicant is requesting approval to construct portions of the Fanno Creek trail. Construction involves installation of a sidewalk and signalized crosswalk on Hall Boulevard north of the Fanno Creek Bridge. An elevated boardwalk is proposed through the floodplain and vegetated corridor of nearby wetlands and Fanno Creek on the eastern side of Hall Boulevard, and a pedestrian bridge (Woodruff Bridge) over Fanno Creek is also proposed east of Hall Boulevard to connect the new boardwalk with the existing trail north of the Tigard library.

APPLICANT/  
OWNER: City of Tigard  
Attn: Duane Roberts  
13125 SW Hall Blvd.  
Tigard, OR 97223

COMPREHENSIVE  
PLAN/ZONE  
DESIGNATIONS:

CBD: Central Business District. The CBD zoning district is designed to provide a concentrated central business district, centered on the City's historic downtown, including a mix of civic, retail and office uses. Single-family attached housing, at a maximum density of 12 units/net acre, equivalent of the R-12 zoning district, and multi-family housing at a minimum density of 32 units/acre, equivalent to the R-40 zoning district, are permitted outright. A wide range of uses, including but not limited to adult entertainment, utilities, facilities with drive-up windows, medical centers, major event entertainment and gasoline stations, are permitted conditionally. (The CBD zone is located west of Hall Boulevard).

I-L: Light Industrial District. The I-L zoning district provides appropriate locations for general industrial uses including industrial service, manufacturing and production, research and development, warehousing and freight movement, and wholesale sales activities with few, if any, nuisance characteristics such as noise, glare, odor, and vibration. (The I-L zone is located east of Hall Boulevard and north of Fanno Creek).

R-12: Medium-Density Residential District. The R-12 zoning district is designed to accommodate a full range of housing types at a minimum lot size of 3,050 square feet. A wide range of civic and institutional uses are also permitted conditionally. (The R-12 zone is located east of Hall Boulevard and south of Fanno Creek).

LOCATION: 13125 & 13500 SW Hall Blvd.; WCTM 2S102DA, Tax Lots 401 & 600.

APPLICABLE  
REVIEW  
CRITERIA:

Community Development Code Chapters 18.330, 18.360, 18.390, 18.510, 18.520, 18.530, 18.745, 18.775 and 18.810.

## SECTION II. DECISION

Staff recommends that the Hearings Officer find that the proposed Sensitive Lands Review and Minor Modification requests will not adversely affect the health, safety and welfare of the City and meet the Approval Standards for a Sensitive Lands Permit and Minor Modification. Therefore, Staff recommends APPROVAL, subject to the following recommended Condition of Approval.

### CONDITION OF APPROVAL

#### THE FOLLOWING CONDITIONS SHALL BE SATISFIED PRIOR TO THE ISSUANCE OF SITE/BUILDING PERMITS:

Submit to the Planning Department (Cheryl Caines, 639-4171, ext. 2437) for review and approval:

1. The applicant shall provide information from a registered engineer to certify that the design and construction of the improvements will be resistant to flood damage and anchored to prevent flotation, collapse, and lateral movement.

## SECTION III. BACKGROUND INFORMATION

### Proposal Description:

The applicant is requesting to construct a segment of the Fanno Creek trail to connect two existing sections between City Hall and the Tigard Library. The proposal includes construction of a crosswalk across Hall Boulevard, north of the Fanno Creek Bridge, a sidewalk along the east side of Hall Boulevard (140 Feet), an elevated boardwalk from the sidewalk to the creek (132 feet), and a new pedestrian/bike bridge across the creek (62 feet). This bridge, to be known as Woodruff Bridge, will align with an existing trail on the south side of the creek.

Most of the work is proposed within the 100-year floodplain and floodway. The plans have been designed to avoid construction within the wetlands but do impact the vegetated corridors of the wetlands and Fanno Creek. Mitigation for the project's permanent impacts is proposed off-site at SW Fern Street and 139<sup>th</sup> Avenue. On-site mitigation possibilities are limited due to current Clean Water Services (CWS) restoration activities already in progress, the future widening of Hall Boulevard, an access easement extending through the property, and potential impacts to turtle habitat.

### Site/Vicinity Information

The site is made up of two parcels (2S102DA-00600 and 2S102DA-00401). The main project site (tax lot 600) is located on the north side of Fanno Creek just north of the existing Tigard Library. Some of the proposed work will also occur on the west side of Hall Boulevard on the City Hall site (tax lot 401). This work is limited to relocation of a sidewalk ramp for the proposed crosswalk and installation of a pad for the crosswalk signal pole.

Tax lot 600 has dual zoning, Light Industrial (I-L) and Medium High Density Residential (R-12). The City Hall site is zoned Central Business District (CBD). Both sites are encumbered by sensitive lands, which include wetlands, floodplain, and drainageways (Fanno Creek). Parcels in the area are zoned I-L, CBD, and R-12.

### Site History

Staff conducted a search of City records for the subject property. The Tigard Library was approved for tax lot 600 in 2003 (CUP2003-00001). Various other approvals have been granted to construct a gazebo in the open space adjacent to the library, modify the library parking lot and construct portions of the Fanno Creek Trail. A Minor Modification and Sensitive Lands Review was approved in 2005 (SLR2005-00016/MMD2005-00015) to construct a segment of the trail around the Tigard Library, including the section proposed in this application. Condition # 5 of that approval required a wildlife assessment to be completed prior to construction of the trail section north of Fanno Creek. The trail design north of the creek must respond to and take into account the results of the wildlife assessment. The assessment will be subject to a public hearing by the Hearings Officer. This application seeks to satisfy that condition.

On the City Hall site land use applications related to on-site work include construction, expansion and remodel of the existing buildings and the construction of the Tigard Skate Park. These include a Conditional Use Permit to allow a Department of Motor Vehicles office within an industrial zone (CU 18-76), construction of an office/warehouse building to be used by an electrical contractor (SDR24-77), redevelopment of the site for the City Hall complex (SDR91-0017) and various minor modifications. Case file SDR2006-00005 approved the development of the Tigard Skate Park. No other land use cases were found to be on file with the City besides some temporary sign permits.

#### SECTION IV. DECISION MAKING PROCEDURES, PERMITS AND USE

Use Classification: Section 18.130.020

Lists the Use Categories.

The applicant is proposing to construct a missing segment of the Fanno Creek Trail. This facility is defined as Community Recreation within the use classification section of the Tigard Development Code. Community Recreation is permitted within the CBD zone and is a conditional use within the R-12 and I-L zones.

Summary Land Use Permits: Chapter 18.310

Defines the decision-making type to which the land-use application is assigned.

The proposal requires a Sensitive Lands Review within the 100-year floodplain, which is a Type III-HO (Hearings Officer) decision.

#### SECTION V. ANALYSIS OF ALTERNATIVE TRAIL ALIGNMENTS

The applicant evaluated four alternative trail alignments during the 2005 design process. An explanation of this evaluation is found on pages 3 - 5 of the applicant's narrative. Alternative alignments were considered to look at ways to minimize impacts to natural resources while providing a bike-pedestrian friendly path. The proposed location/design was chosen as it provides a balance between the two, as well as being handicap accessible. The applicant's evaluation is summarized below:

Hall Boulevard is an Oregon Department of Transportation (ODOT) facility. ODOT has refused to allow a signalized or un-signalized crossing between the Fanno Creek Bridge and the signalized crossing at Wall Street to the south. This existing crossing is too far out of direction for trail users to consider it to cross Hall Boulevard. The majority of pedestrians cross just south of the bridge during gaps in traffic, creating a dangerous situation for both pedestrians and drivers. Some of the alternative alignments would involve bicycle traffic turning left across Hall Boulevard. Other alternatives would require modifying the existing Fanno Creek Bridge to accommodate a cantilevered walkway, which was rejected by ODOT. For these reasons the applicant chose the proposed alignment north of the Fanno Creek Bridge.

The design of the trail was also modified to lessen impacts to the wildlife habitat. The proposed trail has been shortened and shifted closer to Hall Boulevard than the 2005 design. In addition, the original 10-foot asphalt trail has been replaced by an 8-foot, raised boardwalk on pre-cast foundations that eliminate the need to dig holes or pour concrete. The boardwalk provides 30 inches of clearance for wildlife to pass freely under the trail. Cable fencing and shrubs are also proposed on the trail to discourage users from leaving the trail.

#### SECTION VI. APPLICABLE REVIEW CRITERIA AND FINDINGS

A summary of the applicable criteria in the Chapter order in which they are addressed are as follows:

- A. 18.775 Sensitive Lands Review Criteria
- B. Other Applicable Development Code Standards
  - 18.330 (Conditional Use)
  - 18.360 (Site Development Review)
  - 18.510 (Residential Zoning Districts)
  - 18.520 (Commercial Zoning Districts)
  - 18.530 (Industrial Zoning Districts)
  - 18.810 (Street and Utility Improvement Standards)
- C. Impact Study (18.390)

SECTION VII. APPLICABLE REVIEW CRITERIA AND FINDINGS  
A. SPECIFIC SENSITIVE LANDS REVIEW APPROVAL CRITERIA

Sensitive Lands (Section 18.775):

Section 18.775.020.F states that the Director shall have the authority to issue a sensitive lands permit in the following areas by means of a Type II procedure, as governed in Section 18.390.040, using approval criteria contained in Section 18.775.070 C-E:

- ♦ Drainageways;
- ♦ Slopes that are 25% or greater or unstable ground; and
- ♦ Wetland areas which are not regulated by other local, state, or federal agencies and are designated as significant wetlands on the Comprehensive Plan Floodplain and Wetland Map.

Section 18.775.020.G states that the Hearings Officer shall have the authority to issue a sensitive lands permit in the 100-year floodplain by means of a Type IIIA procedure, as governed by Section 18.390.050, using approval criteria contained in Section 18.775.070.

General Provisions for Floodplain Areas 18.775.040.

Special flood hazard:

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study of the City of Tigard," effective February 18, 2005, with accompanying Flood Insurance Rate Maps effective February 18, 2005, is hereby adopted by reference and declared to be a part of this chapter. This Flood Insurance Study is on file at the Tigard Civic Center.

The applicant and staff have reviewed these maps and agree that this site is within one of the identified special flood hazard areas. The application is being reviewed under this premise.

Base flood elevation data:

When base flood elevation data has not been provided in accordance with Section 18.775.040.B above, the Director shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 18.775.040.M and 18.775.040.N below).

The base flood elevation for the subject sites are shown to be 144 and 145 feet according to the Flood Insurance Rate Maps of February 18<sup>th</sup>, 2005.

Test of reasonableness:

Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that the potential for flood damage to the proposed construction will be minimized. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these sensitive land areas may result in higher insurance rates.

Base flood elevation data is available and has been established at 144 and 145 feet by the FEMA Flood Insurance Maps. Therefore, this standard does not apply.

Resistant to flood damage:

All new construction and substantial improvements, including manufactured homes, shall be constructed with materials and utility equipment resistant to flood damage.

The applicant has not provided sufficient information to determine if this criterion is met. Information should be submitted from the applicant's engineer regarding the design's resistance to flood damage. A condition has been imposed to ensure this standard is met.

Minimize flood damage:

All new construction and substantial improvements, including manufactured homes, shall be constructed using methods and practices that minimize flood damage.

A flood study prepared by the applicant's engineer has been provided. The study shows that the proposed improvements will not result in an increase in flood levels.

**Equipment protection:**

Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

**Water Supply Systems:**

All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.

**Anchoring:**

All new construction, all manufactured homes and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

The bridge will be anchored to abutments installed on each side of Fanno Creek. The boardwalk will be constructed on piers attached to low impact foundations. Information about the movement, collapse, flotation was not provided by the applicant. A condition of approval will ensure this standard is satisfactorily addressed.

**Sanitary sewerage systems:**

New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharge from the systems into floodwater.

**On-site water disposal systems:**

On-site water disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

No service facilities/equipment, water, sewer, or water disposal systems are proposed with this project. These standards do not apply.

**Residential Construction:**

1. New construction and substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor, including the basement, elevated at least one foot above base flood elevation; 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria: a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided; b. The bottom of all openings shall be no higher than one foot above grade; and c. Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of flood waters. 3. Manufactured homes shall be securely anchored to an adequately anchored permanent foundation system. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

Residential construction is not proposed with this development. This standard does not apply.

**Nonresidential Construction:**

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation, or together with attendant utility and sanitary facilities, shall: 1. Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water; 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; 3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in Section 18.775.030.E.2; and 4. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 18.775.040.L.2. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

This standard does not apply as this development is for roadway purposes. No habitable structures are proposed. This standard does not apply.

**FINDING:** Based on the analysis above, the General Provisions for Floodplain Areas can be met as conditioned below.

**CONDITION:** The applicant shall provide information from a registered engineer to certify that the design and construction of the improvements will be resistant to flood damage and anchored to prevent flotation, collapse, and lateral movement.

#### 18.775.050 General Provisions for Wetlands

##### Code compliance requirements.

Wetland regulations apply to those areas classified as significant on the City of Tigard "Wetland and Streams Corridors Map", and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, per "Table 3.1 Vegetated Corridor Widths" and "Appendix C" Natural Resource Assessments of the CWS "Design and Construction Standards". Wetland locations may include but are not limited to those areas identified as wetlands in "Wetland Inventory and Assessment for the City of Tigard, Oregon," Fishman Environmental Services, 1994.

The location of the proposed improvements is identified as having two locally significant wetlands (E-13 and E-14 - 1994 City of Tigard Wetland Inventory). The extents of the vegetated corridors, as determined by CWS, are shown in the applicant's plans. Work is not proposed within the wetlands, but will occur within the vegetated corridors. The proposal is therefore, subject to a Type II sensitive lands review for wetlands.

##### Delineation of wetland boundaries.

Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineation will be done by qualified professionals at the applicant's expense.

The extent of the vegetated corridors as determined by CWS are shown in the applicant's plans. According to the applicant's narrative, Fishman Environmental Services prepared a wetland delineation to meet CWS requirements.

18.775.070.B states that the Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:

Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;

The proposal includes alterations within the floodway and 100-year floodplain of Fanno Creek. The applicant hired an engineering consultant to perform a floodway and floodplain study to measure the impacts of the proposed improvements on area flood levels. Changes were made to the project before settling on the current design. According to the applicant's engineer "the proposed boardwalk, crosswalk and pedestrian bridge will not impose any meaningful hydraulic impacts to the Fanno Creek floodplain elevation." Therefore, the proposal meets the zero-foot rise requirement.

Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;

The development site lies within three zones. One is commercial, the second is industrial, and the third is residential. Land form alterations within the 100-year floodplain are permitted within the commercial and industrial zones. Community Recreation and Public Support Facilities are permitted within residential zones as an exception. The trail and sidewalk therefore, are permitted within the R-12 zoning. This standard is met.

Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;

The modeling results provided by the applicant's engineer show that the proposal will not result in any increase in the flood elevation.

The land form alteration or development plan includes a pedestrian/bicycle pathway in accordance with the adopted pedestrian/bicycle pathway plan, unless the construction of said pathway is deemed by the Hearings Officer as untimely;

The development proposal is only to construct a segment of the Fanno Creek Trail. The design is in accordance with the City's pedestrian/bicycle plan.

The plans for the pedestrian/bicycle pathway indicate that no pathway will be below the elevation of an average annual flood;

The proposed pathway is located above the average annual flood elevation as shown in a letter prepared by the applicant's water resources consultant (Pacific Water Resources, Inc.).

The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS permits and approvals shall be obtained; and

Fanno Creek will not be impacted by the construction of the bridge. The bridge will completely span Fanno Creek and with construction below the top of bank. The trail and sidewalk are located outside the wetlands on both the library and City Hall site but are within the vegetated corridor. Because no wetland or streams are impacted by the proposal, permits are not required by U.S. Army Corps of Engineers or Department of State Lands. A service provider letter is required by CWS for the work within the vegetated corridors. The letter has been obtained and is included in the application packet.

Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the comprehensive plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle pathway plan.

The proposal is to construct a missing segment of the Fanno Creek Trail between City Hall and the Tigard Library. No dedication is necessary as the trail will be entirely on City-owned property.

Within wetlands:

The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:

The proposed land form alteration or development is neither on wetland in an area designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map nor is within the vegetative corridor established per "Table 3.1 Vegetative Corridor Widths" and Appendix C: Natural Resources Assessments" of the CWS "Design and Construction Standards", for such a wetland;

The subject site contains areas designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map and a vegetative corridor of 50 feet from the edge of the wetland. The vegetative corridor for this wetland is a CWS water quality buffer and is not subject to the safe harbor provisions of Goal 5. No work is proposed within the significant wetland. Some grading and trail construction is proposed within the vegetative corridor and has already been approved by CWS (see service provider letter).

The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;

The applicant has indicated that the disturbance to the vegetated corridor will be the minimum required for the development. The portion of the trail within the vegetated corridors will be the minimum allowed (8 feet). A boardwalk design has been chosen and will be constructed with 42 inch piers. These piers eliminate the need to dig holes or pour concrete, therefore minimizing the disturbance. Because the applicant has revised the trail alignment/design, the amount of permanent impact area has been reduced from the original design.

Any encroachment or change in on-site or off-site drainage which would adversely impact wetland characteristics have been mitigated;

The impacts to the vegetative corridor will be for the proposed boardwalk, bridge abutments, and crosswalk signal pad. These improvements have been approved by CWS. There is no encroachment into the nearby wetlands. The proposed sidewalk along the east side of Hall Boulevard will change drainage by directing stormwater that now flows over land from street to the sidewalk, north to the end of the sidewalk. Water will then flow over land into the wetland. The site contours will remain relatively unchanged. The change will not have an adverse affect on the wetland.

Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in accordance with Chapter 18.745, Landscaping and screening.

The applicant's plans show erosion control measures to be used during construction. Disturbed vegetation will be replaced. Both proper erosion control and re-vegetation are conditions of the CWS Service Provider Letter.

All other sensitive lands requirements of this chapter have been met;

Fanno Creek runs through the project sites. No work is proposed within the creek but is proposed within the floodway and 100-year floodplain. The criteria for work within the flood areas have been met as shown within this staff report.

The necessary U.S. Corp of Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained.

Fanno Creek will not be impacted by the construction of the bridge. The bridge will completely span Fanno Creek and with construction below the top of bank. The trail and sidewalk are located outside the wetlands on both the library and City Hall site but are within the vegetated corridor. Because no wetland or streams are impacted by the proposal, U.S. Army Corps of Engineers or the Division of State Lands does not require permits. A service provider letter is required by CWS for the work within the vegetated corridors. The letter has been obtained and is included in the application packet.

The provisions of Chapter 18.790, Tree Removal shall be met;

There are two trees on the library site that may be affected by construction of the trail/bridge. Neither tree will be removed. The applicant has provided a tree protection plan for both trees. This criterion does not apply.

Physical Limitations and Natural Hazards, Floodplains and Wetlands, Natural Areas, and Parks Recreation and Open Space policies of the Comprehensive Plan have been satisfied.

The applicant addresses the relevant Comprehensive Plan policies within the narrative. These include Water Resources Quality (Goal 6), Hazards (Goal 7), and Parks, Recreation, Trails and Open Space (Goal 8). The design meets regional, state and federal water quality standards by meeting CWS permit requirements. A flood study shows that the improvements will not result in an increase in flood elevation. The construction of this gap in the trail connects two larger open space areas near the Tigard Library and City Hall and furthers the policy of creating an interconnected regional system of trails. The applicant has proposed a design that tries to balance the policies of providing greenway trails and minimizing the impact on natural areas. This criterion has been met.

**FINDING:** Based on the analysis above, the applicant meets the criteria for sensitive lands permit in wetlands.

18.775.090 Special Provisions for Development within Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and South Fork of Ash Creek

In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 666-023-0030) pertaining to wetlands, all wetlands classified as significant on the City of Tigard "Wetlands and Streams Corridors Map" are protected. No land form alterations or developments are allowed within or partially within a significant wetland, except as allowed/approved pursuant to Section 18.775.130.

The proposal does not include any work within a significant wetland.

In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of the bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.

The standard width for "good condition" vegetated corridors along Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50 feet, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard "Wetlands and Streams Corridors Map") is located within the 50 foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.

The CWS Service Provider Letter designates the pre-development vegetated corridor as 50 feet and in degraded condition. CWS has begun a restoration project on the site (including the area where the bridge and trail are proposed) that will upgrade the condition to good. The required vegetated corridor width is 50 feet as approved by CWS and is delineated on the project plans. There are no wetlands within the 50 foot setback; therefore, the vegetated corridor is measured from the upland edge of the wetland.

The minimum width for "marginal or degraded condition" vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50% of the standard width, unless wider in accordance with CWS "Design and Construction Standards", or modified in accordance with Section 18.775.130.

As noted above, the vegetated corridor will be in good condition once the CWS restoration project is complete. The required 50-foot width requirement is met.

The determination of corridor condition shall be based on the Natural Resource Assessment guidelines contained in the CWS "Design and Construction Standards".

CWS has classified the vegetated corridor as degraded based on the site conditions at the time of the site assessment. A long term restoration project has begun on-site and over time the plantings will improve the vegetated corridor to good condition. Amber Wierck, with CWS, has indicated that this change does not create any issues with the current Service Provider Letter.

The standard setback distance or vegetated corridor area applies to all development proposed on property located within or partially within the vegetated corridors, except as allowed below:

- a. Roads, pedestrian or bike paths crossing the vegetated corridor from one side to the other in order to provide access to the sensitive area or across the sensitive area, as approved by the City per Section 18.775.070 and by CWS "Design and Construction Standards";
- b. Utility/service provider infrastructure construction (i.e. storm, sanitary sewer, water, phone, gas, cable, etc.), if approved by the City and CWS;
- c. A pedestrian or bike path, not exceeding 10 feet in width and meeting the CWS "Design and Construction Standards";
- d. Grading for the purpose of enhancing the vegetated corridor, as approved by the City and CWS;
- e. Measures to remove or abate hazards, nuisances, or fire and life safety violations, as approved by the regulating jurisdiction;
- f. Enhancement of the vegetated corridor for water quality or quantity benefits, fish, or wildlife habitat, as approved by the City and CWS;
- g. Measures to repair, maintain, alter, remove, add to, or replace existing structures, roadways, driveways, utilities, accessory uses, or other developments provided they are

consistent with City and CWS regulations, and do not encroach further into the vegetated corridor or sensitive area than allowed by the CWS "Design and Construction Standards.

A portion of the proposed pedestrian/bike trail and sidewalk alteration (City Hall site) is located within the wetland vegetated corridor. The proposed trail is 8 feet wide. The existing sidewalk on the western side of Hall Boulevard is being modified to relocate the handicap ramp and install a new crosswalk signal. This modification will be approximately 31 square feet of permanent impact to the vegetated corridor on the City Hall site. All work meets the CWS Design and Construction Standards as shown in the approved CWS Service Provider Letter. Only a and c above apply to this trail project.

Land form alterations or developments located within or partially within the Goal 5 safeharbor setback or vegetated corridor areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek that meet the jurisdictional requirements and permit criteria of the CWS, U.S. Army Corps of Engineers, Division of State Lands, and/or other federal, state, or regional agencies, are not subject to the provisions of Section 18.775.090.B, except where the:

- a. Land form alterations or developments are located within or partially within a good condition vegetated corridor, as defined in Sections 18.775.090.B.1 and 18.775.090.B.2;
- b. Land form alterations or developments are located within or partially within the minimum width area established for marginal or a degraded condition vegetated corridor, as defined in Section 18.775.090.B.3.

This proposal is subject to the provisions of 18.775.090.B since a portion of the improvements are located partially within vegetated corridor areas established for Fanno Creek. As shown, this proposal meets those provisions.

FINDING: Based on the above analysis, the applicant adheres to the special provisions for development along Fanno Creek. No work is proposed within significant wetlands or along the Tualatin River, Ball Creek, or the south fork of Ash Creek.

## B. OTHER APPLICABLE DEVELOPMENT CODE STANDARDS

### CONDITIONAL USE (18.330)

Section 18.330.020 of the Tigard Development Code Conditional Use Review Section, states; "if the requested modification meets any of the major modification criteria, that the request shall be reviewed as a new Conditional Use application."

Section 18.330.020.B.2 states that the Director shall determine that a major modification(s) has resulted if one (1) or more of the changes listed below have been proposed:

A change in land use;

The proposal is to construct a sidewalk, boardwalk and bridge to complete a gap within the Fanno Creek trail. Currently tax lot 600 is developed with the Tigard Library and trails within the Fanno Creek Greenway. No new uses are proposed at this time. This criterion is met.

A 10% increase in dwelling unit density;

The site is not developed with a residential use; therefore, this criterion is not applicable.

A change in the type and/or location of access ways and parking areas where off-site traffic would be affected;

There is no change in the type and/or location of access ways and parking areas where off-site traffic would be affected. This standard is met.

An increase in the floor area proposed for non-residential use by more than 10% where previously specified;

The request is to construct a section of the Fanno Creek trail. No increase in floor area of the existing structures is proposed. This criterion is satisfied.

A reduction of more than 10% of the area reserved for common open space and/or usable open space;

Placement of a trail within open space does not reduce the amount of open space. This criterion is satisfied.

A reduction of specified setback requirements by more than 20%;

The applicant has not requested changes to the building location or proposed setbacks. Trails, sidewalks, and bridges are not subject to setback requirements. This standard is not applicable.

An elimination of project amenities by more than 10% where previously specified provided such as: (a) Recreational facilities; (b) Screening; or (c) Landscaping provisions;

The proposed trail segment will increase the recreational opportunity on-site. Screening will not be affected by the proposal. The percentage of landscaping on-site is reduced by the construction of the boardwalk, but the library site has over five acres of open space. Open space is included in the landscaping percentage. The construction of 1,056 square feet of boardwalk will eliminate less than a .5% of the open space on-site. This standard is met.

A 10% increase in the approved density;

The proposed modification request does not involve residential development; therefore, no increase to density is involved in the request.

**FINDING:** This request is determined to be a minor modification to an existing site as demonstrated in the above analysis and meets all applicable requirements of Title 18 as indicated within this report. The requirements for a minor modification have been met.

#### SITE DEVELOPMENT REVIEW (18.360)

Section 18.360.050.B contains the following criteria for approval of a request for Minor Modification:

Section 18.360.050.B states that the Director shall determine that a major modification will result if one or more of the following changes are proposed.: There will be:

An increase in dwelling unit density, or lot coverage for residential development;

There are no dwelling units on the property. Therefore, this criterion does not apply.

A change in the ratio or number of different types of dwellings;

There are no dwelling units on the property. Therefore, this criterion does not apply.

A change that requires additional on-site parking in accordance with Chapter 18.765.

The proposed improvement on this site (sidewalk widening and signal installation) is classified as a Public Support Facility. These uses require no parking. This criterion is satisfied.

A change in the type of commercial or industrial structures as defined by the Uniform Building Code;

There are no proposed changes in the type of structures. Therefore, this criterion does not apply.

An increase in the height of the building(s) by more than 20%;

There is no proposed change in building height. Therefore, this criterion does not apply.

A change in the type and location of access ways and parking areas where off-site traffic would be affected;

The proposal does not change the type or location of access ways or parking areas where off-site traffic would be affected. Therefore, this criterion is met.

An increase in vehicular traffic to and from the site and the increase can be expected to exceed 100 vehicles per day;

The proposal does not increase vehicular traffic to and from the site. Therefore, this criterion does not apply.

An increase in the floor area proposed for a nonresidential use by more than 10% excluding expansions under 5,000 square feet;

No increase in floor area is proposed. Therefore, this criterion does not apply.

A reduction in the area reserved for common space and/or usable open space which reduces the open space area below the minimum required by this code or reduces the open space area by more than 10%;

The construction of the pad and signal pole, affecting 31 square feet of land, will not appreciably reduce the acreage of the site amenities. The City Hall tax lot has approximately 4 acres of open space. This criterion has been satisfied.

A reduction of project amenities below the minimum established by this code or by more than 10% where specified in the site plan:

- a. Recreational facilities;
- b. Screening; and/or
- c. Landscaping provisions.

The proposal does not reduce the site's recreational facilities or screening. Open space is part of the landscaping on the City Hall site. The landscaping will be reduced by 31 square feet. This decrease does not reduce the percentage to less than that required by code (15%), and does not reduce the percentage of existing landscaping by more than 10%. Therefore, this criterion has been satisfied.

A modification to the conditions imposed at the time of site development review approval, which are not the subject of B 1 through 10 above of this subsection.

The original site plan was approved under SDR 29-84. The conditions for this and subsequent approvals have been reviewed. This proposal does not conflict with nor modify any of these previous applied conditions.

FINDING: This request is determined to be a minor modification to an existing site as demonstrated in the above analysis and meets all applicable requirements of Title 18 as indicated within this report. The requirements for a minor modification have been met.

#### RESIDENTIAL ZONING DISTRICTS (18.510)

##### 18.510.030 Uses

Table 18.510.1 lists Community Recreation as a Conditional Use within the R-12 zoning district.

The library site has dual zoning (R-12 and I-L). Trails are classified as a Community Recreation use, which are listed as a conditional use within Table 18.510.1. The applicant has requested a minor modification to a previously approved Conditional Use Permit to allow the trail. The requirements of the Residential Zoning District have been met.

#### COMMERCIAL ZONING DISTRICTS (18.520)

##### 18.520.030 Uses

Table 18.520.1 lists Community Recreation as a Permitted Use within the CBD zoning district.

The City Hall site is zoned Central Business District (CBD). A small portion of the proposed work is on-site, but the majority of the work will be within the adjacent right-of-way. Sidewalk modifications and the proposed crosswalk signal are classified Public Support Facilities. These uses are permitted outright within the CBD. The applicant has applied for a minor modification to the previously approved Site Development Review to permit the proposed work. The requirements of the Commercial Zoning District have been met.

#### INDUSTRIAL ZONING DISTRICTS (18.530)

##### 18.530.030 Uses

Table 18.530.1 lists Community Recreation as a Conditional Use within the I-L zoning district.

As noted above, the library site has dual zoning, including Light Industrial (I-L). Community Recreation is permitted as a Conditional Use within the zone according to Table 18.530.1. Footnote 10 states that the use is limited to outdoor recreation on land classified as floodplain on City flood maps, when the recreational use does not otherwise preclude future cut and fill as needed in order to develop adjoining industrially zoned upland. According to FEMA flood maps adopted by the City, the industrial portion of the trail right-of-way is located entirely within the floodplain and does not adjoin any industrially zoned upland.

#### STREET UTILITY IMPROVEMENT STANDARDS (18.810)

##### 18.810.070 Sidewalks

Section 18.810.070.C requires a planter strip separation of at least five feet between the curb and the sidewalk in the design of streets, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant portions of the street; it would conflict with the utilities, there are significant natural features (large trees, water features, significant habitat areas, etc) that would be destroyed if the sidewalk were located as required, or where there are existing structures in close proximity to the street (15 feet or less). Additional consideration for exempting the planter strip requirement may be given on a case by case basis if a property abuts more than one street frontage.

The proposed sidewalk along the east side of Hall Boulevard is designed without a planter strip and is not proposed at ultimate location so as to limit the impact on the adjoining natural area. This is allowed as an exception to the standard.

##### Bikeways and Pedestrian Pathways

##### 18.810.110.C. requires:

1. Minimum width for bikeways within the roadway is five feet per bicycle travel lane.
2. Minimum width multi-use paths separated from the road is ten (10) feet. The width may be reduced to eight (8) feet if there are environmental or other constraints.
3. The minimum width for pedestrian only off-street paths is five (5) feet.
4. Design standards for bike and pedestrian-ways shall be determined by the City Engineer.

The proposed multi-use path is 8 feet wide. This narrower width was chosen to limit the impact on the sensitive lands. The proposal has been reviewed by the Engineering Division and no objections to the design were indicated.

##### C. IMPACT STUDY (18.390):

Section 18.390.040.B.2.e states that the applicant shall provide an impact study to quantify the effect of development on public facilities and services. For each public facility system and type of impact, the study shall propose improvements necessary to meet City standards, and to minimize the impact of the development on the public at large, public facilities systems, and affected private property users.

The proposed trail and sidewalk improvements will not increase traffic to and from the site. A signalized crosswalk is proposed where the trail crosses Hall Boulevard. It is expected that the proposed trail, sidewalk, and crosswalk will reduce the number of pedestrians crossing Hall at unsigned locations and provide a safer alternative to the stretches of Hall Boulevard without sidewalks. The proposed trail segment will result in improved recreational opportunities by closing a gap within the current Fanno Creek trail system and connect the open spaces of Fanno Creek Park and the library site. Water and sanitary sewer systems will not be impacted by the development. Minimal impervious area will be added by the improvements. Storm water will continue to be directed over land, through the vegetated corridors, and into the wetland or Fanno Creek. Noise levels from the trail are expected to be minimal. Any noise created by trail users is likely to have less of an impact than current traffic noise from Hall Boulevard.

## SECTION VI. OTHER STAFF COMMENTS

The City of Tigard Engineering Department commented that the proposed work is within the Fanno Creek floodplain regulated by TDC 18.775.070.B, the submittal is an adequate showing of compliance with these standards. 18.755.070.B.3 requires that the trail not be below the elevation of an average annual flood. The applicant's engineer has submitted no-rise certifications that the pathway is above the average annual flood elevation. These reports have been reviewed and found to comply with the TDC requirements. The applicant has obtained the required ODOT permit to connect the pathway to the Hall Boulevard sidewalk.

City of Tigard Arborist requested that the drawings have the tree protection fence shown to scale and specifications per the Arborist Report. It was also noted the Tigard Municipal Code requires tree protection for trees on City property.

RESPONSE: No trees will be removed for the proposed improvements. Protection required by the Municipal Code is not a land use regulation. Regardless the applicant has provided an arborist report outlining measures to be taken to protect existing trees during construction. The applicant should work with the City Arborist to ensure the Municipal Code protection requirements are met.

Tigard Police have reviewed the proposal and have no objections.

The Tigard Parks Department noted that the suggestion for a 6-foot fence is a little overboard. If fencing is installed, a 3 to 4 - foot fence would be preferred for security purposes.

The Tigard Public Works Department has reviewed the proposal and has no objection.

## SECTION VII. AGENCY COMMENTS (Copies of the complete letters are found in the file).

Clean Water Services issued a Service Provider Letter (4714) with conditions dated April 1, 2009.

Oregon Division of State Lands has commented that no removal-fill permit is required because it appears that the proposed bridge, elevated pathway, and crosswalk improvements avoid impacts to wetlands and waters.

Oregon Department of Fish and Wildlife does not support the placement of the trail within floodplains and vegetated corridor due to adverse impacts such as fragmented habitats, disturbance of sensitive species such as the Western pond turtle and affects on water flow. The bridge is being placed in an area with severely eroding banks which could cause future maintenance problems. The placement could also preclude future restoration projects. It is recommended that the City use the Senior Center/O'Mara Street/existing Hall Boulevard crossing as the trail connection to avoid any negative impacts to the North Library wetlands and mitigation site.

RESPONSE: The applicant's proposal meets or can meet the current requirements of the Tigard Development Code and other regulatory agencies. The design and location of the pathway has been modified prior to the review process to minimize impacts to natural areas, therefore these comments and suggestions were passed on to the applicant for their review and consideration.

Metro provided comments about the proposed trail. Of the four alternative alignments, the proposed alignment best suits the Metro requirements for regional trails. This application has four of the five components of the Metropolitan Greenspaces Master Plan framework used to prioritize regional trail capital improvements. Because of the trails location within a natural area that supports rare Western pond turtle, the writer emphasized that the greatest care should be taken and outlined possible adverse impacts of the trail on nesting populations of turtle. Metro praises the boardwalk and bridge design but also states that the applicant should be encouraged to protect rare and sensitive species. Suggestions provided include:

- ◆ Installing any necessary silt fencing for construction prior to mid-May, to avoid the risk of trapping nesting turtles in the construction site.
- ◆ Keeping construction materials and equipment away from suspected turtle nesting areas.

RESPONSE The applicant's proposal meets or can meet the current requirements of the Tigard Development Code and other regulatory agencies. The design and location of the pathway has been modified prior to the review process to minimize impacts to natural areas, therefore these comments and suggestions were passed on to the applicant for their review and consideration.

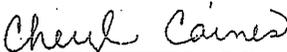
The Oregon Department of Environmental Quality commented that care should be taken to control erosion and sediment migration during construction activities.

RESPONSE: Erosion control measures are shown on the applicant's plans and are a condition of approval of Clean Water Services.

Verizon wrote that the proposed plans indicate working where there are several underground cables that run south of the east side of Hall Boulevard. Coordination to adjust any manholes will require early contact with this office and final grade information. Locates will be required.

Qwest states that the project location falls out of the Qwest service area.

Tualatin Valley Fire and Rescue, Clean Water Services, Oregon Department of Transportation, U.S. Army Corps. of Engineers, Portland General Electric, NW Natural Gas, Comcast Cable Corporation, and Tri-Met Transit were given an opportunity to review this proposal but offered no comments or objections.

  
PREPARED BY: Cheryl Caines  
Associate Planner

April 29, 2009  
DATE

  
APPROVED BY: Richard Bewersdorff  
Planning Manager

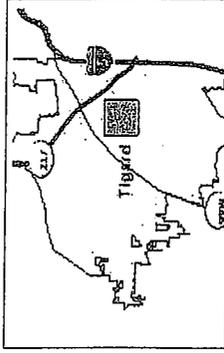
April 29, 2009  
DATE

**VICINITY MAP**

SLR2009-00002  
 SLR2009-00003  
 MMD2009-00007  
 MMD2009-00013

**FANNO CREEK TRAIL &  
 BRIDGE/HALL BLVD.  
 CROSSWALK**

**Subject Site**



Information on this map is for general location only and should be verified with the Development Services Division.

Scale 1:5,500 - 1 in = 458 ft  
 Map printed at 08-Apr-09 11:06 AM

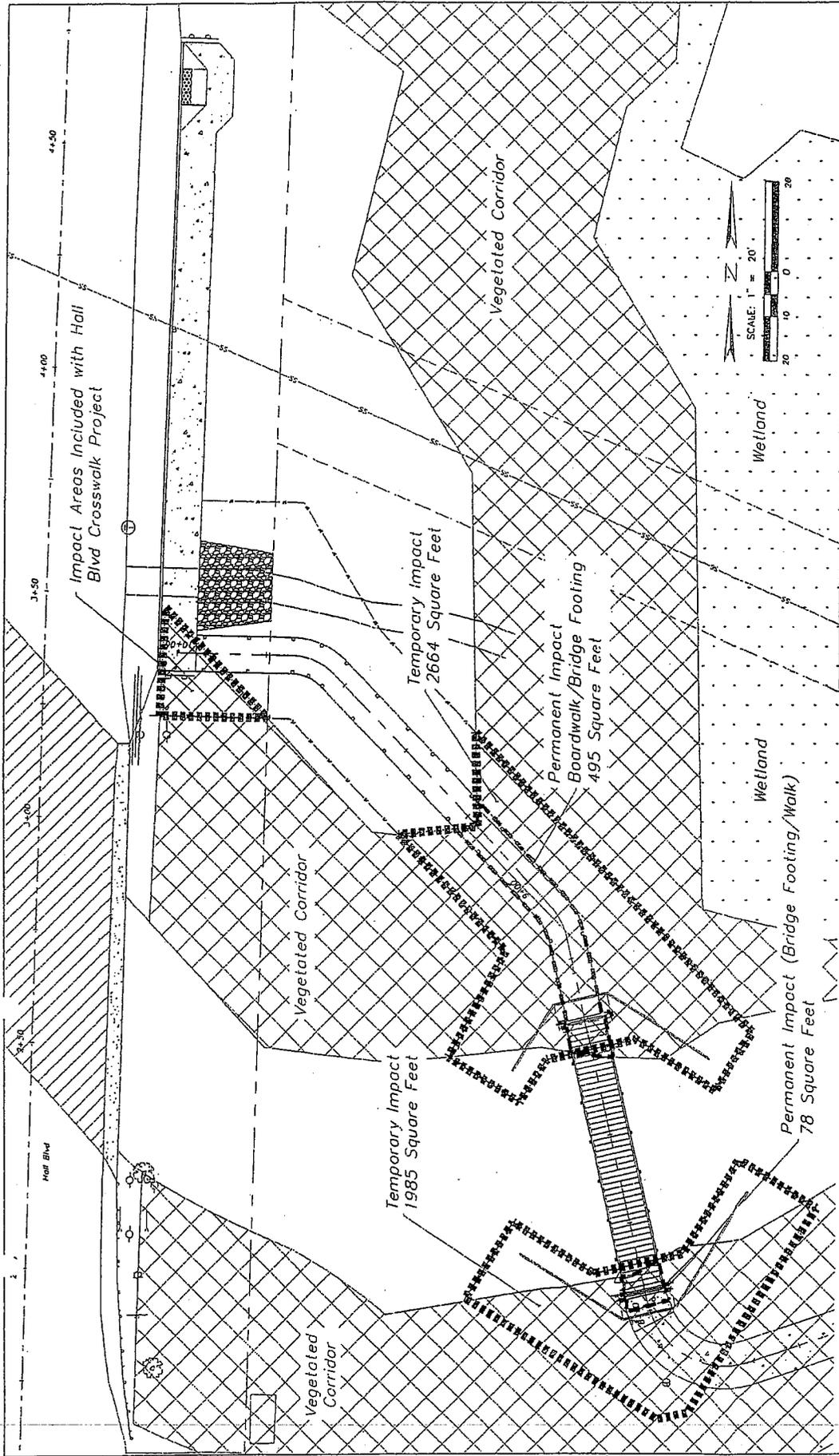
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City of Tigard  
 13125 SW Hill Blvd  
 Tigard, OR 97223  
 503 638-4171  
 www.tigard-or.gov

**TIGARD MAPS**





CAPITAL CONSTRUCTION AND  
 TRANSPORTATION DIVISION  
 12125 S.W. HAIL BLVD  
 MCARD, OREGON 97223  
 VOICE: 503-639-4171  
 FAX: 503-674-0752  
 WWW.MCARD-OR.GOV

**Fanno Creek Trail**  
**HAIL Blvd to Fanno Creek**  
**CWS Vegetated Corridor Impacts**

**Totals**  
 Permanent Impacts: 573 Sq Ft  
 Temporary Impacts: 4649 Sq Ft

FIGURE  
 CWS+ VC/  
 FILE NO

Printed by: EITC on 11/11/09 at 10:08 AM. Path: \\C:\Users\jmc\Documents\Projects\Fanno Creek Trail\Drawings\Impact Areas\Impact Areas.dwg.



## Cheryl Caines

---

**From:** gude6@comcast.net  
**Sent:** Sunday, November 14, 2010 11:11 AM  
**To:** Cheryl Caines  
**Cc:** Steve Martin; Susan Hartnett  
**Subject:** Re: Wall Street Extension

Thank you for this opportunity to state our position to council.

The Fanno Creek banks should belong to the public as a valuable natural resource for pedestrian / bike pathways to encourage healthy transportation options and community connection without disrupting the wetlands, but instead capitalizing on the open space reserve potential while it is still possible to do so.

Nancy & Peter Gudekunst  
10200 SW Hoodview Dr.  
Tigard, OR 97224

----- Original Message -----

**From:** "Cheryl Caines" <[cherylc@tigard-or.gov](mailto:cherylc@tigard-or.gov)>  
**To:** "[gude6@comcast.net](mailto:gude6@comcast.net)" <[gude6@comcast.net](mailto:gude6@comcast.net)>  
**Cc:** "Steve Martin" <[STEVE@tigard-or.gov](mailto:STEVE@tigard-or.gov)>, "Susan Hartnett" <[SusanH@tigard-or.gov](mailto:SusanH@tigard-or.gov)>  
**Sent:** Monday, October 25, 2010 10:54:48 AM  
**Subject:** RE: Wall Street Extension

Nancy,

Thank you for your comments. The applicant, Fred Fields, has proposed the extension of Wall Street to obtain an access for possible future development of his property located east of Fanno Creek and the Tigard Library but west of the railroad tracks.

The applicant has requested removal of the protection of .19 acres of wetland on the site which are impacted by the proposed street extension plan. Staff and the city's Planning Commission are recommending denial based on the evidence in the record, however the final decision will be made by the City Council.

The comment period for the Planning Commission hearing has passed, but public testimony will be taken for the City Council hearing scheduled for Tuesday, December 14, 2010. Written testimony can be provided to me and forwarded to Council or presented directly to Council, along with oral testimony at the hearing. Please send any final written comments you would like me to include in the City Council packet by December 3<sup>rd</sup>.

Please let me know if I can answer any questions on the proposal.

Cheryl Caines  
Associate Planner  
City of Tigard  
(503) 718-2437

---

**From:** [gude6@comcast.net](mailto:gude6@comcast.net) [mailto:gude6@comcast.net]

**Sent:** Sunday, October 24, 2010 10:05 AM

**To:** Cheryl Caines; Susan Hartnett

**Cc:** Steve Martin

**Subject:** Wall Street Extension

Dear Cheryl,

What is the purpose of extending Wall Street? Remove wet lands!?

I would like to recommend the City purchase the triangle of property along the tracks and install better pedestrian/bike paths connecting the library to Bonita Park.

I hope my comments aren't too late. Thank you,

Nancy Gudekunst  
10200 SW Hoodview Dr.

---

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## Cheryl Caines

---

**From:** Nancy Davis [nancyd.oregon@yahoo.com]  
**Sent:** Wednesday, November 17, 2010 9:21 PM  
**To:** Cheryl Caines  
**Subject:** Fw: RE: Notice of 12/14/10 City Council Public Hearing for CPA2009-00004/Fields Wall Street Extension  
**Attachments:** Noph CC.docx

I want to go on record immediately as a tax-paying citizen of Tigard to NOT permit the wetlands to be compromised. Also TOTALLY OBJECT to removing protections for the wetlands, OBJECT to any tree-cutting (and how do we protest that).

What will happen to the two herons that are there? is the applicant intended to just shoot them?

--- On Wed, 11/17/10, Patty Lunsford <[PATTY@tigard-or.gov](mailto:PATTY@tigard-or.gov)> wrote:

From: Patty Lunsford <[PATTY@tigard-or.gov](mailto:PATTY@tigard-or.gov)>  
Subject: RE: Notice of 12/14/10 City Council Public Hearing for CPA2009-00004/Fields Wall Street Extension  
To: "Patty Lunsford" <[PATTY@tigard-or.gov](mailto:PATTY@tigard-or.gov)>, "nancyd.oregon@yahoo.com" <[nancyd.oregon@yahoo.com](mailto:nancyd.oregon@yahoo.com)>, "tivodiva@mac.com" <[tivodiva@mac.com](mailto:tivodiva@mac.com)>, "mibclark@gmail.com" <[mibclark@gmail.com](mailto:mibclark@gmail.com)>, "arlynda.craft@comcast.net" <[arlynda.craft@comcast.net](mailto:arlynda.craft@comcast.net)>, "sandflea\_41@yahoo.com" <[sandflea\\_41@yahoo.com](mailto:sandflea_41@yahoo.com)>, "budandjo2go@yahoo.com" <[budandjo2go@yahoo.com](mailto:budandjo2go@yahoo.com)>, "nadjje@comcast.net" <[nadjje@comcast.net](mailto:nadjje@comcast.net)>, "irvin24@hotmail.com" <[irvin24@hotmail.com](mailto:irvin24@hotmail.com)>, "wade43@gmail.com" <[wade43@gmail.com](mailto:wade43@gmail.com)>, "southpaw\_pdx@yahoo.com" <[southpaw\\_pdx@yahoo.com](mailto:southpaw_pdx@yahoo.com)>, "notreallylucy@gmx.com" <[notreallylucy@gmx.com](mailto:notreallylucy@gmx.com)>, "linnea\_johnsson@yahoo.com" <[linnea\\_johnsson@yahoo.com](mailto:linnea_johnsson@yahoo.com)>, "nichole.sailorcancer@gmail.com" <[nichole.sailorcancer@gmail.com](mailto:nichole.sailorcancer@gmail.com)>, "larkinp@gmail.com" <[larkinp@gmail.com](mailto:larkinp@gmail.com)>, "fastfotopro@hotmail.com" <[fastfotopro@hotmail.com](mailto:fastfotopro@hotmail.com)>, "joseph1486@comcast.net" <[joseph1486@comcast.net](mailto:joseph1486@comcast.net)>, "bryansebourn33@gmail.com" <[bryansebourn33@gmail.com](mailto:bryansebourn33@gmail.com)>, "lynnm23@comcast.net" <[lynnm23@comcast.net](mailto:lynnm23@comcast.net)>, "lynn.m.walker@kp.org" <[lynn.m.walker@kp.org](mailto:lynn.m.walker@kp.org)>, "cww18usa@aol.com" <[cww18usa@aol.com](mailto:cww18usa@aol.com)>, "imagic2@hotmail.com" <[imagic2@hotmail.com](mailto:imagic2@hotmail.com)>  
Date: Wednesday, November 17, 2010, 3:21 PM

I apologize. I sent you all the wrong notice the first time. This is the correct notice of the 12/14/10 public hearing before the City Council.

**Patty Lunsford**

Planning Assistant

City of Tigard /Current Planning

503.718.2438 /[patty@tigard-or.gov](mailto:patty@tigard-or.gov)



---

**From:** Patty Lunsford  
**Sent:** Wednesday, November 17, 2010 3:18 PM  
**To:** 'nancyd.oregon@yahoo.com'; 'tivodiva@mac.com'; 'mibclark@gmail.com'; 'arlynda.craft@comcast.net'; 'sandflea\_41@yahoo.com'; 'budandjo2go@yahoo.com'; 'nadje@comcast.net'; 'irvin24@hotmail.com'; 'wade43@gmail.com'; 'southpaw\_pdx@yahoo.com'; 'notreallylucy@gmx.com'; 'linnea\_johnsson@yahoo.com'; 'nichole.sailorcancer@gmail.com'; 'larkin@gmail.com'; 'fastfotopro@hotmail.com'; 'joseph1486@comcast.net'; 'bryansebourn33@gmail.com'; 'lynm23@comcast.net'; 'lynn.m.walker@kp.org'; 'cww18usa@aol.com'; 'imagic2@hotmail.com'  
**Subject:** Notice of 12/14/10 City Council Public Hearing for CPA2009-00004/Fields Wall Street Extension  
**Importance:** High

Good afternoon everyone,

Attached is the notice of 12/14/10 public hearing before the City Council for the Fields Wall Street Extension (CPA2009-00004).

In addition, the City of Tigard Community Development Code requires that "Notice of a Type IV Decision shall be **mailed** to the applicant and to all parties of record within five business days after the decision is filed by the Review Authority with the Director". Because you have provided testimony, you are entitled to notice of the final order by the Council.

Please provide me with your **name and mailing address no later than December 20, 2010** if you want to receive notice of the Council's final order once that decision has been rendered.

Best Regards,

**Patty Lunsford**

Planning Assistant

City of Tigard /Current Planning

503.718.2438 /[patty@tigard-or.gov](mailto:patty@tigard-or.gov)

---

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**MILLER NASH** LLP  
ATTORNEYS AT LAW

PORTLAND, OREGON  
SEATTLE, WASHINGTON  
VANCOUVER, WASHINGTON  
CENTRAL OREGON  
WWW.MILLERNASH.COM

3400 U.S. Bancorp Tower  
111 S.W. Fifth Avenue  
Portland, Oregon 97204-3699  
OFFICE 503.224.5858  
FAX 503.224.0155

**Phillip E. Grillo**  
phil.grillo@millernash.com  
(503) 205-2311 direct line

RECEIVED PLANNING

MAY 12 2011

CITY OF TIGARD

May 10, 2011

**BY FIRST-CLASS MAIL AND  
ELECTRONIC MAIL**

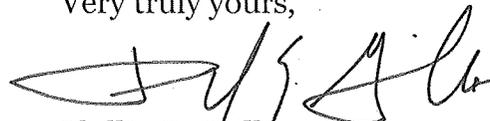
Ms. Cheryl Caines  
Associate Planner  
City of Tigard  
13125 S.W. Hall Boulevard  
Tigard, Oregon 97223

Subject: Fields: Wall Street Extension (CPA 2009-00004, SLR 2009-00004,  
SLR 2009-00005, VAR 2010-00002)

Dear Cheryl:

I am writing on behalf of the applicant to request that the City Council hearing in the above-captioned matter be continued to July 12. The purpose of this continuance request is to allow the Hearings Officer to make a decision on the Pivot Road option before the city takes further action on the original alignment.

Very truly yours,



Phillip E. Grillo

cc: Mr. Fred Fields

**AIS-521**

**Item #: 5.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** 10 Minutes

**Agenda Title:** Public Hearing (continued) for City of Tigard 2011 Economic Opportunities Analysis

**Submitted By:** Darren Wyss  
Community Development

**Item Type:** Ordinance  
Public Hearing - Legislative

**Meeting Type:**

Council Business  
Meeting - Main

---

**ISSUE**

Shall Council approve the Planning Commission's recommendation (CPA2011-00002) to adopt the Tigard 2011 Economic Opportunities Analysis and amend the Tigard Comprehensive Plan Goal 9: Economic Development and the Tigard Comprehensive Plan Glossary?

**STAFF RECOMMENDATION / ACTION REQUEST**

Staff recommends approval, with minor amendments, of the Planning Commission's recommendation (CPA2011-00002) to adopt the Tigard 2011 Economic Opportunities Analysis and amend the Tigard Comprehensive Plan Goal 9: Economic Development and the Tigard Comprehensive Plan Glossary.

**KEY FACTS AND INFORMATION SUMMARY**

The City of Tigard conducted an Economic Opportunities Analysis (EOA) as part of state required Periodic Review of its Comprehensive Plan. The completion of an EOA is a specific task in Tigard's Periodic Review work program. Tigard received grant funds from the Department of Land Conservation and Development (DLCD) for consultant assistance to complete this task.

The EOA was developed in compliance with OAR 660, Division 9 (Goal 9), and is a technical study that compares the projected demand for industrial and other employment land to existing land supply. The process helps communities implement their local economic development objectives and informs implementation of economic development policies in the Comprehensive Plan.

The Planning Commission acted as the advisory committee for the project, reviewing each task during the process to complete the EOA. The outcomes of the project include: 1) An understanding of the characteristics of Tigard's employment lands and their adequacy to accommodate future economic activity; 2) proposed economic development policies and action measures as a basis to plan for a supply of appropriately zoned land necessary for existing businesses to expand and to accommodate future economic activities.

The Planning Commission completed its final review of the staff proposed draft Tigard 2011 EOA at a public hearing on April 4, 2011 and voted unanimously to recommend its adoption along with amendments to Tigard's Comprehensive Plan Goal 9: Economic Development and Tigard Comprehensive Plan Glossary. The "land efficient" need scenario was recommended as appropriate for Tigard. This scenario would not require any rezoning of vacant property at this time.

CPA2011-00002 also intended to adopt an expanded Tigard Town Center boundary by amending the definitions in the Tigard Comprehensive Plan Glossary and referring to maps maintained by Metro. This approach was discussed with Metro before including it in the staff proposal. Prior to the Planning Commission hearing, the Oregon Department of Transportation submitted a letter (see Exhibit C) questioning the validity of this approach. The Planning Commission found the content and purpose of the Tigard 2011 EOA and its compliance with OAR 660, Division 9 is not affected by whether this approach to modifying the Town Center boundary is valid. The Commission found the decision on the expanded boundary lies with Metro and suggested that staff secure a letter from Metro clarifying its position. Since the hearing, Metro provided a letter (see Exhibit C) indicating that this

approach is not sufficient.

Council, at its May 10, 2011 public hearing, directed staff to return with modified definitions that eliminate the reference to Metro Title 6 maps (see Exhibit C) and continued the public hearing.

## **OTHER ALTERNATIVES**

- 1) Adopt the Tigard 2011 EOA and Comprehensive Plan amendments as recommended by Planning Commission
- 2) Not adopt the Tigard 2011 EOA or Comprehensive Plan amendments and remand one or both back to the Planning Commission for additional work

## **COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

1. Implement Comprehensive Plan
2. Implement Downtown and Town Center Redevelopment Opportunities

## **DATES OF PREVIOUS COUNCIL CONSIDERATION**

August 8, 2010 - Periodic Review Update  
February 15, 2011 - Economic Opportunities Analysis Briefing  
March 22, 2011 - Economic Opportunities Analysis Briefing  
May 10, 2011 - CPA2011-00002 Public Hearing (continued)

---

### **Fiscal Impact**

**Cost:** See Below

**Budgeted (yes or no):** Yes

**Where Budgeted (department/program):** CD Dept.

#### **Additional Fiscal Notes:**

Approval of the Tigard 2011 Economic Opportunities Analysis does not have a direct cost to Tigard.

The cost of performing the analysis is budgeted in the Community Development Department. The Oregon Department of Land Conservation and Development committed \$35,000 from its Periodic Review Grant program to fund an Economic Opportunities Analysis. The City hired Cogan Owens Cogan to perform the work. The City is not required to provide matching funds, but provides in-kind contributions of staff time and materials to aid in completing the project.

---

### **Attachments**

[Attachment 1: Planning Commission Transmittal Memo](#)

[Attachment 2 - Ordinance](#)

[Exhibit A: Tigard 2011 EOA](#)

[Exhibit B: Comp Plan Amendments](#)

[Exhibit C: Staff Report and Findings](#)

[Planning Commission Minutes](#)



## City of Tigard Memorandum

---

**To:** Mayor Dirksen and City Council

**From:** David Walsh, President, Tigard Planning Commission

**Re:** Planning Commission Recommendation - CPA2011-00002

**Date:** April 25, 2011

On Monday, April 4, 2011, the Tigard Planning Commission held a public hearing on the Tigard 2011 Economic Opportunities Analysis (CPA2011-00002), a city periodic review task, and made an unanimous recommendation that the Tigard City Council:

1. Adopt the Tigard 2011 Economic Opportunities Analysis as a component of Tigard Comprehensive Plan Goal 9: Economic Development;
2. Amend the current Tigard Comprehensive Plan Goal 9: Economic Development goals, policies, and recommended action measures; and
3. Amend Tigard Comprehensive Plan Glossary.

The Commission acted as the advisory committee during the development of the EOA; reviewing and providing direction during a series of seven meetings. This thorough review, along with the professional assistance provided by the periodic review grant funds, allowed the Commission to formulate an EOA that not only met the requirements of statewide planning goal 9, but the specific needs of the community. This includes an acknowledgement of the importance of the redevelopment of underutilized employment and industrial lands, the efficient use of vacant lands, and some actions that could be undertaken to improve the economic climate in Tigard.

The Commission feels two particular recommended actions deserve some immediate consideration, but also understands the budgetary implications. These include: 1) monitoring local and regional development initiatives; and 2) explore an economic development marketing and incentives program targeting strategic business clusters. The Commission is interested in a continued dialogue on these recommended actions.

The lone controversial component of CPA2011-00002 was whether definitions in the glossary would suffice for adopting an expanded Tigard town center boundary. The Commission found this immaterial to the adoption and effectiveness of the EOA, which is the focus of the periodic review work task. Ultimately, the boundary decision lies with Metro and the definitions are valid either way.

The Commission enjoyed the process to develop the Tigard 2011 Economic Opportunities Analysis and feels it will serve the community well.

CITY OF TIGARD, OREGON  
TIGARD CITY COUNCIL  
ORDINANCE NO. 11-\_\_\_\_\_

---

AN ORDINANCE ADOPTING COMPREHENSIVE PLAN AMENDMENT CPA 2011-00002 TO ADOPT THE TIGARD 2011 ECONOMIC OPPORTUNITIES ANALYSIS AND AMEND CURRENT TIGARD COMPREHENSIVE PLAN GOAL 9: ECONOMIC DEVELOPMENT AND AMEND TIGARD COMPREHENSIVE PLAN GLOSSARY.

WHEREAS, Oregon Administrative Rule 660 Division 9 requires cities under State Periodic Review to complete an economic opportunities analysis; and

WHEREAS, the city of Tigard is under State Periodic Review order; and

WHEREAS, the Tigard City Council directed staff to complete an economic opportunities analysis to comply with Oregon Administrative Rule 660 Division 9; and

WHEREAS, the city of Tigard was awarded grant monies from the Oregon Department of Land Conservation and Development to fund the Tigard 2011 Economic Opportunities Analysis, which required the inclusion of specific elements; and

WHEREAS, the Tigard 2011 Economic Opportunities Analysis is consistent with Oregon Administrative Rule 660 Division 9; and

WHEREAS, the city has proposed an amendment to the Tigard Comprehensive Plan by updating Goals, Policies, and Recommended Action Measures corresponding to Statewide Planning Goal 9 and updating the Tigard Comprehensive Plan Glossary; and

WHEREAS, the Tigard Planning Commission held a public hearing, which was noticed in accordance with city standards, on April 4, 2011, and recommended approval of the proposed CPA 2011-00002 by motion and with unanimous vote in support; and

WHEREAS, on May 10, 2011, the Tigard City Council held a public hearing, which was noticed in accordance with city standards, to consider the Commission's recommendation on CPA 2011-00002, and at this meeting Council received public testimony, closed the public hearing and continued its deliberations to May 24, 2011; and

WHEREAS, on May 24, 2011, the Tigard City Council held a public hearing to deliberate on CPA 2011-00002 and apply applicable decision-making criteria; and

WHEREAS, on May 24, 2011, the Tigard City Council adopted CPA 2011-00002 by motion, as amended pursuant to the public hearing and its deliberations; and

WHEREAS, Council's decision to adopt CPA 2011-00002 was based on the findings and conclusions found in Exhibit "C" and the associated land use record which is incorporated herein by reference and is contained in land use file CPA 2011-00002.

ORDINANCE No. 11-

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: Tigard City Council adopts the Tigard 2011 Economic Opportunities Analysis (Exhibit "A") as a component of Tigard Comprehensive Plan Goal 9: Economic Development.

SECTION 2: Tigard Comprehensive Plan is amended to include new text and rescind existing text as shown in Exhibit "B".

SECTION 3: Tigard City Council adopts the findings and conclusions contained in Exhibit "C" in support of the Council's action and to be the legislative basis for this ordinance.

SECTION 4: This ordinance shall be effective 30 days after its passage by the Council, signature by the Mayor, and posting by the City Recorder.

PASSED: By \_\_\_\_\_ vote of all Council members present after being read by number and title only, this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
Carol A. Krager, Deputy City Recorder

APPROVED: By Tigard City Council this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
Craig Dirksen, Mayor

Approved as to form:

\_\_\_\_\_  
City Attorney

**City of Tigard**  
**2011 Economic Opportunities Analysis**  
*Planning Commission Recommended Draft*

**Prepared By**

**Cogan Owens Cogan, LLC**  
**FCS GROUP**

# ACKNOWLEDGEMENTS

## **Tigard City Council**

Craig Dirksen, Mayor  
Gretchen Buehner, Council President  
Marland Henderson  
Nick Wilson  
Mark Woodard

## **Tigard Planning Commission/Advisory Committee**

David Walsh, President  
Tom Anderson, Vice President  
Margaret Doherty  
Stuart Hasman  
Matthew Muldoon  
Karen Ryan  
Jason Rogers  
Donald Schmidt  
Richard Shavey

## **Cogan Owens Cogan, LLC**

Kirstin Greene, AICP, Managing Principal  
Steve Faust, AICP, Senior Planner  
Ellie Fiore, AICP, Senior Planner

## **FCS Group**

Todd Chase, AICP, Senior Economist

## **City of Tigard Staff**

Ron Bunch, Community Development Director  
Susan Hartnett, AICP, Assistant Community Development Director  
Craig Prosser, City Manager  
Darren Wyss, Senior Planner and Project Manager  
Sean Farrelly, Redevelopment Project Manager

# TABLE OF CONTENTS

Executive Summary – i

Introduction – 1

Economic Development Vision and Goals – 1

Economic Trends Analysis – 2

*Business Clusters Analysis – 9*

*Targeted Business Clusters – 12*

Site Suitability Analysis (Land Demand) – 13

Inventory of Suitable Sites (Land Supply) – 16

*Short-Term Land Supply Determination – 18*

Assessment of Potential (Reconciliation of Demand and Supply) – 19

*Short-Term Land Need Determination – 19*

*Long-Term Land Need Determination – 19*

*Planning, Market, Cost and Risk Factors - 21*

Implementation Policies and Action Measures – 22

*Policies – 22*

*Recommended Action Measures – 23*

## Appendices

A. Office Leasing Activity Summary, Mid-Year Report – 26

B. Industrial Leasing Activity, Mid-Year 2010 Report – 27

C. Analysis of Employment and Space Needs – 28

D. Analysis of Retail Inflow/Outflow – 32

E. Summary of Tigard Employment Zones and Regulations – 33

F. Typical Site Requirements for Development Types – 37

G. Buildable Land Inventory – 38

H. Redevelopment Land Inventory – 39

I. Summary of Stakeholder Interviews – 40

J. Map of Buildable Lands and Redevelopment/Refill Potential – 44

## **Executive Summary**

The City of Tigard has conducted an Economic Opportunities Analysis (EOA) as required by its Periodic Review work program to update its Comprehensive Plan. The City received grant funds from the Department of Land Conservation and Development (DLCD) for technical consultant assistance to complete this task. The EOA was developed in compliance with OAR 660 Division 9 (Statewide Planning Goal 9: Economic Development). The EOA is in-part a technically-based study that compares projected demand for land for industrial and other employment uses to the existing supply of such land. At the same time, it provides economic development policies and actions consistent with emerging economic opportunities, market trends, and local vision

### **Vision and Goals**

In March 2008, as part of a robust public process, the City of Tigard updated the Economic Development chapter of its Comprehensive Plan. The chapter included the City's vision and goals for economic development to read:

#### Vision

The City shall have a strong and resilient local economy with a diverse portfolio of economic activity: retail, professional service and industrial jobs.

#### Goals

1. Develop and maintain a strong, diversified and sustainable local economy.
2. Make Tigard a center and incubator for innovative businesses including those that focus on environmental sustainability.
3. Make Tigard a prosperous and desirable place to live and do business.

### **Demographic and Employment Trends**

Tigard has been increasing in population at a slower rate (1.3%) than Washington County, but above Oregon and national growth rates. Tigard population is estimated to be 47,460 as of 2009, up from 42,260 residents in 2000. Tigard currently is relatively "jobs rich" with a positive ratio of 2.3 jobs per household, which is well above the tri-county Metro regional average of 1.5 jobs per household. This is understandable given Tigard's concentration of regional employment centers, including Washington Square Mall, the "Tigard Triangle" employment area near the confluence of I-5/Hwy. 217, and pockets of industrial uses along the Hwy. 217 corridor.

Tigard also is home to a number of large retail employers at Washington Square Mall as well as several large high-tech manufacturing, construction contractors, professional, business operations, and state and local government operations. Regional commercial and industrial real estate brokers see Tigard as a well-defined submarket within the suburban Metro region. Tigard's office market is especially competitive within the inner southwest portion of the region. Additionally, various efforts are underway to make the Downtown Tigard area a more viable place to live and work.

### **Target Industries**

In line with Tigard's vision and goals, and in consultation with the City Planning Commission, the consultant team and City staff recommend that the City focus on retaining and attracting a mix of existing and emerging business clusters that pay above average wages. This includes existing, established clusters such as:

- Durable goods manufacturing (includes metals and machinery)
- Education (private and non-profits)

- Financial services
- Information (including software development)
- Professional and technical services
- Wholesale trade

They also recommend that the City focus on emerging clusters, including health care and advanced technology (i.e., green energy) manufacturing and research operations.

### Tigard’s Land Demand and Supply

The consulting team prepared a range of land need forecasts including: efficient, medium, and high land needs scenarios. These scenarios all take into account the Metro employment forecasts, but assume varying levels of industrial development and redevelopment.

As summarized in the table below, the land efficient need scenario assumes 48 acres of net new industrial vacant land demand, which is just below the estimated vacant industrial land supply of 50 acres. If the City chooses to pursue a more aggressive economic growth strategy that is consistent with the moderate or high land need scenario, the City would need to identify another 14 to 30 acres of vacant industrial land area to meet the level of industrial demand associated with adding another 1,059 to 1,324 industrial jobs.

### 20-Year Industrial Demand Forecast and Vacant Land Supply, Tigard USB

Land Demand and Supply	Efficient Land Need Scenario	Moderate Land Need Scenario	High Land Need Scenario
Demand for Vacant Industrial Land	48	64	80
Supply of Vacant Industrial Land	50	50	50
Land Surplus or (Deficit)	2	(14)	(30)

Preliminary Parcel Distribution, Efficient Land Need Forecast <sup>1</sup>	Existing Unconstrained Supply (tax lots)	Forecast of Parcel Size Demand (tax lots) <sup>1/</sup>	Surplus (tax lots)
Less than 1 acre	12	10	2
1 to 5 acres	5	5	0
5 to 10 acres	0	0	0
10 to 20 acres	2	2	0
20+ acres	0	0	0
Total	19	17	2

Notes: <sup>1</sup> Tax lot demand forecast expected to meet or exceed supply in 20 years.

Source: Based on findings included in demand and supply analysis.

As shown in the table below, the land efficient needs scenario assumes 78 acres of net new commercial and mixed-use vacant land demand, which is just below the estimated vacant land supply of 86 acres. As with the industrial land needs, an economic growth strategy that is consistent with the moderate or

high land needs scenario would require the City to identify an additional 19 to 45 acres of vacant commercial and mixed-use land to meet the demand.

**Reconciliation of Long-term Land Demand and Supply Commercial and Mixed Use 20-Year Land Use Forecast (gross buildable acres), Tigard USB**

<b>Land Demand and Supply</b>	<b>Efficient Land Need Scenario</b>	<b>Medium Land Need Scenario</b>	<b>High Land Need Scenario</b>
Demand for Vacant Commercial Land	78	105	131
<i>Commercial Demand</i>	51	68	85
<i>Mixed-Use Demand</i>	27	36	45
Supply of Vacant Commercial Land	86	86	86
<i>Commercial Zoned Supply</i>	46	46	46
<i>Mixed-Use Zoned Supply</i>	40	40	40
Land Surplus or (Deficit)	8	(19)	(45)
<b>Preliminary Parcel Distribution, Efficient Need Forecast</b>	<b>Existing Supply (tax lots)</b>	<b>Forecast of Demand (tax lots)</b>	<b>Surplus (tax lots)</b>
Less Than 1 acre	89	30	59
1 to 5 acres	14	14	0
5 to 10 acres	3	3	0
10 to 20 acres	0	0	0
20+ acres	0	0	0
<b>Total</b>	<b>106</b>	<b>47</b>	<b>59</b>

Source: FCS GROUP, based on findings included in demand and supply analysis.

**Recommendations**

In accordance with the proposed vision and goals, the consulting team and City staff recommends the City pursue the “efficient land need scenario”. The implications of this recommendation are that the City will focus a significant portion of future employment growth and high-density housing development in its Metro-designated Town Center (Downtown); Regional Center (Washington Square); High Capacity Transit Corridor (Hwy 99W); and the Tigard Triangle.

More detailed information on employment trends and projections, and land needs and supply is found throughout the remainder of the document.

## **INTRODUCTION**

The City of Tigard has conducted an Economic Opportunities Analysis (EOA) as required by its Periodic Review work program. The City received grant funds from the Department of Land Conservation and Development (DLCD) for technical consultant assistance to complete this task. The EOA was developed in compliance with OAR 660 Division 9 (Statewide Planning Goal 9: Economic Development) and is a technical study that compares projected demand for land for industrial and other employment uses to the existing supply of such land.

The purpose of the EOA is to improve opportunities for Tigard to attract and maintain the type and quality of employment desired by its citizens, grow its economy, and maintain its quality of life. Goal 9 emphasizes the preservation and protection of vacant land for industrial and employment uses. This will happen by adopting policies that ensure an adequate supply of industrial and other employment lands within the City of Tigard.

The Tigard Planning Commission acted as the advisory committee for the project, reviewing each task during the process to complete the EOA. The anticipated outcomes of the project are:

1. An understanding of the characteristics of Tigard's employment lands and their adequacy to accommodate future economic activity;
2. Updated economic development policies and action measures as a basis to plan for a supply of appropriately zoned land necessary for existing businesses to expand and to accommodate future economic activities.

The six tasks reviewed by the Planning Commission included:

1. Economic Development Vision and Goals
2. Economic Trends Analysis
3. Site Suitability Analysis (Land Demand)
4. Inventory of Suitable Sites (Land Supply)
5. Assessment of Potential (Reconciliation of Demand and Supply)
6. Implementation Policies and Action Measures

The process and findings of these tasks are outlined in detail throughout the remainder of the EOA. This includes examining key demographic and employment opportunities and trends to assess Tigard's economic development potential, projecting employment growth, and determining short- and long-term demand for employment land. This demand is compared to an inventory of suitable commercial and industrial properties (supply) to assess the sufficiency of immediate and longer term (20-year) supply of commercial and industrial employment land in the City's Urban Planning Area (UPA). Finally, economic development policies and action measures are recommended for inclusion in the Tigard Comprehensive Plan.

## **ECONOMIC DEVELOPMENT VISION AND GOALS**

In March 2008, as part of a robust public process, the City of Tigard updated the Economic Development chapter of its Comprehensive Plan. The chapter included the City's vision and goals for economic development:

## **Vision**

The City shall have a strong and resilient local economy with a diverse portfolio of economic activity: retail, professional service and industrial jobs.

## **Goals**

1. Develop and maintain a strong, diversified and sustainable local economy.
2. Make Tigard a center and incubator for innovative businesses including those that focus on environmental sustainability.
3. Make Tigard a prosperous and desirable place to live and do business.

## **Community Economic Development Objectives**

Community Economic Development Objectives were developed through interviews with City staff and a review of Tigard's economic development vision, goals and recommended action measures. These objectives were refined based on comments from the Planning Commission and the results of interviews with key stakeholders, including state and regional agencies, the Chamber of Commerce, Tigard Central Business District Association, and local employers and developers.

- Encourage businesses that provide family-wage jobs to start-up, expand, or locate in Tigard.
- Develop industry clusters, and preserve jobs, through the retention, expansion, and recruitment of industries that already have a presence in Tigard.
- Promote well-designed and efficient development and redevelopment of vacant and underutilized industrial and commercial lands.
- Ensure the City's land use and other regulatory practices are flexible and adaptive and that adequate public facilities and infrastructure exist to support a diverse and stable economic base.
- Focus significant employment growth in Tigard's designated centers and corridors and support the development of efficient regional multi-modal transportation systems.
- Limit the development of retail and service uses in Tigard's designated industrial areas to preserve the potential of these lands for industrial jobs. Support neighborhood commercial uses to meet smart growth goals.
- Encourage businesses that are environmentally and economically sustainable.

## **ECONOMIC TRENDS ANALYSIS**

The consultant team conducted an economic overview for the City of Tigard, including a review of national, state, regional, county, and local economic trend data and real estate market analysis of office, commercial retail, industrial, and public government space development for the Tigard Urban Service Boundary. The analysis focuses on the expected level of demand for new commercial, industrial, and public development and related gross buildable land needs over the next 20 years (2011-2031).

Both the U.S. and Oregon economies are currently mired in the aftermath of a national economic recession that began in December 2007. The current economic slowdown is now the longest on record since the Great Depression; however, some economic expansion is beginning to occur. According to the U.S. Bureau of Economic Analysis, real Gross Domestic Product (GDP is the measure of value of all goods and services in the U.S.) increased at an annual rate of 3.7 percent during the first quarter of 2010, and increased by 2.4 percent during the second quarter of 2010.

Consumers are still very cautious as unemployment rates remain high and high levels of home foreclosures continue. Oregon posted a year-over-year overall job loss of 16,000 jobs between June 2009 and June 2010. At the same time, the state’s unemployment rate decreased to 10.5 percent in June 2010, compared to 11.6 percent in June 2009. It should be noted that Oregon’s employment levels have declined over the past year in spite of the drop in unemployment rate. This trend likely reflects a decline in the number of people who are actively seeking employment.

The U.S. and Oregon economies are now poised for a slow economic recovery. The July 2010 survey of the National Association of Business Economists reported expectations of slow growth in GDP during the second half of 2010 in the U.S. as industry demand, profit margins, employment, capital spending and credit conditions improve.

Despite job losses, population levels continue to increase in both Oregon and Tigard due to population migration patterns, increases in immigrant population levels and natural population increases. As indicated in **Table 1**, according to the Portland State University Population Research Center, the population in Tigard increased to 47,460 residents in 2009, up from 42,260 residents in 2000. The average annual growth rate (AAGR) for population in Tigard was 1.3% between 2000 and 2009, which was below the level of population growth recorded for Washington County, but above the Oregon and national growth rates.

**Table 1. Population Trends, 2000 to 2009**

	2000	2009	Annual % Change 2000-2009
Tigard	42,260	47,460	1.3%
Washington County	449,250	527,140	1.8%
Oregon	3,421,399	3,823,465	1.2%
USA	282,171,957	307,006,550	0.9%

Source: Portland State University, Population Research Center.

Metro (the regional government) has prepared forecasts for households and employment for all local jurisdictions in the Metro Urban Growth Planning Area. The most recently adopted Metro growth forecasts are referred to as the Metroscope Generation 2.3 model, and include a forecast period from 2005 to 2030. FCS GROUP extrapolated the Metro forecasts to year 2035 using Metro’s forecasted growth rate from the 2005-2030. While Metro is currently in the process of preparing updated growth forecasts for the region, the Metroscope Generation 2.3 forecasts are being used for this EOA since they are the only set of officially adopted forecasts at this time. As indicated in **Table 2**, the 2005 to 2035 forecasts anticipate that Tigard will add approximately 3,185 households and 24,167 jobs over the 25-year period. The extrapolated 2035 Metro job forecasts shown in **Table 2** are provided for informational purpose only. In light of the recent national economic recession that caused severe declines in Oregon employment (from 2007 through 2010), Metro's 2030 job forecast for Tigard is assumed to be achieved by year 2035 under the "medium forecast" scenario used in the Tigard EOA.

As noted in **Table 2**, the Metro job growth forecasts reflect the fact that Tigard currently is relatively “jobs rich” with a positive ratio of 2.3 jobs per household, which is well above the tri-county Metro regional average of 1.5 jobs per household. This is no surprise given Tigard’s concentration of regional employment centers, including Washington Square Mall, the “Tigard Triangle” employment area near the confluence of I-5/Hwy. 217, and pockets of industrial uses along the Hwy. 217 corridor.

**Table 2. Metro Growth Forecasts for Households and Employment, 2005 to 2035**

	Households			Projected Change 2005-2035	Projected. Avg. Annual Change (%)
	2005	2030	2035		
Tigard	17,724	20,341	20,909	3,185	0.6%
Clackamas County	140,415	241,821	269,594	129,179	2.2%
Multnomah County	288,926	372,913	392,439	103,513	1.0%
Washington County	189,925	272,998	293,545	103,620	1.5%
<i>Total 3 County Region</i>	<i>619,266</i>	<i>887,732</i>	<i>955,578</i>	<i>336,312</i>	<i>1.5%</i>
	Employment*			Projected. Change 2005-2035	Avg. Annual Change (%)
	2005	2030	2035		
Tigard	41,308	60,637	65,475	24,167	1.5%
Clackamas County	145,581	251,286	280,273	134,692	2.2%
Multnomah County	493,671	705,721	758,005	264,334	1.4%
Washington County	269,660	450,970	499,820	230,160	2.1%
<i>Total 3 County Region</i>	<i>908,912</i>	<i>1,407,977</i>	<i>1,538,098</i>	<i>629,186</i>	<i>1.8%</i>
	Jobs Per Household Ratio			Projected. Tigard Capture of Region HHs	Projected Tigard Capture of Region Jobs
	2005	2030	2035		
Tigard	2.3	3.0	3.1	0.9%	3.8%
Clackamas County	1.0	1.0	1.0	N/A	N/A
Multnomah County	1.7	1.9	1.9	N/A	N/A
Washington County	1.4	1.7	1.7	N/A	N/A
<i>Total 3 County Region</i>	<i>1.5</i>	<i>1.6</i>	<i>1.6</i>	<i>N/A</i>	<i>N/A</i>

Source: Metro adopted housing and employment growth forecasts, 2007; Metroscope Gen. 2.3; extrapolated to 2035 by FCS GROUP.

\*The extrapolated 2035 Metro job forecasts shown in Table 2 are provided for informational purpose only. In light of the recent national economic recession that caused severe declines in Oregon employment (from 2007 through 2010), Metro's 2030 job forecast for Tigard is assumed to be achieved by year 2035 under the "medium forecast" scenario used in the Tigard EOA.

Washington Square Mall already functions as a regional commercial center that draws shoppers and patrons from over a 30-mile radius. With 1,458,734 square feet (sf) of retail and entertainment space, the mall has five anchor stores including JC Penny, Macy's, Nordstrom, Sears, and Dick's Sporting Goods and 170 specialty stores. The mall added 28 new stores and restaurants in 2005, along with a new multi-level parking structure.

In addition to large retail employers, Tigard is also home to several large high-tech manufacturing, construction contractors, professional, business operations and state and local government operations. **Table 3** provides a list of Tigard employers with more than 250 jobs per establishment.

**Table 3. Large Employers in Tigard with More Than 250 Employees, 2008**

Firm Name	Specialty	Employment Range
Nordstrom	Retail/Gen. Merchandise	500 – 999
Tigard-Tualatin School District	Local Government	500 – 999
AEROTEK, Inc.	Temp. Emp. Agency	250 – 499
City of Tigard	Local Government	250 – 499
COSTCO Corp.	Retail. Merchandise	250 – 499
Health Net Health Plan of Oregon	Health Insurance Carrier	250 – 499
JC Penny	Retail Merchandise	250 – 499
MACYS	Retail Merchandise	250 – 499
Performance Contracting, Inc.	Industrial Contractors	250 – 499
PERS Headquarters	Pension Fund Mgmt.	250 – 499
Remedy Intelligent Staffing, Inc.	Temp. Emp. Agency	250 – 499
Rockwell Collins Aerospace	Aero. & Tech. Part Mfg.	250 – 499
STARPLEX Corp.	Temp. Emp. Agency	250 – 499
Western Patricians, Inc.	Bldg. Interior Contractors	250 – 499

Source: Oregon Employment Department.

According to regional commercial and industrial real estate brokers, Tigard is a well-defined submarket within the suburban Metro region. Tigard’s office market is especially competitive within the inner southwest portion of the region, with businesses considering locations among several areas including Tigard; 217 Corridor/Beaverton; Kruse Way; Barbur Blvd/Capitol Hwy; Tualatin and Wilsonville.

Recent office leasing market statistics indicate that office vacancy rates in the Metro region have been increasing since 2008 as many businesses have shed jobs and scaled back on required space needs. As indicated in **Appendix A**, negative absorption levels have been occurring during the first six months of the year, particularly in Class A Office space, where Tigard experienced a net loss of 13,097 sf during the first half of this year. As of July 1, 2010 Tigard had total Class A vacancy rates of 151,900 sf and another 66,000 sf in vacant Class B and C space.

Tigard’s Class B inventory has experienced positive absorption this year, with 12,800 sf of net absorption. Since July 2010, Tigard has recorded several positive lease transactions, which rank among the largest in the region, such as Bridgewell Resources (32,088 gsf); Comsys into the Lincoln Center; State Farm Mutual Insurance (23,712 gsf) into Fanno Creek Place; and CAN Insurance (17,843 gsf) into the Pacific Parkway Center.

Industrial leasing activity and vacancy rates were also significantly impacted by the recent economic recession. As indicated in **Appendix B**, Tigard had approximately 170,000 sf of vacant flex space (13.4% vacancy rate), and 339,000 sf of vacant warehouse space (7.7% vacancy rate) as of July 1, 2010.

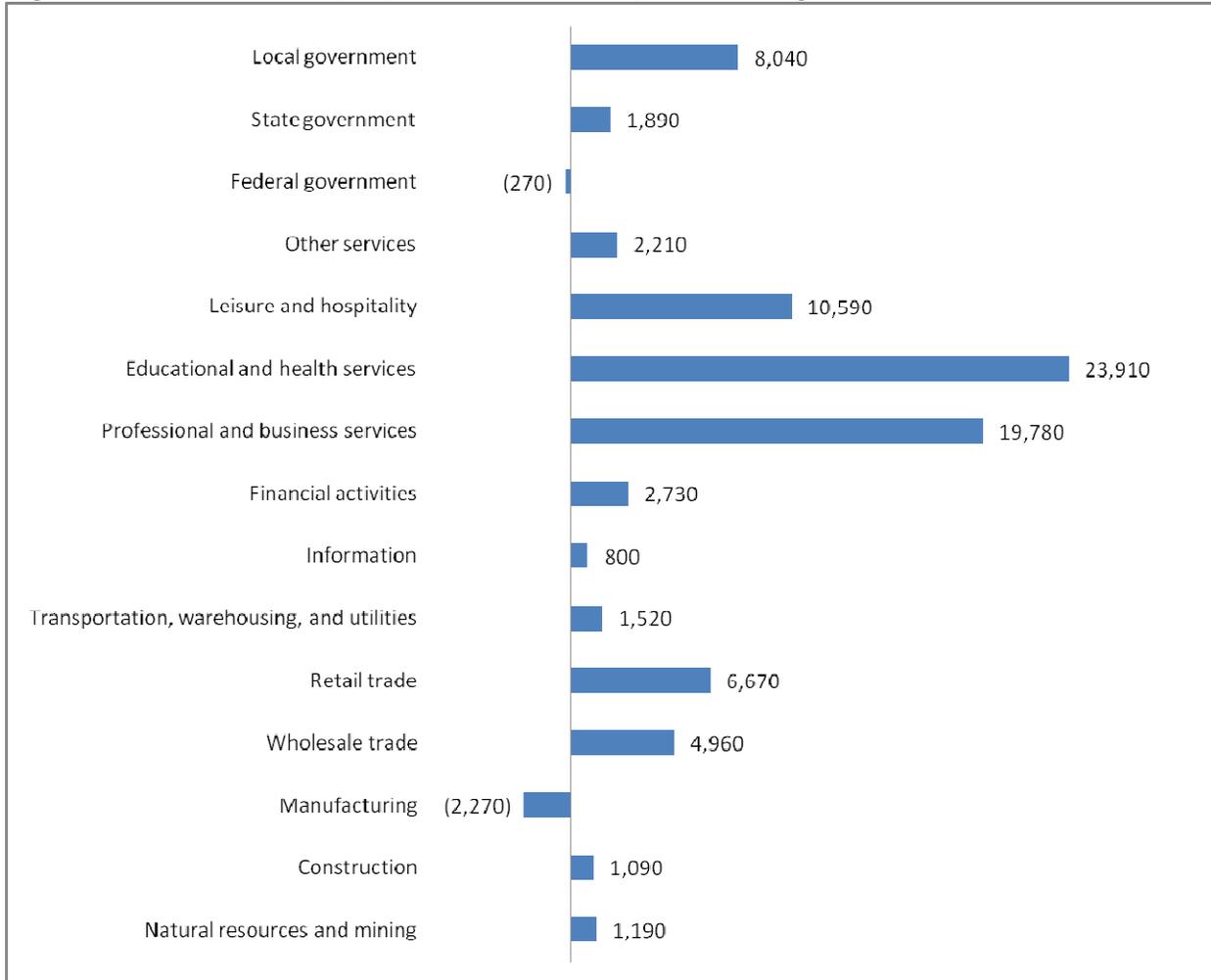
Overall industrial lease rates in the Tigard submarket averaged \$7.68 per sf/year, and were among the highest in the Metro suburbs.

The City of Tigard and the Oregon Department of Transportation (ODOT) are taking steps to enhance the Downtown Tigard area to make it a more viable place to live and work. At a cost of \$12 million, intersection improvements along Pacific Highway at Hall Blvd. and Greenburg Rd. are being paid for by ODOT, Washington County and the City of Tigard. This project is slated for completion by Spring 2011 and will include a third through-lane on the highway, turn lanes on side streets, an extended median, wider sidewalks, new bike lanes, improved pedestrian crossings, and wider corners for truck turning movements. This effort will also enhance access into and from Downtown Tigard.

Tigard's recently completed Downtown Plan is setting the regulatory stage and establishing a new vision for renovating downtown. The vision is intended to be a 50-year look at how the downtown could change into a "mixed-use urban village" with a wide range of housing and commercial opportunities that optimize natural features, such as Fanno Creek and Fanno Creek Park, transportation facilities, such as Pacific Hwy. and the Westside Express Commuter Rail system, and even light rail or bus rapid transit service to/from Portland.

To estimate future development potential for Tigard employment, FCS GROUP evaluated the 10-year employment growth forecasts prepared by the Oregon Employment Department for the Metro Tri-County region, and Metro growth forecasts for Tigard. As shown in **Figure 1**, the 10-year job growth forecasts for the Metro Tri-County Region portend a positive trend towards job growth for all industry sectors, except federal government and the manufacturing sector. The sectors that are expected to grow the fastest in the Tri-County Metro Region include: educational and health services; professional and business services; leisure and hospitality; local government; retail; and wholesale trade.

**Figure 1 Non-Farm Employment, Tri-County Metro Region, 2008-2018 Forecast**



Source: Oregon Employment Department includes Multnomah, Washington and Clackamas Counties.

To estimate future development potential for Tigard, FCS GROUP evaluated the 10-year employment growth forecasts prepared by the Oregon Employment Department as well as the extrapolated employment growth forecasts from Metro. In light of the recent national economic recession that caused severe declines in Oregon employment (from 2007 through 2010), Metro's 2030 job forecast for Tigard is assumed to be achieved by year 2035 under the "medium forecast" scenario.

As indicated in **Appendix C**, the 20-year job growth forecasts for Tigard indicate a more positive trend towards job growth for all industry sectors. According to Metro (and FCS GROUP interpretation of Metro data), the general sectors that are expected to grow the fastest in Tigard over the next 20 years include: services (+10,092 jobs); retail (+3,810 jobs), industrial/other (+1,324 jobs), and government (+882 jobs).

The job growth projections indicate that Tigard should expect to experience significant redevelopment opportunities over the next 20-years. A range in employment forecasts is provided to take into account current weak market conditions and national economic expectations that expect lower-rates of job growth over the next several years. As indicated in **Table 4**, there is a great level of uncertainty

regarding potential job growth for Tigard in light of weak regional and national employment growth predictions.

**Table 4. Forecasted 20-Year Employment Growth and Building Space Needs in Tigard**

<b>Employment Growth Forecast</b>	<b>Slow</b>	<b>Moderate</b>	<b>High</b>
Retail Trades	2,286	3,048	3,810
Services	6,055	8,073	10,092
Industrial/Other*	794	1,059	1,324
Government*	529	706	882
<b>Total</b>	<b>9,665</b>	<b>12,886</b>	<b>16,108</b>

Notes: See supporting analysis in Appendix C.

\*Metro employment growth forecasts for "Other" were allocated to 60% industrial/other and 40% government by FCS GROUP based on local observations and assumptions.

Tigard is expected to add between 9,665 and 16,108 new jobs over the next 20 years. As indicated in **Table 5**, this amount of employment growth translates into approximately 4.2 to 7.1 million of new or renovated building square footage (floor area).

**Table 5. Forecasted 20-Year Total Building Space Needs in Tigard for Employment**

<b>Employment Type</b>	<b>Slow</b>	<b>Moderate</b>	<b>High</b>
Office	1,499,000	1,998,000	2,497,000
Institutional	170,000	227,000	285,000
Flex/Business Park	451,000	602,000	752,000
General Industrial	257,000	342,000	428,000
Warehouse	374,000	499,000	624,000
Retail	1,498,000	1,997,000	2,497,000
<b>Total</b>	<b>4,249,000</b>	<b>5,665,000</b>	<b>7,083,000</b>

Notes: See supporting analysis in Appendix C.

Source: FCS GROUP.

A large portion of this demand will need to be met by redevelopment and utilization of vacant buildings since large vacant undeveloped tracts of land are becoming increasingly scarce. It is estimated that redevelopment and utilization of vacant buildings is expected to accommodate 70% of the retail space demand, 50% of the service/office demand, 40% of the industrial demand, and 40% of the government facilities demand.

**Table 6** shows the expected level of redevelopment and refill in the Tigard USB over the next 20 years. As the existing vacant land supply in Tigard gets developed, the level of redevelopment activity is expected to rise. Prime redevelopment locations in Tigard include Downtown and the Tigard Triangle, and future planned high capacity transit stations along Pacific Hwy. The City's Downtown Plan envisions 2,500 dwelling units and over one million square feet of commercial office and retail space being added over the next few decades.

**Table 6. Redevelopment and Refill Assumptions (2011 to 2031) Tigard USB**

<b>Employment Type</b>	<b>Slow</b>	<b>Moderate</b>	<b>High</b>
Office	1,004,000	1,339,000	1,673,000
Institutional	114,000	152,000	191,000
Flex/Business Park	203,000	271,000	338,000
General Industrial	116,000	154,000	193,000
Warehouse	168,000	225,000	281,000
Retail	899,000	1,198,000	1,498,000
<b>Total</b>	<b>2,504,000</b>	<b>3,339,000</b>	<b>4,174,000</b>

Source: FCS GROUP; derived from Appendix C, based primarily on Metro 2009-2035 Urban Growth Report (December 2009 draft) and local assumptions.

After accounting for the levels of redevelopment activity identified in **Table 6**, the amount of vacant land demand in Tigard for employment uses over the next 20-years is expected to range from 126 to 210 acres. Preliminary estimates for vacant lands needs in Tigard by general building type are provided in **Table 7**, and supporting assumptions are reflected in **Appendix D** and **Appendix E**.

**Table 7. Vacant Land Needs by General Land Use Zoning Classification (2011 to 2031)****Tigard USB (gross buildable acres)**

<b>Land Use Zoning Classification</b>	<b>Slow</b>	<b>Moderate</b>	<b>High</b>
Commercial	51	68	85
Mixed Use	27	36	45
Industrial	48	64	80
<b>Total</b>	<b>126</b>	<b>168</b>	<b>210</b>

Source: FCS GROUP; derived from Appendix C, based primarily on Metro 2009-2035 Urban Growth Report (December 2009 draft) and local assumptions.

To help validate these assumptions, FCS GROUP conducted an additional analysis of retail sales inflow/outflow within Tigard. The retail analysis provided in **Appendix D** indicates that the amount of local retail trade in Tigard over the next 20 years could support an additional 1.4 million square feet of redevelopment or new development activity, even if current levels of retail sales inflow were cut by 50%. Hence, it appears that the “slow” or “land efficient” vacant land demand scenario is the best match with respect to the retail market potential for the Tigard USB.

The actual amount and timing of new development will vary from year to year. The wide range in development forecasts reflects current uncertainty regarding the region’s ability to retain and attract major employers, the City’s desire to stimulate redevelopment in downtown, and limited ability to accommodate new commercial and industrial development on vacant lands.

## Business Clusters Analysis

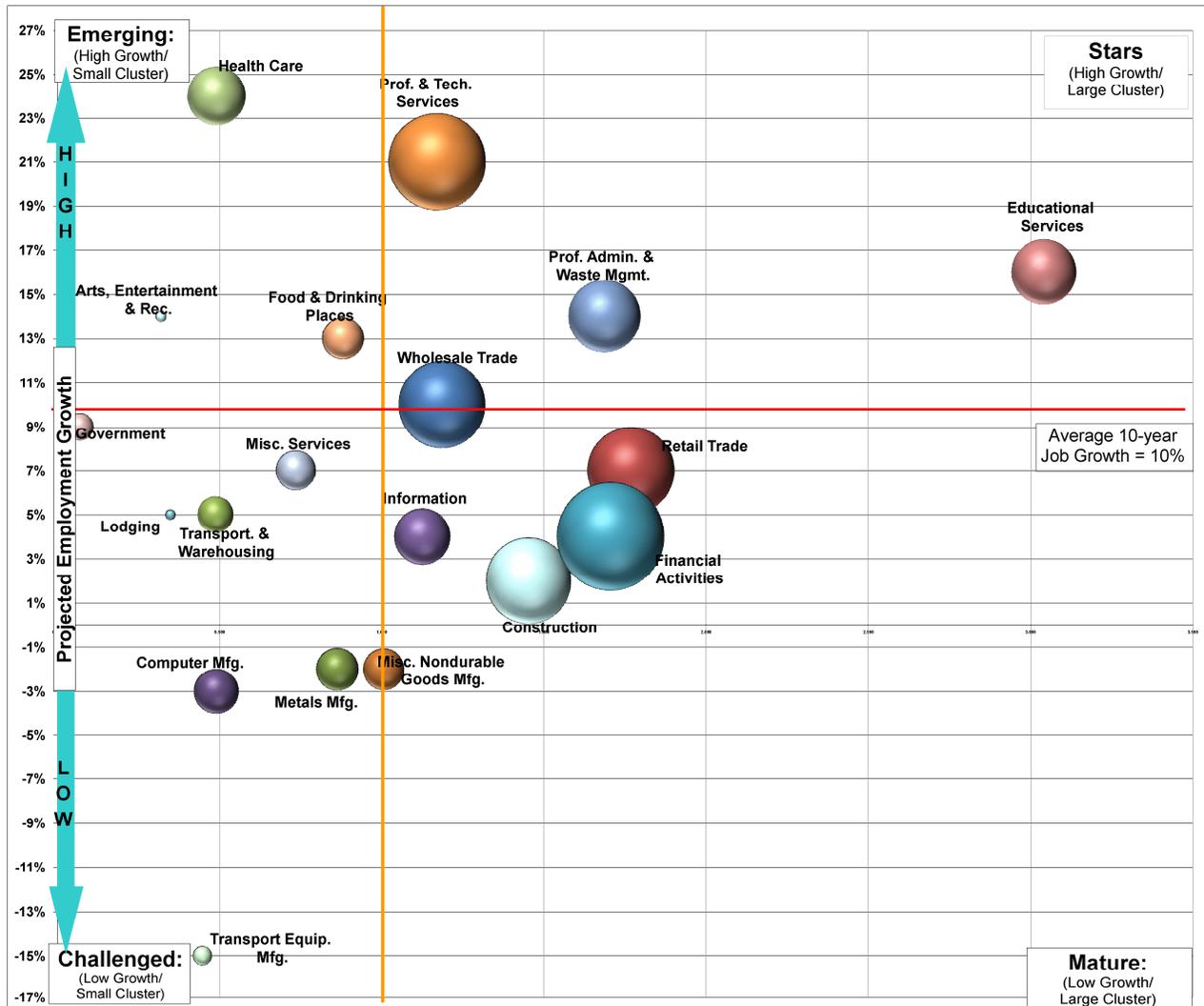
It is a widely accepted theory among economic development professionals that “business clusters” are the primary force driving local economic currents and business location decisions. Clusters of business activity go well beyond mere concentrations of industry or employment types. They represent unique competitive market advantages with regard to employment, work force, creativity, entrepreneurship, business costs, and supporting natural resources.

The clusters analysis prepared by FCS Group is intended to identify potential employment sectors that are most compatible with local economic policy objectives. The process entailed:

1. Obtaining Employment Security (ES202) wage and salary employment data from the Oregon Employment Department (OED) for the Tigard Urban Service Boundary (USB), Washington County, Multnomah County and Clackamas County (tri-county region) for the year 2008.
2. Conducting a location-quotient (LQ) analysis to evaluate business and industrial clusters in the Tigard UGB relative to the tri-county region.
3. Evaluating business clusters within the Tigard UGB with regard to the LQ, projected growth rates, economic size of each cluster, and average wage rates.
4. Classifying each business cluster with regard to one of four classifications, including:
  - I. STARS: Businesses with large LQ (propensity to locate in the Tigard USB) and higher than average projected growth rate compared to the tri-county region.
  - II. EMERGING: Businesses with small LQ and high average growth rate (possible pent up demand or competitive market disadvantage relative to other locations).
  - III. MATURE: Businesses with large LQ but lower than average growth rate.
  - IV. CHALLENGED: Businesses with small LQ and lower than average growth rate.

The business cluster analysis summarized in **Figure 2** identifies the business sectors within the Tigard USB by their LQ, size and growth potential. Each sector has been analyzed by their North American Industrial Classification System (NAICS) code. This code is used by the federal government to classify types of businesses for tax accounting and economic research purposes. The data was derived from the OED ES202 wage and salary employment statistics for the year ending in 2008.

**Figure 2**  
**Existing Business Clusters in Tigard USB, 2008**



Note: X-axis denotes the Location Quotient (LQ) average set at 1. All sectors to right of the yellow line have an LQ greater than 1; all sectors to the left of the yellow line have an LQ less than 1.  
 Source: Oregon Employment Department; data compiled by FCS GROUP.

The clusters analysis classifies the existing business sectors in the Tigard USB into four general categories:

**Industry Sectors with Large LQ/High Growth Potential (“Stars”)**

- Educational Services (private or non-profit)
- Professional and Technical Services
- Professional Administration and Waste Management Services
- Wholesale Trade

### **Industry Sectors with Small LQ/High Growth Potential (“Emerging”)**

- Health Care and Social Services
- Food Service and Drinking Places
- Arts, Entertainment and Recreation

### **Industry Sectors with Large LQ/Low Growth Potential (“Mature”)**

- Retail Trade
- Information Services
- Financial Activities and Services
- Construction
- Nondurable Goods Manufacturing

### **Industry Sectors with Small LQ/Low Growth Potential (“Challenged”)**

- Transportation, and Warehousing
- Miscellaneous Services
- Metals Manufacturing
- Computer Parts and Equipment Manufacturing
- Lodging
- Transportation Equipment Manufacturing
- Government

In addition to evaluating existing *local* business clusters, the City may also consider the expected *regional* growth in business sectors and emerging clusters. According to the Oregon Employment Department, the job sectors with the highest potential for new growth in the greater Portland metropolitan region include:

- Business administration and waste management
- Finance and insurance
- Health care
- Hotel/motel accommodations and food services
- Professional
- Retail trade
- Scientific and technical service (computer science, engineering)
- State and local government
- Transportation and utilities (warehousing, distribution and energy research, private utilities)
- Wholesale trade<sup>1</sup>

While manufacturing of durable goods does not make the list of the top growth sectors, there are certain subsectors within manufacturing that are growing faster than others. The manufacturing sectors with the greatest net new job growth potential in the greater Portland metropolitan region include: computer-related parts manufacturing, transportation equipment, other miscellaneous durable goods (such as solar panels), and miscellaneous non-durable goods (such as apparel research and design).

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<sup>1</sup> These emerging business clusters are documented in the Regional Wired Workforce Innovation and Regional Economic Development, Global Development Strategy, prepared by FCS GROUP et al, 2008.

The greater Portland metropolitan region is now considered an epicenter within the United States for sustainable technology. According to Global Insight, the greater Portland metropolitan region employs 6,700 people in “green jobs” which is more than Denver, Austin, Seattle and San Jose. The number of workers in green jobs (such as solar panel manufacturing, wind energy, bio energy research and manufacturing) is expected to increase to 53,000 over the next two decades. Portland General Electric and Pacific Power are ranked in the top three among the nation’s top utility companies for Green Energy sales, and the greater Portland region has more LEED-certified buildings than any other U.S. metropolitan area.

With the Portland metropolitan region, recent federal and state tax policies have helped spur major investments in green technology and energy by firms such as: SolarWorld, SunEdison, Vestas and Portland General Electric—creating a major new industrial cluster in clean technology. Additional investments in advanced manufacturing are being made by Intel, Flir Systems (producer of night vision and thermal imaging systems), Precision Castparts (maker of parts used in Vestas wind turbines, Boeing aircraft and other products), Genentech, and other firms. These are examples of manufacturing companies that are finding success within the greater Portland metropolitan region, even in challenging economic times.

Focused marketing and business recruitment efforts are being made by the State of Oregon and regional economic development stakeholders to attract certain established and emerging business clusters. The business and industry clusters that are currently being targeted by the Oregon Business Development Department, Portland Business Alliance and the Portland Development Commission include advanced manufacturing, clean technology (with sustainability sub-clusters in green building, solar & wind power), active wear/outdoor gear, and software.

## Targeted Business Clusters

According to its Community Economic Development Objectives, the City of Tigard may target businesses that generally offer above average wages and provide health care and retirement benefits that support families. According to the U.S. Bureau of Labor Statistics, the occupations that had the fastest growth and highest pay over the past 10 years nationally included: computer systems analysts, registered nurses, computer support specialists, teachers, social workers, college faculty, computer programmers, engineering sciences, police officers, securities and financial services, physicians, advertising, marketing, management analysts, electrical engineers, paralegals, writers/editors, commercial artists, medical and health service managers. It is interesting to note that almost two-thirds of the jobs filled in these fast growing occupations required some level of on-the-job training in addition to high school and a college degree.<sup>2</sup>

In light of these findings, the consultant team and City staff recommend that Tigard focus on retaining and attracting a mix of existing and emerging business clusters that pay above average wages. This includes existing, established clusters, such as durable goods manufacturing (includes metals and machinery), education (private and non-profits), financial services, information (including software development), professional and technical services, and wholesale trade. They also recommend that the City focus on emerging clusters, including health care and advanced technology (i.e., green energy) manufacturing and research operations. As indicated in **Table 8**, these recommended business clusters (with the exception of educational services) pay above average wage rates.

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<sup>2</sup> Based on findings contained in publications provided by JIST Works, including the Occupational Outlook Handbook, 2008-2009; and America's Fastest Growing Jobs by Michael Farr.

**Table 8. Summary of Existing Businesses in Tigard USB, 2008**

	Number of Entities	Average Employment	Average Annual Pay
Total Private	2,914	41,032	\$43,542
Natural resources and mining	6	21	\$38,742
Construction	272	3,329	\$56,080
Manufacturing	117	2,743	\$54,300
Durable goods	53	1,814	\$58,229
Metals and machinery manufacturing	36	897	\$51,425
Computer and electronic product mfg.	15	774	\$65,308
Transportation equipment manufacturing	2	143	\$62,594
Nondurable goods	64	929	\$46,628
Trade, transportation, and utilities	704	11,375	\$36,742
Wholesale trade	333	2,987	\$64,284
Retail trade	329	7,621	\$25,407
Transportation, warehousing, and utilities	42	767	\$42,114
Information	69	1,206	\$66,469
Financial services	405	5,037	\$58,459
Professional and business services	638	8,146	\$45,971
Professional and technical services	449	3,858	\$62,851
Administrative and waste services	189	4,288	\$30,784
Educational and health services	269	5,037	\$38,133
Educational services	55	2,912	\$36,384
Health care and social assistance	214	2,125	\$40,531
Leisure and hospitality	204	3,018	\$16,579
Arts, entertainment, and recreation	23	184	\$16,241
Accommodations and food services	181	2,834	\$16,601
Accommodations	10	131	\$20,072
Food services and drinking places	171	2,703	\$16,433
Other services	230	1,120	\$36,618
Government	5	390	\$49,275
Total	2,919	41,422	\$43,596

Notes: Shading indicates targeted business cluster.

Source: Oregon Employment Department, 2008. Average payroll reflects Washington and Multnomah counties.

## SITE SUITABILITY ANALYSIS (LAND DEMAND)

The majority of the targeted businesses that consider expanding or relocating into Tigard will consist of small business operations (less than 50 employees) that can locate within existing professional office or

industrial buildings, or within new office or flex/industrial buildings that are developed on vacant sites of less than five acres in size.

It is also likely that there will be larger potential business and high-tech industrial operations that consider Tigard as a potential location for new campus-style developments. Certain opportunities may emerge as regional businesses expand and desire to remain within the tri-county region. Other opportunities may occur as global and national businesses desire to establish a presence in the Pacific Northwest. In any event, it is likely that Tigard could attract three to four large professional service, health care, education, and/or high tech industrial businesses over the next 20 years.

As indicated in **Table 9**, Tigard is already home to 41 large private business operations (with between 70-250 employees). Tigard could continue to retain and attract large businesses if adequate sites are available. These types of large private operations usually require surplus adjacent land areas to accommodate future business expansion.

**Table 9. Existing Private Businesses by Size Class, Tigard USB, 2008**

Sector	Total Establishments		Large Establishments		Small/Medium Establishments	
	Number	Jobs	Number	Jobs	Number	Jobs
Natural resources and mining	6	21	--	--	6	21
Construction	272	3,329	4	571	268	2,758
Manufacturing	117	2,743	10	1,300	107	1,443
Durable goods	53	1,814	10	1,300	43	514
Nondurable goods	64	929	--	--	64	929
Trade, transport., utilities & communications	704	11,375	20	3,997	684	7,378
Wholesale trade	333	2,987	1	125	332	2,862
Retail trade	329	7,621	16	3,517	313	4,104
Transport., warehousing and communications	42	767	3	355	39	412
Information	69	1,206	2	376	67	830
Financial, professional & tech. services	1,043	13,183	4	1,426	1,039	11,757
Educational and health services	269	5,037	--	--	269	5,037
Educational services	55	2,912	--	--	55	2,912
Health care and social assistance	214	2,125	--	--	214	2,125
Leisure and hospitality	204	3,018	--	--	204	3,018
Arts, entertainment, and recreation	23	184	--	--	23	184
Accommodations and food services	181	2,834	--	--	181	2,834
Other services	230	1,120	1	99	229	1,021
<b>Total</b>	<b>2,914</b>	<b>41,032</b>	<b>41</b>	<b>7,769</b>	<b>2,873</b>	<b>33,263</b>

Notes: green shading indicates targeted business cluster.

Source: Oregon Employment Department, 2008. Note: large establishments are those with at least 70 employees.

The consultant/staff team recommends that Tigard provide a variety of small, medium and large vacant sites that meet the targeted business and industrial requirements. As indicated in **Table 10**, the existing businesses within Tigard can generally be grouped into three general land use categories: industrial, commercial and office.

**Table 10. Existing Private Businesses by Size Class and General Land Use or Building Type, Tigard USB, 2008**

Primary Land Use/Building Type	Total Entities		Large Entities <sup>4</sup>		Small/Medium Entities	
	Firms	Jobs	Firms	Jobs	Firms	Jobs
Industrial <sup>1</sup>	770	9,847	18	2,351	752	7,496
Commercial <sup>2</sup>	763	11,759	17	3,616	746	8,143
Office <sup>3</sup>	1,381	19,426	6	1,802	1,375	17,624
<b>Total</b>	<b>2,914</b>	<b>41,032</b>	<b>41</b>	<b>7,769</b>	<b>2,873</b>	<b>33,263</b>

Notes: <sup>1</sup> Reflects natural resources, construction, manufacturing, wholesale trade, transportation, warehousing, utilities, and communications sectors.

<sup>2</sup> Reflects retail trades, lodging, accommodations, and misc. service sectors.

<sup>3</sup> Reflects information, financial, professional and technical service, health care and educational service sectors.

<sup>4</sup> Large establishments reflect establishments with at least 70 employees.

Source: Oregon Employment Department, 2008. Compiled by FCS GROUP.

Most small and medium business establishments prefer to lease space in office or commercial buildings, and/or could locate into redevelopment sites in downtown or in selected redevelopment locations (e.g., near planned high capacity transit stations or within the Tigard Triangle). No special vacant land requirements are identified for future small or medium businesses. However, the City should pursue more proactive redevelopment strategies to accommodate small and medium sized businesses.

Larger business establishments that are included within the targeted business clusters will likely have minimum site size and infrastructure service requirements. Typical site requirements for the larger targeted business sectors are described in **Table 11** and described in more detail in **Appendix F**. Based on the site requirements described in **Table 11** and **Appendix F**, the recommended targeted business clusters will need sites ranging from one to twenty-five acres, with a majority of the need falling in the five to ten-acre range.

**Table 11. Typical Site Size Requirements for Targeted Business Types**

	<b>Small Users</b>	<b>Medium Users</b>	<b>Large Users</b>
	<i>Less than 50 jobs per business</i>	<i>50 to 70 jobs per business</i>	<i>70 to 200+ jobs per business</i>
Industrial <ul style="list-style-type: none"> <li>• Advanced Technology Manufacturing</li> <li>• Metals/Machinery Manufacturing</li> <li>• Wholesale Trade</li> </ul>	Building tenants or infill redevelopment sites in established industrial locations	4 to 6 acres per user  Prefers industrial or business park settings	6 to 20 acres per user  Prefers industrial or business park campus settings
Office <ul style="list-style-type: none"> <li>• Education</li> <li>• Professional and Technology. Services</li> <li>• Information</li> <li>• Financial Services</li> <li>• Health Care*</li> </ul>	Building tenants or infill redevelopment sites in town center, regional center, or transit station areas	1 to 2 acres per user  Prefers town center, corridors or transit station areas	2 to 4 acres per user*  Prefers business park campus setting with transit service
Retail	Not in Targeted Clusters		

*Notes: Assumes site development requirements shown in Appendix F.*

*\*Larger medical facility campus could require 15 to 30 acres.*

## **INVENTORY OF SUITABLE SITES (LAND SUPPLY)**

Consistent with the employment land demand forecast, the buildable land inventory (BLI) for the Tigard EOA documents industrial and commercial inventory that currently exists within the Tigard Urban Planning Area (UPA). This analysis documents existing land use inventories and compares industrial and commercial land use needs required for addressing the slow, moderate and high growth forecast scenarios.

### **Employment Land Inventory**

The Tigard EOA includes a recent buildable land inventory completed by the City of Tigard Planning staff using Geographic Information Systems (GIS) data that is consistent with the current Draft 2009-2035 Urban Growth Report (accepted by Metro Council in December 2009).

The City’s BLI included an analysis of existing vacant and partially vacant (sub-dividable) tax lots by current zoning classification and deducted all significant environmental constraints to estimate buildable land area within the Tigard USB. The land supply analysis focused on the land use classifications that support employment uses, including commercial, mixed-use, and industrial zones. The City has 10 commercial zones to account for a wide variety of uses ranging from retail to medical centers to mixed use centers. Tigard has three zones which accommodate industrial uses. Please refer to **Appendix E** for a detailed description of the allowed, conditional, and permitted uses within each of the City’s zone classifications.

The buildable land area for each tax lot was derived by analyzing GIS data pertaining to environmental features that would constrain the amount of potential site development on vacant and partially vacant areas. For purposes of this analysis, the environmental constraints were calculated for each site using

estimates for land area that is constrained by the following: Metro Title 3 designation (waterways, wetlands, riparian buffers, 100 year floodplain).

The vacant and partially vacant land inventory for the Tigard UPA includes 125 tax lots with a total buildable land area of 136.1 acres, as indicated in **Table 12**. Tigard’s vacant land supply primarily consists of small (less than one acre) tax lots and tax lots between one and five acres in size. As indicated in **Table 12**, the tax lots of less than five acres in size comprise 79.3 acres or nearly sixty percent of the total vacant land supply. The larger tax lots include three lots of five to ten acres (22.1 acres total), and two contiguous tax lots more than ten acres in size (34.7 acres total). Please refer to **Appendix G** for additional detail.

**Table 12. Distribution of Vacant and Part Vacant Lands by General Land Use Zone Classification, Tigard USB**

	Vacant and Partially Vacant Property									
	< 1 acre		1 to 5 acres		5 to 10 acres		> 10 acres		Total	
	Lots	Acres	Lots	Acres	Lots	Acres	Lots	Acres	Lots	Acres
Commercial	26	9.5	8	20.2	2	16.4	0	0	36	46.1
Mixed Use	63	25.3	6	8.9	1	5.7	0	0.0	70	39.9
Industrial	12	4.2	5	11.2	0	0.0	2	34.7	19	50.1
Total	101	39.0	19	40.3	3	22.1	2	34.7	125	136.1

Source: City of Tigard.

As mentioned in the Site Suitability Analysis, the recommended targeted business clusters will need sites ranging from one to twenty-five acres to expand or locate within the Tigard UPA, with a majority of the need falling in the five to ten-acre range. The City appears to have a range of sites available to accommodate the targeted business clusters. However redevelopment sites may be needed to accommodate development needing five to ten-acre parcels.

In light of the importance of redevelopment to the City’s ability to grow and diversify its economic base, the City and consultant team also evaluated the relative level of high, medium and low redevelopment potential for each developed tax lot in the Tigard UPA. While this is not a stated requirement within OAR 660, Division 9, it is considered an important factor in deciding which land use growth scenario to target.

The analysis of redevelopment opportunities is based on the ratio of assessed improvement value to land value for each tax lot using 2010 Washington County Assessor data. The results provided in **Table 13** indicate that there are significant amounts of high and moderate redevelopment potential within the Tigard USB. The redevelopment analysis identifies 169 tax lots with a total of 115.6 acres as having “high” redevelopment potential, and 180 tax lots with 166.6 acres as having “moderate” redevelopment potential.

**Table 13. Analysis of Redevelopment Tax Lots by General Land Use Zone Classification, Tigard USB**

City of Tigard Redevelopable Potential (Improvement to Land Value)*						
	High (< 0.33)		Moderate (0.33 to 1.00)		Low (> 1.00)	
	Lots	Acres	Lots	Acres	Lots	Acres
Commercial	19	7.2	31	17.8	199	299.8
Mixed Use	132	81.4	124	89.9	232	344.3
Industrial	18	27.0	25	58.8	146	437.9
Total	169	115.6	180	166.6	577	1,082.0

Notes: <sup>1</sup> Improvement to Land Value calculated from Washington County Tax Assessor data (Sept 2010).

<sup>2</sup> 196 Properties contained a zero Improvement or Land Value and are not represented here.

Source: City of Tigard.

### Short-Term Land Supply Determination

In addition to the long-term land supply, OAR 660-009-0005 also requires the identification of a short-term supply of land meaning “suitable land that is ready for construction within one year of an application of a building permit or request for a service extension.” OAR 660-009-0025 also requires that cities must provide “at least 25 percent of the total land supply within the urban growth boundary designated for industrial and other employment uses as short-term supply.”

In Tigard’s case, all of the land supply currently included within the Tigard UPA is deemed by the City to be within the short-term supply category. Hence, there are existing roads, water, sewer, and other infrastructure facilities that are sized appropriately to handle some level of new development on the remaining vacant tax lots.

One issue the City has been dealing with is that of highway capacity. This will continue to be an issue until a regional solution is found. This constraint was the cause of a maximum floor-to-area ratio of 0.4 being applied to the Tigard Triangle when a portion of it was rezoned to mixed-use employment. This severely limits the ability to maximize the development potential of available sites. It also causes proposed developments to provide mitigating measures when it is determined the increased vehicle trips will not meet ODOT performance measures. This can be financially constraining to a project if additional lanes, medians, or intersection improvements are required to be paid for by the development.

Additionally, the Transportation Planning Rule (OAR 660-12-0600) and related ODOT performance standards for the state highways have presented a barrier to Tigard achieving its aspirations. This includes amending existing zoning to allow higher density developments that are consistent with the Region 2040 land use designations. The TPR requires an amendment to an adopted plan not cause an affected roadway to fail to meet performance standards, or if the forecast roadway operations are already failing to meet performance standards, the plan amendment must not further degrade performance. This is a known issue in Downtown, Washington Square Regional Center, along Pacific Highway, and in the Tigard Triangle, and may also arise in other areas near state highways or freeway interchanges.

These issues are being addressed at the state and regional levels and could be somewhat mitigated as the City, Metro, and ODOT work to develop alternative performance standards through a corridor

refinement plan for Pacific Highway. The Pacific Highway corridor is also being studied for potential high-capacity transit service in the future. The presence of high-capacity transit could also alleviate some of the issues associated with ODOT performance measures by allowing new development to allocate additional trips to transit and reduce automobile trip demand. Strategies to promote transit-oriented development and address ODOT capacity issues are recommended as part of the implementation plan policies for the Tigard EOA.

## **ASSESSMENT OF POTENTIAL (RECONCILIATION OF DEMAND AND SUPPLY)**

### **Short-Term Land Need Determination**

Commercial and industrial properties appear to clearly meet the statutory requirements for short-term land supply, as all of the long-term land supply can be classified as short-term as well as long-term supply. Industrial and commercial properties appear to be well served with adequate infrastructure, and there is an abundant supply of vacant industrial, office and retail building floor area being actively marketed in the Tigard USB today.

### **Long-Term Land Need Determination**

Consistent with EOA documentation requirements, the economic trends analysis of land needs scenarios and the business clusters analysis indicates that the Tigard UPA can add approximately 794 net new industrial jobs without needing to add additional industrial-zoned land over the next 20 years. In light of current downward trends in industrial business activity, the land efficient need scenario appears to be most consistent with regional growth forecasts and anticipated market realities.

### **Industrial Land Need and Parcel Requirements**

As indicated in **Table 13**, the land efficient need scenario assumes 48 acres of net new industrial vacant land demand, which is just below the estimated vacant industrial land supply of 50 acres. If the City opts to pursue a more aggressive economic growth strategy that is consistent with the moderate or high land need scenario, the City would need to identify another 14 to 30 acres of vacant industrial land area to meet the level of industrial demand associated with adding another 1,059 to 1,324 industrial jobs.

In light of the City's rather limited remaining vacant industrial land supply of tax lots in excess of five acres, the consultant/staff team recommends that the City adopt economic goals and objectives that preserve the remaining large contiguous industrial sites for large industrial employment users. A preliminary expected forecast of demand by parcel size is also provided in **Table 14**, and assumes that virtually all of the remaining vacant industrial land supply within the Tigard UPA will be absorbed over the next 20 years.

**Table 14. 20-Year Industrial Demand Forecast and Vacant Land Supply, Tigard USB**

<b>Land Demand and Supply</b>	<b>Efficient Land Need Scenario</b>	<b>Moderate Land Need Scenario</b>	<b>High Land Need Scenario</b>
Demand for Vacant Industrial Land	48	64	80
Supply of Vacant Industrial Land	50	50	50
Land Surplus or (Deficit)	2	(14)	(30)
<b>Preliminary Parcel Distribution, Efficient Land Need Forecast <sup>1</sup></b>	<b>Existing Unconstrained Supply (tax lots)</b>	<b>Forecast of Parcel Size Demand (tax lots) <sup>1/</sup></b>	<b>Surplus (tax lots)</b>
Less than 1 acre	12	10	2
1 to 5 acres	5	5	0
5 to 10 acres	0	0	0
10 to 20 acres	2	2	0
20+ acres	0	0	0
<b>Total</b>	<b>19</b>	<b>17</b>	<b>2</b>

Notes: <sup>1</sup> Tax lot demand forecast expected to meet or exceed supply in 20 years.

Source: Based on findings included in demand and supply analysis.

### **Commercial Land Need and Parcel Requirements**

As indicated in **Table 15**, the land efficient needs scenario assumes 78 acres of net new commercial and mixed-use vacant land demand, which is just below the estimated vacant land supply of 86 acres. As with the industrial land needs, an economic growth strategy that is consistent with the moderate or high land needs scenario would require the City to identify an additional 19 to 45 acres of vacant commercial and mixed-use land to meet the demand. .

In light of the City’s rather limited remaining vacant commercial and mixed-use land supply of lots in excess of five acres, the consultant/staff team recommends that the City adopt economic goals and objectives that preserve the remaining large contiguous commercial sites for strategic commercial retail and office employment users, and allow housing in these areas, only as part of a mixed-use development. A preliminary expected forecast of demand by parcel size is also provided in **Table 15**, and assumes that virtually all of the remaining vacant commercial land supply over one acre in size within the Tigard UPA will be absorbed over the next 20 years.

The City also anticipates the development of high-capacity transit along the Pacific Highway corridor. The region has made a commitment to high-capacity transit and this corridor is the next to be studied. Any development of high-capacity transit would trigger the City to identify station areas to accept higher, transit supportive mixed-use densities. The logical locations for station areas would more than likely result in the rezoning of general commercial lands to mixed-use zoning. As both commercial and mixed-use zoned lands are included in this analysis, any rezoning would not decrease the amount of vacant or partially vacant land available. The range of allowed uses, from retail to multi-story office buildings, would not be affected.

**Table 15. Reconciliation of Long-term Land Demand and Supply Commercial and Mixed Use 20-Year Land Use Forecast (gross buildable acres), Tigard USB**

Land Demand and Supply	Low Land Need Scenario	Medium Land Need Scenario	High Land Need Scenario
Demand for Vacant Commercial Land	78	105	131
<i>Commercial Demand</i>	51	68	85
<i>Mixed-Use Demand</i>	27	36	45
Supply of Vacant Commercial Land	86	86	86
<i>Commercial Zoned Supply</i>	46	46	46
<i>Mixed-Use Zoned Supply</i>	40	40	40
Land Surplus or (Deficit)	8	(19)	(45)
Preliminary Parcel Distribution, Efficient Need Forecast	Existing Supply (tax lots)	Forecast of Demand (tax lots)	Surplus (tax lots)
Less Than 1 acre	89	30	59
1 to 5 acres	14	14	0
5 to 10 acres	3	3	0
10 to 20 acres	0	0	0
20+ acres	0	0	0
Total	106	47	59

Source: FCS GROUP, based on findings included in demand and supply analysis.

### Planning, Market, Cost and Risk Factors

Consistent with EOA documentation requirements, the economic trends analysis, stakeholder interviews and business clusters analyses indicate that the Tigard USB is uniquely positioned within the greater Portland metropolitan region to experience continued success in retaining and attracting businesses and economic development.

#### Risk of Losing Large Commercial and Industrial Sites

As Tigard’s vacant land supply of large parcels (more than five acres) becomes diminished, the City could risk losing economic growth potential if remaining larger industrial and commercial sites allow non-employment uses that displace prospective business opportunities. While the current short-term employment market is sluggish at best, the future long-term job growth trends bode well for Tigard if it preserves large commercial and industrial zoned parcels for intended business activity. These risks can be mitigated in part by adopting new economic development objectives that preserve large commercial and industrial areas for desired commercial and industrial business activities.

#### Risk of Not Adequately Preparing for Targeted Area Redevelopment

As Tigard’s population and employment levels increase with time, and vacant land diminishes, the City will need to rely more upon redevelopment areas, and productivity increases from existing developed lands and businesses to achieve long-term economic strength and diversity. New economic

development objectives should be formulated to enable the City to leverage desired redevelopment in targeted locations such as downtown, and within planned transit-station communities.

### **Risk of Expanding the USB in the Future**

Beyond the 20-year forecast time horizon the City should consider the need to grow into urban reserve locations, if the City's investment in infrastructure extensions yields a favorable return to its residents and businesses. An Urban Planning Area expansion is not necessary at this time to accommodate industrial and other employment land needs for the next 20 years, unless the City opts to pursue the moderate or high land needs scenario to accommodate additional commercial and industrial job growth.

### **Planning and Permitting Risks**

The City should review its land use development code to ensure that it preserves sites for their intended use, yet is flexible enough to accommodate a full diversity of commercial and light industrial uses consistent with public safety, public facilities, and positive urban design characteristics. The ability to provide a streamlined and predictable permitting process can be a challenge as the City relies more on smaller infill and redevelopment sites to accommodate business growth.

### **Non-Local Regulatory Risks**

The City is dependent upon ODOT to achieve higher trip caps in targeted redevelopment areas. As the City and Metro pursue high capacity transit facilities and assessed service levels, these regulatory risks may be addressed by assuming higher non-vehicle mode shares that result in reduced traffic impacts from new development.

Most of the risk factors described above may be addressed by the City of Tigard. Others will require partnerships with regional and state regulatory agencies, such as Metro, Washington County and ODOT. The City can take a leadership position by providing a local planning and permitting environment that is favorable to business investment and more proactive economic marketing to raise awareness of Tigard's strengths as a preferred location for over 2,900 existing business establishments.

## **IMPLEMENTATION POLICIES AND ACTION MEASURES**

OAR 660-009-0020 stipulates that comprehensive plans must provide community economic development objectives, a commitment to providing a competitive short-term land supply, and identification and provision of adequate sites and public facilities to serve economic development demand.

Since the City of Tigard updated the economic development chapter of its Comprehensive Plan in 2008, the document contains a fairly complete set of economic development goals, policies and action measures. The following is a list of topics and recommended policy updates to comply with state statutes and/or implement the City's economic goals.

### **Policies**

#### Community Economic Development Objectives (CEDOs)

The majority of these objectives are already embedded in existing policies. Two new policies are recommended:

*“The City shall encourage neighborhood commercial uses that support economic opportunities, multi-modal transportation options, neighborhood vitality, and the goals of efficient land use patterns.”*

*“The City shall encourage businesses that are environmentally and economically sustainable.”*

#### Commitment to Provide Adequate Sites and Facilities and Commitment to Provide a Short-Term Land Supply of Land

The commitment to provide adequate public facilities is embedded in existing Policy 9.1.4 of the Comprehensive Plan. One new policy is recommended to describe the commitment to provide adequate sites and a short-term land supply:

*“The City shall monitor and update its Buildable Lands Inventory to ensure adequate short and long-term supplies of buildable employment land.”*

#### Provide for Prime Industrial Land Development on Large Lots

Existing Policy 9.1.7 addresses the need to protect prime industrial land but does not address the need for large lots. It is recommended the policy be revised as follows:

*“The City shall limit the development of retail and service land uses in Metro-designated industrial areas, and especially on lots of 10 or more acres, to preserve the potential of these lands for industrial jobs.”*

#### Promote Targeted Redevelopment in Downtown and other areas

This issue is addressed by several existing policies and recommended action measures, but most directly by Policy 9.3.1: “The City shall focus a significant portion of future employment growth and high-density housing development in its Metro-designated Town Center (Downtown); Regional Center (Washington Square); High Capacity Transit Corridor (Hwy 99W); and the Tigard Triangle.” No new language is proposed.

### **Recommended Action Measures**

#### Assist property owners with the Oregon Industrial Site Certification Process

A new recommended action measure is suggested:

*“Assist property owners with the Oregon Industrial Site Certification Process to help preserve and market the City’s inventory of industrial lands.”*

#### Economic Development Marketing and Incentives Directed Towards Strategic Clusters

This issue is addressed indirectly by several recommended action measures, but could benefit from more concise language. A new recommended action measure is suggested:

*“Explore an economic development marketing and incentives program targeting strategic business clusters.”*

#### Work with ODOT to address mobility standards

Capacity issues on state highways (particularly Pacific Highway, Hwy. 217, and Interstate 5) impact economic development opportunities through trip caps, limited floor-to-area ratios, and required road improvements that are expensive. The conversation is just getting started at the regional level. A new recommended action measure is suggested:

*“Work with state and regional partners to develop alternative mobility standards that will benefit the community and its economic development efforts.”*

Monitor Local and Regional Economic Development Initiatives

This request from the Planning Commission led to a suggested new recommended action measure:

*“Monitor local and regional economic development initiatives to assess their effectiveness related to cost and outcome.”*

Metro Designated Centers and Corridors

Based on a resolution passed by the Tigard City Council, Metro recently amended its Growth Concept Map expanding the Tigard Town Center Boundary to include the entire Tigard Urban Renewal District and the Tigard Triangle. The City is required to adopt this change into its Comprehensive Plan. Staff recommends adopting a definition that will refer to the Metro Growth Concept Map, thus eliminating the need to amend the Tigard Comprehensive Plan each time the Metro Growth Concept Map is amended.

## APPENDIX A – OFFICE LEASING ACTIVITY SUMMARY, MID-YEAR REPORT

OFFICE Leasing Activity, Mid-Year 2010 (as of June 30, 2010)								
<b>Class A Market Statistics</b>								Mid-Year 2010
Market	Existing Inventory		Vacancy		YTD Net Absorbption	YTD Deliveries	Under Const SF	Quoted Rates
	# Builds	Total RBA	Total SF	Vac %				
Central Business District	41	11,389,435	1,412,066	12.4%	(135,590)	368,800	62,200	\$24.42
Suburban	141	17,234,745	2,225,626	12.9%	(130,126)	-	-	\$23.74
Tigard	6	509,087	151,931	29.8%	(13,097)	-	-	\$23.93
217 Corridor/Beaverton	12	1,142,430	303,750	26.6%	(15,550)	-	-	\$21.77
Kruse Way	19	1,961,855	495,615	25.3%	(26,228)	-	-	\$26.05
Barbur Blvd/Capitol Hwy	-	-	-	-	-	-	-	\$0.00
Tulalatin	4	361,270	154,503	42.8%	5,604	-	-	\$24.31
Wilsonville	4	325,501	55,071	16.9%	-	-	-	\$24.77
<b>Total</b>	<b>182</b>	<b>28,624,180</b>	<b>3,637,692</b>	<b>12.7%</b>	<b>(265,716)</b>	<b>368,800</b>	<b>62,200</b>	<b>\$24.01</b>
<b>Class B Market Statistics</b>								Mid-Year 2010
Market	Existing Inventory		Vacancy		YTD Net Absorbption	YTD Deliveries	Under Const SF	Quoted Rates
	# Builds	Total RBA	Total SF	Vac %				
Central Business District	130	9,423,902	927,523	9.8%	61,787	-	-	\$20.18
Suburban	1,155	30,095,314	4,345,461	14.4%	(62,639)	14,000	268,854	\$17.82
Tigard	83	1,979,955	277,469	14.0%	12,806	-	-	\$20.88
217 Corridor/Beaverton	72	1,719,571	314,759	18.3%	5,148	-	-	\$16.40
Kruse Way	26	728,262	93,241	12.8%	(14,059)	-	-	\$20.76
Barbur Blvd/Capitol Hwy	42	890,672	121,398	13.6%	2,337	-	-	\$16.79
Tulalatin	30	704,815	105,798	15.0%	(7,289)	-	-	\$19.36
Wilsonville	17	622,051	30,169	4.8%	(10,369)	-	-	\$16.71
<b>Total</b>	<b>1,285</b>	<b>39,519,216</b>	<b>5,272,984</b>	<b>13.3%</b>	<b>(852)</b>	<b>14,000</b>	<b>268,854</b>	<b>\$18.38</b>
<b>Class C Market Statistics</b>								Mid-Year 2010
Market	Existing Inventory		Vacancy		YTD Net Absorbption	YTD Deliveries	Under Const SF	Quoted Rates
	# Builds	Total RBA	Total SF	Vac %				
Central Business District	177	4,093,913	489,486	12.0%	11,201	-	-	\$17.49
Suburban	2,815	18,283,763	129,081	0.7%	68,665	-	-	\$14.36
Tigard	97	662,182	66,493	10.0%	(3,199)	-	-	\$15.60
217 Corridor/Beaverton	82	609,431	70,635	11.6%	1,202	-	-	\$14.50
Kruse Way	19	133,044	2,452	1.8%	-	-	-	\$18.00
Barbur Blvd/Capitol Hwy	120	846,865	99,822	11.8%	(5,090)	-	-	\$15.60
Tulalatin	20	119,561	29,278	24.5%	(5,598)	-	-	\$14.73
Wilsonville	21	103,496	2,681	2.6%	5,609	-	-	\$17.21
<b>Total</b>	<b>2,992</b>	<b>22,377,676</b>	<b>618,567</b>	<b>2.8%</b>	<b>79,866</b>	<b>-</b>	<b>-</b>	<b>\$14.93</b>
<b>Class B and C Market Statistics</b>								Mid-Year 2010
Market	Existing Inventory		Vacancy		YTD Net Absorbption	YTD Deliveries	Under Const SF	Quoted Rates
	# Builds	Total RBA	Total SF	Vac %				
Central Business District	307	13,517,815	1,417,009	10.5%	72,988	-	-	\$19.37
Suburban	3,970	48,379,077	4,474,542	9.2%	6,026	14,000	268,854	\$16.51
Tigard	180	2,642,137	343,962	13.0%	9,607	-	-	\$19.56
217 Corridor/Beaverton	154	2,329,002	385,394	16.5%	6,350	-	-	\$15.90
Kruse Way	45	861,306	95,693	11.1%	(14,059)	-	-	\$20.33
Barbur Blvd/Capitol Hwy	162	1,737,537	221,220	12.7%	(2,753)	-	-	\$16.21
Tulalatin	50	824,376	135,076	16.4%	(12,887)	-	-	\$18.69
Wilsonville	38	725,547	32,850	4.5%	(4,760)	-	-	\$16.78
<b>Total</b>	<b>4,277</b>	<b>61,896,892</b>	<b>5,891,551</b>	<b>9.5%</b>	<b>79,014</b>	<b>14,000</b>	<b>268,854</b>	<b>\$17.14</b>
<i>Quoted Rates for Class B and C table are weighted average of individual B and C markets according to the total RBA inventory</i>								
<i>Source: CoStar Office Report Mid-Year 2010; Capacity Commercial Group.</i>								

## APPENDIX B: INDUSTRIAL LEASING ACTIVITY, MID-YEAR 2010 REPORT

Flex Building Market Statistics								Mid-Year 2010	
Market	Existing Inventory		Vacancy		YTD Net Absorbtion	YTD Deliveries	Under Const SF	Quoted Rates	
	# Builds	Total RBA	Total SF	Vac %					
Central Business District	3	45,000	10,000	22.2%	-	-	-	\$16.50	
Suburban	741	18,956,577	2,268,793	12.0%	(336,814)	70,020	-	\$10.23	
Tigard	50	1,277,751	170,855	13.4%	(12,799)	-	-	\$12.30	
217 Corridor/Beaverton	87	2,204,502	419,258	19.0%	(69,237)	-	-	\$11.77	
Kruse Way	2	88,928	-	0.0%	-	-	-	\$0.00	
Barbur Blvd/Capitol Hwy	7	53,681	6,771	12.6%	5,100	-	-	\$10.35	
Tulalatin	14	430,840	23,229	5.4%	(2,531)	-	-	\$7.54	
Wilsonville	29	1,661,734	201,334	12.1%	(18,316)	7,020	-	\$9.31	
<b>Total</b>	<b>744</b>	<b>19,001,577</b>	<b>2,278,793</b>	<b>12.0%</b>	<b>(336,814)</b>	<b>70,020</b>	<b>-</b>	<b>\$10.24</b>	

Warehouse Building Market Statistics								Mid-Year 2010	
Market	Existing Inventory		Vacancy		YTD Net Absorbtion	YTD Deliveries	Under Const SF	Quoted Rates	
	# Builds	Total RBA	Total SF	Vac %					
Central Business District	41	1,616,833	141,090	8.7%	(1,843)	-	-	\$5.78	
Suburban	4,694	167,214,476	13,813,643	8.3%	91,337	119,723	415,000	\$5.55	
Tigard	119	4,394,617	339,683	7.7%	57,333	-	-	\$6.38	
217 Corridor/Beaverton	75	3,332,391	471,805	14.2%	31,770	-	-	\$6.30	
Kruse Way	13	301,069	3,378	1.1%	10,240	-	-	\$7.20	
Barbur Blvd/Capitol Hwy	17	209,963	5,000	2.4%	8,000	-	-	\$6.16	
Tulalatin	221	8,453,141	675,494	8.0%	(39,805)	-	-	\$5.20	
Wilsonville	83	6,155,906	1,268,475	20.6%	47,351	-	-	\$5.95	
<b>Total</b>	<b>4,735</b>	<b>168,831,309</b>	<b>13,954,733</b>	<b>8.3%</b>	<b>89,494</b>	<b>119,723</b>	<b>415,000</b>	<b>\$5.55</b>	

Total Industrial Market Statistics								Mid-Year 2010	
Market	Existing Inventory		Vacancy		YTD Net Absorbtion	YTD Deliveries	Under Const SF	Quoted Rates	
	# Builds	Total RBA	Total SF	Vac %					
Central Business District	44	1,661,833	151,090	9.1%	(1,843)	-	-	\$7.16	
Suburban	5,435	186,171,053	16,082,436	8.6%	(245,477)	189,743	415,000	\$6.19	
Tigard	169	5,672,368	510,538	9.0%	44,534	-	-	\$7.68	
217 Corridor/Beaverton	162	5,536,893	891,063	16.1%	(37,467)	-	-	\$8.07	
Kruse Way	15	389,997	3,378	0.9%	10,240	-	-	\$7.20	
Barbur Blvd/Capitol Hwy	24	263,644	11,771	4.5%	13,100	-	-	\$8.01	
Tulalatin	235	8,883,981	698,723	7.9%	(42,336)	-	-	\$5.29	
Wilsonville	112	7,817,640	1,469,809	18.8%	29,035	7,020	-	\$6.72	
<b>Total</b>	<b>5,479</b>	<b>187,832,886</b>	<b>16,233,526</b>	<b>8.6%</b>	<b>(247,320)</b>	<b>189,743</b>	<b>415,000</b>	<b>\$6.20</b>	

Source: CoStar Office Report Mid-Year 2010; Capacity Commercial Group.

## APPENDIX C: ANALYSIS OF EMPLOYMENT AND SPACE NEEDS

### Projected Tigard Employment, Medium Forecast Scenario, 2005-2035

	2005	Proj. 2035	Change	
			Jobs	%
Retail Trades	9,854	14,426	4,572	46%
Services	11,372	23,482	12,110	106%
Industrial/Other*	12,049	13,637	1,588	13%
Government*	8,033	9,092	1,059	13%
<b>Total</b>	<b>41,308</b>	<b>60,637</b>	<b>19,329</b>	<b>47%</b>

Source: Metro adopted housing and employment growth forecasts, 2007; Metroscope Gen. 2.3. Assumes allocation of "Other" jobs at 60% industrial, and 40% government. In light of the recent national economic recession that caused severe declines in Oregon employment from 2007 through 2010, Metro's 2030 job forecast for Tigard is assumed to be achieved by year 2035 under the "medium forecast" scenario.

### Projected Tigard Net New Average Annual Employment Forecast (1 Year Forecast)

	Low	Medium	High
Retail Trades	114	152	191
Services	303	404	505
Industrial/Other*	40	53	66
Government*	26	35	44
<b>Total</b>	<b>483</b>	<b>644</b>	<b>805</b>

### Projected Tigard Net New 20-Year Employment Forecast

	Low	Medium	High
Retail Trades	2,286	3,048	3,810
Services	6,055	8,073	10,092
Industrial/Other*	794	1,059	1,324
Government*	529	706	882
<b>Total</b>	<b>9,665</b>	<b>12,886</b>	<b>16,108</b>

## APPENDIX C: ANALYSIS OF EMPLOYMENT AND SPACE NEEDS (CONTINUED)

Job Sectors and Building Type Assumptions							
Employment Sectors	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	5%	1%	6%	0%	12%	76%	100%
Services	72%	1%	5%	1%	1%	20%	100%
Industrial/Other	8%	0%	50%	40%	2%	0%	100%
Government	43%	37%	5%	0%	0%	15%	100%

Source: Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observations.

### Proj. Tigard Net New 20-Year Employment Forecast by Building Type, Low

	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	114	23	137	-	274	1,737	2,286
Services	4,360	61	303	61	61	1,211	6,055
Industrial/Other*	64	-	397	318	16	-	794
Government*	228	196	26	-	-	79	529
<b>Total</b>	<b>4,765</b>	<b>279</b>	<b>863</b>	<b>378</b>	<b>351</b>	<b>3,028</b>	<b>9,665</b>

### Proj. Tigard Net New 20-Year Employment Forecast by Building Type, Medium

	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	152	30	183	-	366	2,316	3,048
Services	5,813	81	404	81	81	1,615	8,073
Industrial/Other*	85	-	529	424	21	-	1,059
Government*	304	261	35	-	-	106	706
<b>Total</b>	<b>6,353</b>	<b>372</b>	<b>1,151</b>	<b>504</b>	<b>468</b>	<b>4,037</b>	<b>12,886</b>

### Proj. Tigard Net New 20-Year Employment Forecast by Building Type, High

	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	191	38	229	-	457	2,896	3,810
Services	7,266	101	505	101	101	2,018	10,092
Industrial/Other*	106	-	662	529	26	-	1,324
Government*	379	326	44	-	-	132	882
<b>Total</b>	<b>7,942</b>	<b>465</b>	<b>1,439</b>	<b>630</b>	<b>585</b>	<b>5,046</b>	<b>16,108</b>

Source: FCS GROUP based on Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observations.

## APPENDIX C: ANALYSIS OF EMPLOYMENT AND SPACE NEEDS (CONTINUED)

Building Type to Land Needs Assumptions*							
	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	
Refill/Redevelopment Rate <sup>1</sup>	67%	67%	45%	45%	45%	60%	
Jobs Needing Vacant Land Rate <sup>2</sup>	33%	33%	55%	55%	55%	40%	
Building SF Per Job <sup>2</sup>	370	630	550	700	1,100	510	
Floor-Area-Ratio <sup>2</sup>	0.50	0.50	0.31	0.30	0.30	0.30	
Public Facility Net:Gross Adjustment <sup>3</sup>	1.10	1.05	1.10	1.05	1.05	1.10	
Work at Home Adjustment <sup>4</sup>	0.15	0.03	0.05	0.03	0.03	0.03	
* assumptions are intended to reflect a long-term average over 20 years, some "ramp up" is expected to attain these density levels.							
1/ Adjusts for building refill & vacancy allowances.							
2/ Building density derived from Metro UGR assumptions.							
3/ Allowances take into account land dedicated to public/utility easements.							
4/ Allowance based on national statistics by US Dept. of Labor, Bureau of of Labor Statistics, Technical information: "Work at Home i							
Source: assumptions are generally consistent with the Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observatio							
Proj. Tigard Net New 20-Year Redevelopment Building Space Needs (Floor Area)							
	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Low	1,004,000	114,000	203,000	116,000	168,000	899,000	2,504,000
Medium	1,339,000	152,000	271,000	154,000	225,000	1,198,000	3,339,000
High	1,673,000	191,000	338,000	193,000	281,000	1,498,000	4,174,000
Proj. Tigard Net New 20-Year Building Floor Area on Vacant Lands (Floor Area)							
	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Low	495,000	56,000	248,000	141,000	206,000	599,000	1,745,000
Medium	659,000	75,000	331,000	188,000	274,000	799,000	2,326,000
High	824,000	94,000	414,000	235,000	343,000	999,000	2,909,000
Proj. Tigard 20-Year Vacant Lands (gross buildable acres)							
	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Low	25	3	20	11	17	50	126
Medium	33	4	27	15	22	67	168
High	42	5	34	19	28	84	210

## APPENDIX C: ANALYSIS OF EMPLOYMENT AND SPACE NEEDS (CONTINUED)

Land Use Assignment Assumptions						
Local Zoning Classification	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail
Commercial	50%	60%	20%	10%	10%	60%
Mixed Use	40%	20%	5%	5%	0%	30%
Industrial	10%	20%	75%	85%	90%	10%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Assumptions by FCS GROUP and Tigard based on local observations.

### Proj. Tigard 20-Year Vacant Land Needs Forecast by Zoning Classification, Low

Land Use Classification	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	13	2	4	1	2	30	51
Mixed Use	10	1	1	1	-	15	27
Industrial	3	1	15	10	15	5	48
<b>Total</b>	<b>25</b>	<b>3</b>	<b>20</b>	<b>11</b>	<b>17</b>	<b>50</b>	<b>126</b>

### Proj. Tigard 20-Year Vacant Land Needs Forecast by Zoning Classification, Medium

Land Use Classification	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	17	2	5	2	2	40	68
Mixed Use	13	1	1	1	-	20	36
Industrial	3	1	20	13	20	7	64
<b>Total</b>	<b>33</b>	<b>4</b>	<b>27</b>	<b>15</b>	<b>22</b>	<b>67</b>	<b>168</b>

### Proj. Tigard 20-Year Vacant Land Needs Forecast by Zoning Classification, High

Land Use Classification	Office	Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	21	3	7	2	3	50	85
Mixed Use	17	1	2	1	-	25	45
Industrial	4	1	25	16	25	8	80
<b>Total</b>	<b>42</b>	<b>5</b>	<b>34</b>	<b>19</b>	<b>28</b>	<b>84</b>	<b>210</b>

### Summary of 20-Year Vacant Land Demand Forecast by Zoning Classification, Tigard USB (with current zoning regulations)

Land Use Classification	Low	Medium	High
Commercial	51	68	85
Mixed Use	27	36	45
Industrial	48	64	80
<b>Total</b>	<b>126</b>	<b>168</b>	<b>210</b>

Assumptions by FCS GROUP based on Dec. 2009 Metro 2009-2035 Urban Growth Report assumptions and local observations.

## APPENDIX D: ANALYSIS OF RETAIL INFLOW/OUTFLOW

Analysis of Retail Development Potential								
Tigard Area								
2010 to 2030								
Est. 2010 Population in City	48,100							
Proj. 2030 Population in City	62,278							
<b>Analysis of Effective Buying Income (EBI)</b>								
Est. 2010 Per Capita Income 1/	\$33,000							
Proj. 2030 Per Capita Income 1/	\$36,462							
Est. 2010 Aggregate EBI (000)	\$1,587,300							
Proj. 2030 Aggregate EBI (000)	\$2,270,749							
Change in Aggregate EBI (000)	<b>\$683,449</b>							
Store Group	Analysis of Existing & Future Retail Sales				Future 2030 Supportable Retail Development Potential			
	Distribution of Local Income by Store Group 2/	2010 Retail Buying Power from Local Residents (000) 2/	2030 Retail Buying Power from Local Residents (000) 2/	Change in Retail Buying Power (000)	Sales Attributed to Local Residents (000)	Sales Attributed to Retail Inflow (000) 4/	Total Supportable Retail Sales (000)	Supportable Sq.Ft. of New Retail Development 5/
Food Stores	8.3%	\$131,746	\$188,472	\$56,726	\$51,054	\$12,763	\$63,817	236,000
Eating & Drinking	5.0%	\$79,365	\$113,537	\$34,172	\$30,755	\$13,181	\$43,936	162,000
Gen. Merchandise	5.5%	\$87,302	\$124,891	\$37,590	\$33,831	\$27,680	\$61,510	227,000
Furniture, Fixtures & Appliances	2.2%	\$34,921	\$49,956	\$15,036	\$13,532	\$11,072	\$24,604	91,000
Automotive Services	9.6%	\$152,381	\$217,992	\$65,611	\$52,489	\$42,945	\$95,434	352,000
Other/Misc.	11.3%	\$179,365	\$256,595	\$77,230	\$54,061	\$23,169	\$77,230	285,000
<b>Total</b>	<b>41.9%</b>	<b>\$665,079</b>	<b>\$951,444</b>	<b>\$286,365</b>	<b>\$235,722</b>	<b>\$130,810</b>	<b>\$366,532</b>	<b>1,353,000</b>
Notes:								
1/ Derived from US Census estimates; assumes .05% annual real income growth.								
2/ Store group sales allocations from U.S. Bureau of Economic Analysis, Consumer Expenditure Survey, Western United States.								
3/ Based upon employment estimates: assumes 500 sq.ft. per job, 5% vacancy allowance, and avg. sales of \$275/sq.ft.								
4/ Future retail inflow assumed to account for 30% to 45% of total retail sales.								
5/ Building area assumes \$285/per sq. ft. annual sales, and 5% vacancy allowance.								
Source: analysis by FCS GROUP.								

## **APPENDIX E: SUMMARY OF TIGARD EMPLOYMENT ZONES AND REGULATIONS**

The following is an overview of regulations related employment lands and zones for the City of Tigard. A general description of each zone is provided along with common and specific development standards when applicable. A summary table highlights specific regulations, such as building height, lot size, setbacks, landscaping and lot coverage.

### **COMMERCIAL ZONES**

#### ***Neighborhood Commercial District (C-N)***

Provide convenience goods and services (those purchased frequently) within a small cluster of stores adjacent to residential neighborhoods. A limited number of other uses such as restaurants, gas stations and medical centers are permitted conditionally.

#### ***Community Commercial District (C-C)***

Provide convenience shopping facilities to meet regular needs of nearby (1.5 miles) residential neighborhoods. Typically range in size from 30,000-100,000 sf on 2 to 8-acre sites. Separated from other commercial zones by at least one half-mile. Housing is permitted on the second floor at densities not to exceed 12 units/net acre. Limited other uses are allowed conditionally. Mandatory site development review.

#### ***General Commercial District (C-G)***

Accommodate a full range of retail, office and civic uses with a City-wide and even regional trade area. Residential uses limited to single family residences on same site as permitted use. A wide range of uses are permitted conditionally.

#### ***Professional Administrative Commercial District (C-P)***

Accommodate civic and business/professional services and compatible support services in close proximity to residential areas and major transportation facilities. Within the Tigard Triangle and Bull Mountain Road District, residential uses at a minimum density of 32 units/net acre are permitted in conjunction with commercial development. Heliports, medical centers, religious institutions and utilities are permitted conditionally. Developments are intended to serve as a buffer between residential areas and more intensive commercial and industrial areas.

#### ***Mixed Use-Central Business District (MU-CBD)***

Provide a pedestrian friendly urban village in Downtown Tigard. A wide variety of commercial, civic, employment, mixed-use, multi-family and attached single family residences are permitted. All uses are allowed in all areas.

#### **Specific Development Standards (18.610):**

Four sub-areas (see MU-CBD Development Standards Matrix) have different setback and height limits in order to create a feeling of distinct districts within the larger zone.

- Pacific Hwy. and Hall Boulevard Corridor: designed to create a “pulse-point” along the Pacific Hwy. corridor. Regional retail draw and potential future high capacity transit.
- Main Street – Center Street: pedestrian-oriented with smaller scale development.
- Scoffins Street – Commercial Street: higher density residential and employment base of civic, office and commercial uses.

- Fanno – Burnham Street: medium scale residential or mixed use development.

### **Mixed Use Employment (MUE)**

Designed to apply to a majority of land within the Tigard Triangle, it permits a wide range of uses including major retail goods and services, business/professional offices, civic uses and housing (multi-family at a max density of 25 units/acre. A wide range of uses are permitted conditionally. Acknowledges a majority of trips by automobile, but supports alternative modes of transportation to the greatest extent possible and encourages a mix of uses. Includes special design standards for Tigard Triangle (18.620).

### **Mixed Use Employment Districts (MUE-1 and MUE-2)**

Apply to areas where employment uses such as office, research and development and light manufacturing are concentrated. Commercial and retail support uses are allowed but limited, and residential uses are permitted when compatible with employment character of the area. MUE-1 example is Lincoln Center (high density). MUE-2 example is Nimbus area (more moderate densities).

### **Mixed Use Commercial District (MUC)**

Includes land around Washington Square Mall and immediately west of Highway 217. Primary uses include office buildings, retail, and service areas. Also permits mixed use developments and housing at 50 units/acre. Large buildings encouraged with parking under behind or to sides. Includes special design standards for Washington Square Regional Center (18.630).

### **Mixed Use Commercial (MUC-1)**

Applies to portion of the Durham Quarry site. Subject to IGA agreement between Tigard and Tualatin. Permits a wide range of uses including commercial lodging, general retail, offices and housing at min density of 25 units/acre and max of 50 units/acre. Includes special design standards for Durham Quarry (18.640).

### **Mixed Use Residential Districts (MUR)**

Applies to predominantly residential areas where mixed-uses are permitted when compatible with residential use.

## **INDUSTRIAL/INSTITUTIONAL ZONES**

### **Industrial Park District (I-P)**

Provides appropriate locations for combining light manufacturing, office and small-scale commercial uses (restaurants, personal services and fitness centers) in a campus-like setting. Only those uses with no off-site impacts are permitted. Mandatory site development review and specific design standards (18.530).

### **Light Industrial District (I-L)**

Provides appropriate locations for general industrial uses, including manufacturing and production, research and development, warehousing and freight movement and wholesale sales activities with few, if any, nuisance characteristics.

**Heavy Industrial District (I-H)**

Provides appropriate locations for intensive industrial uses including I-L uses as well as railroad yards and waste-related activities. Uses include those which involve the use of raw materials, require significant outdoor storage and generate heavy truck and/or rail traffic. Properties are carefully located to minimize impacts on established residential, commercial and light industrial areas.

**COMMERCIAL DEVELOPMENT STANDARDS**

STANDARD	MUE												
	C-N	C-C <sup>[9]</sup>	C-G	C-P	MU-CBD**	C-G	R-25 MF DU*	MUC -1	MUC <sup>[17][18]</sup>	MUE 1 <sup>[17][18]</sup>	MUE 2 <sup>[17][18]</sup>	MUR 1 <sup>[17][18]</sup>	MUR 2 <sup>[17][18]</sup>
Minimum Lot Size	5,000 sq ft	5,000 sq ft	None	6,000 sq ft	None	None	-	None	None	None	None	None	None
- Detached unit	-	-	-	-	-	-	1,480 sq ft	-	-	-	-	-	-
- Boarding, lodging, rooming house	-	-	-	-	-	-	6,100 sq ft	-	-	-	-	-	-
Minimum Lot Width	50 ft	50 ft	50 ft	50 ft	None	50 ft	None	None	None	None	None	None	None
Minimum Setbacks													
- Front yard	20 ft	0/20 ft <sup>[10]</sup>	0 ft <sup>[11]</sup>	0 ft <sup>[11]</sup>	□	0 ft <sup>[11]</sup>	20 ft	▽	0 ft <sup>[19]</sup>	0 ft <sup>[21]</sup>	0 ft <sup>[21]</sup>	0 ft <sup>[21]</sup>	10 ft <sup>[21]</sup>
- Side facing street on corner & through lots <sup>[1]</sup>	20 ft	-	-	-	□	-	20 ft	▽	0 ft <sup>[19]</sup>	0 ft <sup>[21]</sup>	0 ft <sup>[21]</sup>	5 ft <sup>[21]</sup>	10 ft <sup>[21]</sup>
- Side yard	0/20 ft <sup>[8]</sup>	0/20 ft <sup>[8]</sup>	0/20 ft <sup>[8]</sup>	0/20 ft <sup>[8]</sup>	□	0/20 ft <sup>[8]</sup>	10 ft	▽	0 ft <sup>[19][20]</sup>	0 ft <sup>[20]</sup>	0 ft <sup>[20]</sup>	0 ft <sup>[20]</sup>	0 ft <sup>[20]</sup>
- Side or rear yard abutting more restrictive zoning district	-	-	-	-	-	-	30 ft	▽	-	-	-	-	-
- Rear yard	0/20 ft <sup>[8]</sup>	0/20 ft <sup>[8]</sup>	0/20 ft <sup>[8]</sup>	0/20 ft <sup>[8]</sup>	□	-	20 ft	▽	-	0 ft <sup>[20]</sup>	0 ft <sup>[20]</sup>	0	0
- Distance between front of garage & property line abutting a public or private street.	-	-	-	-	-	0/20 ft <sup>[8]</sup>	20 ft	▽	0 ft <sup>[19][20]</sup>	N/A	N/A	0 ft <sup>[20][22]</sup>	0 ft <sup>[20][22]</sup>
Minimum Building Height	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	2 stories	2 stories	None	2 stories	None
Maximum Building Height	35 ft	35 ft	45 ft	45 ft	□	45 ft	45 ft	70 ft	200 ft	200 ft	60 ft	75 ft	45 ft
Maximum Site Coverage <sup>[2]</sup>	85 %	80 %	85 %	85 %	□	85 %	80 % <sup>[16]</sup>	90%	85%	85%	85%	80%	80%
Minimum Landscape Requirement	15 %	20 %	15 %	15 %	□	15 %	20 %	10%	15%	15%	15%	20%	20%
Minimum FAR <sup>[3]</sup>	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	1.25	1.25	0.6	0.6	0.3
Minimum Residential Density <sup>[4][5][6]</sup>	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	50 unit/acre	50 unit/acre	25 unit/acre	50 unit/acre	25 unit/acre
Maximum Residential Density <sup>[4][5][6][7]</sup>	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	None	None	50 unit/acre	None	50 unit/acre

\*\* Multiple-family dwelling unit.

\*\*\* See Table 18.610.1 and Map 18.610.A for development standards.

▽ = See 18.640.050.B.

□ = See Table 18.610.1 and Map 18.610.A for development standards.

- [1] The provisions of Chapter 18.795 (Vision Clearance) must be satisfied.
- [2] Includes all buildings and impervious surfaces.
- [3] Applies to all nonresidential building development and mixed use development which includes a residential component. In mixed use development, residential floor area is included in the calculations of floor area ratio to determine conformance with minimum FAR.
- [4] Notwithstanding the requirements of Section 18.715.020, minimum and maximum density shall be determined for residential only projects using the number of residential units per acre shown in the above table. The provisions for density transfer described in Section 18.715.030.B apply, using the minimum and maximum density shown in the above table. Any mixed-use or commercial only development does not have a minimum density requirement.
- [5] For purposes of determining floor area ratio and residential densities, the net development area shall be used to establish the lot area, determined per Section 18.715.020.A.
- [6] Adjustments to minimum density in the Washington Square Regional center area subject to the standards set forth in Section 18.630.020.E.
- [7] The maximum density requirements for developments that include or abut designated Water Resources Overlay district Riparian setbacks per Chapter 18.797 are described in Section 18.630.020.D.
- [8] No setback shall be required except 20 feet shall be required where the zone abuts a residential zoning district.
- [9] See Section 18.520.050.B for site and building design standards.
- [10] No front yard setback shall be required, except a 20-foot front yard setback shall apply within 50 feet of a residential district.
- [11] There shall be no minimum front yard setback requirement; however, conditions in Chapters 18.745 and 18.795 must be met.
- [12] There are no setback requirements, except 30 feet where a commercial use within a district abuts a residential zoning district.
- [13] The maximum height of any building in the CBD zone within 100 feet of any residential zoning district shall not exceed 40 feet.
- [14] Where the side or rear yard of attached or multiple-family dwellings abut a more restrictive zoning district, such setbacks shall not be less than 35 feet.
- [15] Landscaped areas on existing developed property in the CBD shall be retained. Buffering and screening requirements set forth in Chapter 18.745 shall be met for existing and new development.
- [16] Lot coverage includes all buildings and impervious surfaces.
- [17] Modifications to dimensional and minimum density requirements for developments that include or abut designated Water Resources Overlay District Riparian setbacks per Chapter 18.797 are described in Section 18.630.040.F.
- [18] The requirements contained in the Buffer Matrices in Tables 18.745.1 and 18.745.2 shall be used in calculating widths of buffering/screening and required improvements to be installed between proposed uses in the MUC, MUE and MUR zones within the Washington Square Regional Center (WSRC) and abutting zoning districts not included within the WSRC, or zoning districts within the WSRC which are not mixed-use. For MUC and MUE zones, the requirements for Commercial Zones apply. For MUR zones, the requirements for the Neighborhood Commercial Zone apply.
- [19] For Commercial and Mixed-use developments, the maximum front and street side yard setback is 10 feet. For Residential only developments, the maximum front and street side yard setback is 20 feet.
- [20] Side and rear yard setbacks shall be 20 feet when the zone abuts residential districts shown in Section 18.510.020 except R-25 and R-40.
- [21] The maximum setback is 20 feet.
- [22] The maximum setback is 10 feet.

C-N - Neighborhood Commercial District	MUC 1 – Mixed Use Commercial
C-C - Community Commercial District	MUC – Mixed Use Commercial
C-G - General Commercial District	MUE 1 – Mixed Use Employment/High Density
C-P - Professional/Administrative Office Commercial	MUE 2 – Mixed Use Employment/Medium Density
MU-CBD – Mixed Use Central Business District	MUR 1 – Mixed Use Residential/High Density
	MUR 2 – Mixed Use Residential/Medium Density

**MU-CBD Development Standards Matrix** <sup>1, 2, 3</sup>

STANDARD	SUB-AREAS			
	Main Street (MS)	99W/Hall Corridor (99H)	Scoffins/Commercial (SC)	Fanno/Burnham (FB)
Front setback				
Minimum	0 ft.	0/5 ft. (5 ft. for frontage on 99W)	0 ft.	0 ft.
Maximum	10 ft.	25 ft.	20 ft.	20 ft.
Side facing street on corner and through lots				
Minimum	0 ft.	0 ft.	0 ft.	0 ft.
Maximum	10 ft.	N/A	N/A	N/A
Sideyard				
Minimum/maximum	N/A	N/A	N/A	N/A
Rear setback				
Minimum	0 ft.	5 ft.	5 ft.	5 ft.
Maximum	N/A	N/A	N/A	N/A
Building height				
Minimum	20 ft.	20 ft.	20 ft.	20 ft.
Maximum (stories/feet)	3 stories (45 ft.)	3 stories (45 ft.)	6 stories (80 ft.)	6 stories (80 ft.) <sup>7</sup>
Ground floor height minimum	15 ft.	15 ft.	None	None
Site coverage maximum	100%	90%	90%	80%
Minimum landscaping <sup>4</sup>	0% <sup>5</sup>	10%	10%	20%
Minimum building frontage	50%	50%	50%	50%
Residential density (units per acre)				
Minimum <sup>8</sup>	25	25	25	15
Maximum	50	50	50 <sup>6</sup>	50 <sup>6</sup>

<sup>1</sup> This table does not apply to existing development. All new buildings in the district must meet these development standards, including projects using the Track 3 approval process.

<sup>2</sup> For standards for development surrounding the future public plaza see Section 18.610.040, Special Requirements for Development Bordering Urban Plaza.

<sup>3</sup> See also Section 18.610.045, Exceptions to Standards in the MU-CBD zone.

<sup>4</sup> In the MU-CBD zone, required landscaping can be provided on roofs.

<sup>5</sup> Landscaping/screening requirements for parking lots must be met.

<sup>6</sup> Station Area Overlay permits a maximum of 80 units per acre (see Map 18.610A).

<sup>7</sup> 3 stories/45 feet within 200 feet of Fanno Creek Park boundary (see Map 610.A) or within 50 feet of low or medium density residential district.

<sup>8</sup> Minimum density applies to residential-only development (not mixed use).

**DEVELOPMENT STANDARDS IN INDUSTRIAL ZONES**

<b>STANDARD</b>	<b>I-P</b>	<b>I-L</b>	<b>I-H</b>
Minimum Lot Size	None	None	None
Minimum Lot Width	50 ft.	50 ft.	50 ft.
Minimum Setbacks			
- Front yard	35 ft.	30 ft.	30 ft.
- Side facing street on corner & through lots [1]	20 ft.	20 ft.	20 ft.
- Side yard	0/50 ft. [3]	0/50 ft. [3]	0/50 ft. [3]
- Rear yard	0/50 ft. [3][4]	0/50 ft. [3]	0/50 ft. [3]
- Distance between front of garage & property line abutting a public or private street	--	--	--
Maximum Height	45 ft.	45 ft.	45 ft.
Maximum Site Coverage [2]	75 % [5]	85 %	85 %
Minimum Landscape Requirement	25 % [6]	15 %	15%

[1] The provisions of Chapter 18.795 (Vision Clearance) must be satisfied.

[2] Includes all buildings and impervious surfaces.

[3] No setback shall be required except 50 feet shall be required where the zone abuts a residential zoning district.

[4] Development in industrial zones abutting the Rolling Hills neighborhood shall comply with Policy 11.5.1.

[5] Maximum site coverage may be increased to 80% if the provisions of Section 18.530.050.B are satisfied.

[6] Except that a reduction to 20% of the site may be approved through the site development review process.

I-P - Industrial Park District I-L - Light Industrial I-H - Heavy Industrial
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## APPENDIX F: TYPICAL SITE REQUIREMENTS FOR DEVELOPMENT TYPES

### Typical Criteria For Specific Development Sites

Development Type	Heavy Industrial/ Manufacturing	General Manufacturing	Food Processing	Hi-Tech Manufacturing & Processing	Campus Industrial/ Electronic and Computer Assembly	Warehouse/ Distribution	Call Center/ Business Services	Office (Class A)	Commercial Shopping Center	Hotel
Typical Size (NCDA)	5 to 25	5 to 10	5 to 10	10 to 25	5 to 25	10 to 25	3 to 5	1 to 5	5 to 10	3 to 5
Location Preference	Interstate, state highway or principle arterial within 1-10 miles	Interstate, state highway or principle arterial within 1-20 miles	Interstate, state highway or principle arterial within 1-30 miles	Interstate, state highway or principle arterial within 1-15 miles	Interstate, state highway or principle arterial within 1-10 miles	Interstate or limited access four-lane highway within 1-15 miles	Along arterial or streets	Along arterial or streets or in down town centers and transit areas	Arterial street visibility, prefers transit areas	Arterial or interstate visibility or downtown centers
Typical Infrastructure	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 36,100 GPD</li> <li>• Sewer flow <math>\geq</math> 32,500 GPD</li> <li>• 1.0 MW Electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 17,000 GPD</li> <li>• Sewer flow <math>\geq</math> 15,300 GPD</li> <li>• 0.5 MW Electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 24,900 GPD</li> <li>• Sewer flow <math>\geq</math> 22,400 GPD</li> <li>• 1.0 MW Electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 65,300 GPD</li> <li>• Sewer flow <math>\geq</math> 58,800 GPD</li> <li>• 2.0 MW Electricity</li> <li>• Fiber-telecom and route diversity</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 74,300 GPD</li> <li>• Sewer flow <math>\geq</math> 74,300 GPD</li> <li>• 0.5 MW Electricity</li> <li>• Fiber-telecom</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 11,700 GPD</li> <li>• Sewer flow <math>\geq</math> 11,700 GPD</li> <li>• 0.5 MW Electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 4,600 GPD</li> <li>• Sewer flow <math>\geq</math> 4,600 GPD</li> <li>• 0.5 MW Electricity</li> <li>• Broadband Internet access</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 3,500 GPD</li> <li>• Sewer flow <math>\geq</math> 3,500 GPD</li> <li>• 0.5 MW Electricity</li> <li>• Broadband Internet access</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 4,000 GPD</li> <li>• Sewer flow <math>\geq</math> 4,000 GPD</li> <li>• 0.5 MW Electricity</li> <li>• Broadband Internet access</li> </ul>	<ul style="list-style-type: none"> <li>• Water flow <math>\geq</math> 10,000 GPD</li> <li>• Sewer flow <math>\geq</math> 10,000 GPD</li> <li>• 0.5 MW Electricity</li> <li>• Broadband Internet access</li> </ul>

NCDA - Net Contiguous Developable Acres

Source: Compiled by FCS Group based on Business Oregon Industrial Site Certification requirements and industry standards.

## APPENDIX G: BUILDABLE LAND INVENTORY

### City of Tigard Buildable Lands Inventory (as of January 1, 2010)

Vacant and Part-Vacant Property										
	< 1 acre		1 to 5 acres		5 to 10 acres		> 10 acres		Total	
	Lots	Acres	Lots	Acres	Lots	Acres	Lots	Acres	Lots	Acres
<b>Commercial</b>										
C-C	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
C-G	19	6.8	6	14.0	2	16.4	0	0.0	27	37.3
C-N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
C-P	7	2.7	2	6.2	0	0.0	0	0.0	9	8.9
<b>Mixed Use</b>										
MU-CBD	3	1.1	0	0.0	0	0.0	0	0.0	3	1.1
MUC	3	1.4	1	1.3	0	0.0	0	0.0	4	2.8
MUE	35	13.9	4	6.1	0	0.0	0	0.0	39	19.9
MUE-1	10	3.8	1	1.5	1	5.7	0	0.0	12	11.0
MUE-2	1	1.2	0	0.0	0	0.0	0	0.0	1	1.2
MUR-1	9	3.2	0	0.0	0	0.0	0	0.0	9	3.2
MUR-2	2	0.8	0	0.0	0	0.0	0	0.0	2	0.8
<b>Industrial</b>										
I-H	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
I-L	7	2.2	2	4.5	0	0.0	0	0.0	9	6.7
I-P	5	2.0	3	6.7	0	0.0	2	34.7	10	43.4
<b>Total</b>	<b>101</b>	<b>38.9</b>	<b>19</b>	<b>40.4</b>	<b>3</b>	<b>22.1</b>	<b>2</b>	<b>34.7</b>	<b>125</b>	<b>136.2</b>

### Summary of Vacant Land by General Land Use Zoning Classification

Vacant and Part-Vacant Property										
	< 1 acre		1 to 5 acres		5 to 10 acres		> 10 acres		Total	
	Lots	Acres	Lots	Acres	Lots	Acres	Lots	Acres	Lots	Acres
Commercial	26	9.5	8	20.2	2	16.4	0	0	36	46.1
Mixed Use	63	25.3	6	8.9	1	5.7	0	0.0	70	39.9
Industrial	12	4.2	5	11.2	0	0.0	2	34.7	19	50.1
<b>Total</b>	<b>101</b>	<b>38.9</b>	<b>19</b>	<b>40.4</b>	<b>3</b>	<b>22.1</b>	<b>2</b>	<b>34.7</b>	<b>125</b>	<b>136.2</b>

Source: City of Tigard.

## APPENDIX H: REDEVELOPMENT LAND INVENTORY

City of Tigard Redevelopable Potential (Improvement to Land Value) <sup>1</sup>						
	High (< 0.33)		Moderate (0.33 to 1.00)		Low (> 1.00)	
	Lots	Acres	Lots	Acres	Lots	Acres
C-C	0	0.0	0	0.0	4	8.5
C-G	8	3.4	13	6.8	158	255.0
C-N	0	0.0	1	0.2	2	2.8
C-P	11	3.8	17	10.9	35	33.6
MU-CBD	24	10.5	50	38.4	86	59.0
MUC	7	12.6	11	24.2	35	155.0
MUE	70	40.5	22	12.3	59	61.8
MUE-1	15	11.5	10	6.9	24	30.9
MUE-2	0	0.0	0	0.0	6	29.4
MUR-1	10	3.9	23	5.6	16	5.3
MUR-2	6	2.4	8	2.6	6	3.0
I-H	2	3.4	4	5.5	9	41.3
I-L	3	11.0	8	25.1	61	203.5
I-P	13	12.5	13	28.2	76	193.1
<b>Total</b>	<b>169</b>	<b>115.6</b>	<b>180</b>	<b>166.6</b>	<b>577</b>	<b>1,082.0</b>

### Summary of Redevelopable Potential

City of Tigard Redevelopable Potential (Improvement to Land Value) <sup>2</sup>						
	High (< 0.33)		Moderate (0.33 to 1.00)		Low (> 1.00)	
	Lots	Acres	Lots	Acres	Lots	Acres
Commercial	19	7.2	31	17.8	199	299.8
Mixed Use	132	81.4	124	89.9	232	344.3
Industrial	18	27.0	25	58.8	146	437.9
<b>Total</b>	<b>169</b>	<b>115.6</b>	<b>180</b>	<b>166.6</b>	<b>577</b>	<b>1082.0</b>

Notes: <sup>1</sup> Improvement to Land Value calculated from Washington County Tax Assessor data (Sept 2010).

<sup>2</sup> 196 Properties contained a zero Improvement or Land Value and are not represented here.

Source: City of Tigard.

## APPENDIX I: SUMMARY OF STAKEHOLDER INTERVIEWS

In support of the City of Tigard's statewide planning Goal 9 Economic Opportunity Analysis, consulting staff interviewed twelve business leaders, employers and economic experts to gather perspectives on the City's current position and future economic opportunities. Summary of interview responses are included after each question, shown in italics. The list of respondents is included at the end of the summary.

1. *What is Tigard's primary market advantage within the state and region with regard to attracting population and jobs? What do you feel are its greatest assets?*

Stakeholders consistently reported that Tigard's location is its primary asset, particularly its proximity to I-5 and other major transportation corridors such as Highway 217 and Highway 99W. Other factors frequently cited included Tigard's position relative to Portland, an educated, affluent population, and open spaces. Four respondents mentioned that the size of Tigard and its suburban setting are attractive. Other named assets include the variety of housing options, diversity of office and industrial buildings and availability of land.

2. *I'm going to read you a list of seven (7) items. From the list, please identify Tigard's primary strengths as a place to do business.*

The list below is organized in order of frequency of response, shown in parentheses.

- Proximity to I-5 and other transportation corridors (11)
- Quality of life (10)
- Available, skilled workforce (10)
- Adequate public infrastructure (transportation, utilities, etc.) (5)
- Access to local markets and customers (5)
- General business climate (4)
- Interaction with firms in the same and/or related industries (2)

3. *(Optional- for employers) Do you have plans to maintain or expand your business in Tigard? If not, will you relocate within the region or elsewhere? Why or why not?*

Most employers who were interviewed said they plan to maintain their current location but are unlikely to expand. Two others said they hope to expand as the economy improves. Reasons for not moving include preferred location, access, and property ownership. One employer said a recent employee survey showed that most of their employees live near the business. One business owner said they may relocate when the current lease expires and relocate to a more thriving business district.

4. *What geographic area(s) do you think best define(s) Tigard's competitive market region for commercial office, retail and industrial development?*

Most interviewees responded to this question by identifying areas in the City that are thriving or successful employment districts. Four respondents felt that the Tigard Triangle is a particularly competitive market area within the city, especially for industrial and retail uses. One person felt strongly that the Triangle was not as competitive as the Hunziker area. Washington Square and the surrounding area were cited twice as being competitive for retail. Other areas mentioned by one person included Oregon Business Park, PacCorp and the area between Highway 99W and Scholls Ferry Road.

5. *The City is interested in redevelopment in its downtown and along the Highway 99W corridor, developing a mixed-use district in the triangle south of Highway 99W and north of Highway 217, and adding more neighborhood commercial uses to meet local needs. Do you agree with these priorities? Why or why not? Are there other areas or corridors the City should focus on?*

Most respondents agreed with these priorities, though several cautioned against development that would compound existing transportation problems (particularly along Highway 99W). There was support for revitalizing downtown by adding new businesses and destinations; including mixed uses, parks and housing that contribute to a unique identity for the City. There was also a good deal of support expressed for improving the Triangle by adding services and diversifying the types of businesses there with available land. Other ideas for focused efforts included the Tiedeman/Greenburg area, the area north of Highway 99W and in the Oak Street or Locust Street areas by Washington Square.

6. *What can Tigard do locally to complement the regional and state economy?*

Several respondents felt that improvements to the transportation network are important to support the Tigard economy. This included improving conditions for vehicle traffic, providing access to alternative transportation facilities such as bike lanes and light rail, and working with regional agencies (e.g., JPACT) to solve transportation problems. Two respondents suggested that the City needs an economic development department and/or active business recruitment by the mayor, city manager and economic development staff. Other ideas included lower taxes, incentives to start a business or re-locate in Tigard, and grants for small businesses. Two respondents recommended continuing to improve upon the current level of service and responsiveness of City building and planning staff. One suggested retaining large industrial tracts to attract potential employers.

7. *What types of land and/or economic development actions or incentives are most needed in the City to nurture job growth and private investment?*

Respondents' most common suggestion was for the City to improve infrastructure – particularly transportation. Others suggested lowering taxes and strategically reducing system development charges (SDCs) for small businesses or other potential employers. Another suggested using enterprise zones or urban renewal areas to capture future tax revenues. Two others emphasized the importance of diversifying local businesses and professional services, particularly downtown.

8. *What actions should be taken by the City to create a more balanced and sustainable community?*

Interview respondents had several ideas about how to create a balanced and sustainable community. These include diversifying the types of business in the city, adding more transportation options and creating mixed-use districts. Two people said that the City needs to focus its efforts and build a distinct identity and greater sense of community, including supporting local business and adding more commercial services to residential areas. Others suggested creating affordable housing and mixed-use districts near commuter rail and future light rail. Two respondents noted that they thought the City is doing well with its current efforts.

9. *Along those lines, the City wishes to better balance jobs and housing. What types of housing do you think are most needed?*

While three interviewees responded that the current mix of housing is adequate, others suggested the need for a more diverse housing stock. Specific needs include moderate to low-income housing in or near downtown and commercial services, second-floor residential, condominiums and small lot or zero lot line homes. A few respondents suggested siting mixed-income housing near transit routes.

10. *What business clusters exist or should exist in Tigard? What can the City do to build and strengthen these clusters?*

Most interview respondents said that Tigard does not have business clusters other than some collection of general services and industry. One identified a cluster of finance and professional services. Several felt that Tigard has a good diversity of businesses and does not need to build clusters. Others suggested that the City could encourage clusters by recruiting a large company so that supporting organizations follow, or by acquiring and consolidating large parcels to sell to a major employer. One respondent recommended the City find a niche such as specialty medical, technical or manufacturing that does not compete with existing retail establishments including Washington Square.

11. *What opportunities and challenges are there to expanding the traded sector in Tigard? What goods and services could be produced locally rather than imported, and what could be exported?*

Most respondents did not have an answer for this question. One suggested that all services are imported and another suggested polling the manufacturing sector to identify existing goods and services offered in Tigard. Another interviewee pointed out that there is a great deal of vacant Class A and B office and industrial space, which is both a challenge and an opportunity for the City to attract new industry and business.

12. *Are there certain goods or services that you think are missing in the City of Tigard today?*

Goods and services that interviewees said were missing from Tigard include downtown grocery and retail, upscale restaurants and neighborhood commercial services. Others suggested that Tigard needs light rail or bus rapid transit as well as more parks and trails. One recommended that Tigard develop a unique identity based on neighborhood and housing design in order to compete with the large surrounding retail and cited Sierra Madre, CA as a successful example.

13. *Is there anything else you'd like to add?*

Interview respondents offered the following closing comments:

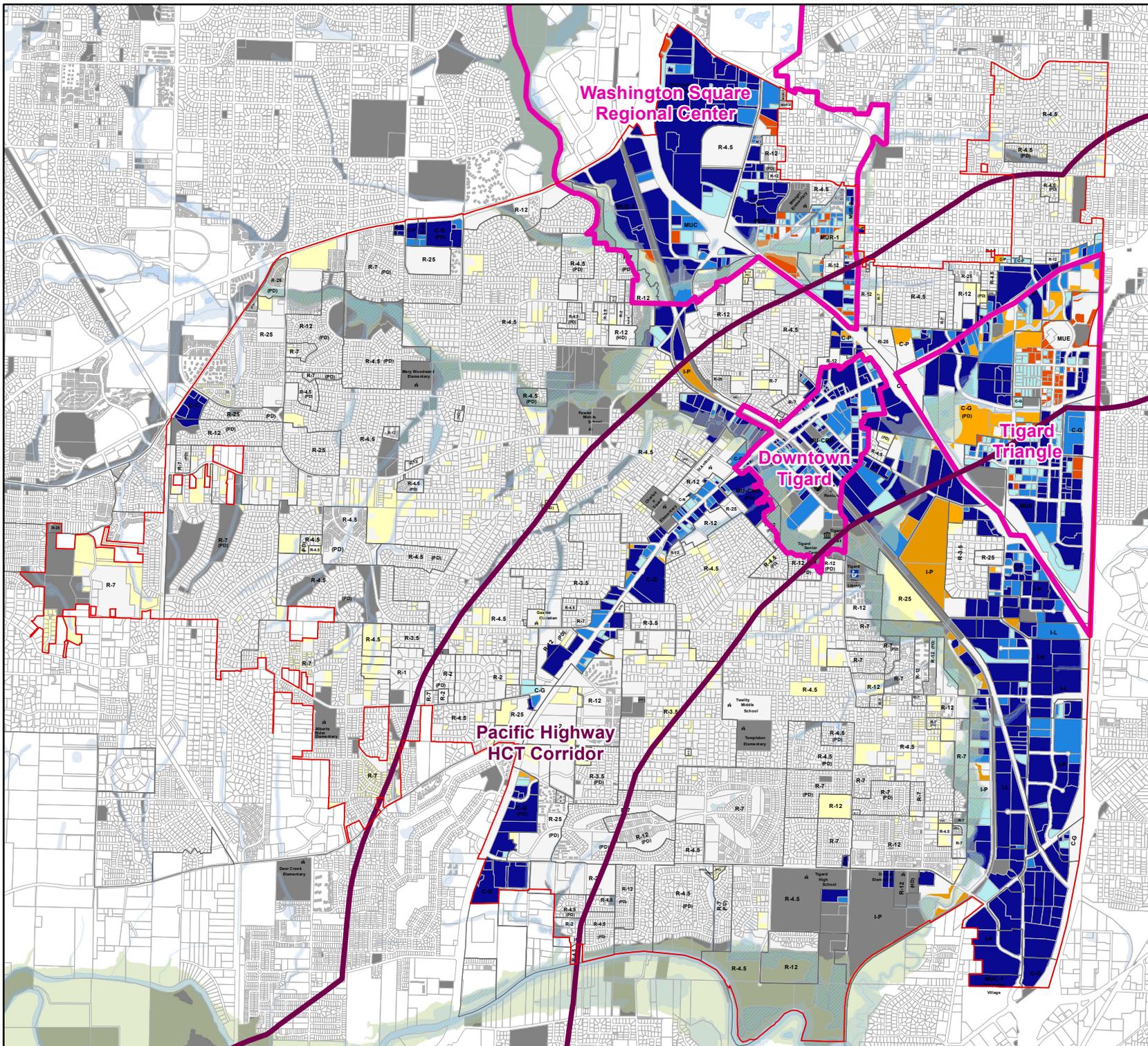
- One person stated that he is frustrated with the lack of economic development activity on the part of the City.
- Tigard has the opportunity to be a good example for a small city. Improve transportation options and get people off the freeways while maintaining mobility in and between towns.
- The City needs to be efficient to support businesses. Be prepared for the economic upturn. Keep an eye on the planning department and have a contingency plan to respond to an increase in business activity (e.g., hire contractors or new staff).
- Be sure to “over-communicate” this and other City projects. Explore and use a variety of communication media, including mail and social media.
- It is great that the City is doing this type of outreach and planning.
- Tigard's city council members toured Vancouver, BC a few years ago to look at urban planning and transportation issues. The trip, hosted by Metro, was very beneficial in generating ideas on how to meet these challenges.

### **List of Interviewees**

1. Kirsten Alvares, Gerber Legendary Blades
2. Jonae Armstrong, Washington Square
3. Mark Ellsworth, Economic Revitalization Team
4. Donald Fox, Fox Chiropractic Clinic
5. Mike Marr, Tigard Central Business District
6. Debi Mollahan, Tigard Area Chamber of Commerce
7. Bonnie Nakashimada, George Fox University
8. Jonathan Schlueter, Westside Economic Alliance
9. George Specht, Specht Properties
10. Eric Sporre, PACTrust/Oregon Business Park
11. Mike Stevensen, B&B Printing
12. Eric Turner, GVA/Kidder Matthews

# Appendix J: Buildable Lands and Redevelopment/ Refill Potential

City of Tigard  
Oregon

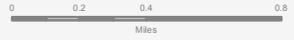


- City Limits
- Zoning
- Taxlot Boundary
- Wetland
- Water
- Stream Corridor
- 100 yr Floodplain
- Buildable Lands**
- Commercial
- Industrial
- Mixed Use
- Residential
- Redevelopment Potential**
- Improve\_Land**
- High
- Moderate
- Low
- Government Owned Land

The inventory presented is based on specific assumptions and was formulated over a four year period. The inventory should not be considered an exhaustive list of what is not available for development, but a static representation based on the available data. Inclusion does not mean a property will develop or confers a mandate to do so, as exclusion does not prevent a property from developing in the future. For purposes of this inventory, buildable lands were identified as property outside of Title 3 lands that are:

1. Fully vacant: undeveloped, privately-owned parcels
2. Partially vacant: developed, privately-owned parcels with 1/4 acre or more of the parcel vacant

\*\* The information represented on this map is current as of January 1, 2010. Revisions will be made as new decisions or amendments occur to alter the content of the map.



## Goal 9: Economic Development

Economic activity is the lifeblood of any community, providing jobs, creating wealth, and generating tax revenue. Tigard's economy is intertwined with the economy of the region, the nation, and the world.

### Goal 9: Economic Development

*"To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens."*

Tigard's location at the crossroads of several transportation routes has proven to be a major advantage. Other advantages include the relatively high educational attainment level of its citizens; and its proximity to the high technology centers in Washington County and major educational institutions such as Portland State University and Portland Community College. A recent study found that Tigard was a "hub for innovation" for a city its size due to the comparatively high percentage of patents granted to individuals and small business.

Tigard residents envision a future economy that builds on these strengths. Tigard shall have a strong and resilient local economy with a diverse portfolio of economic activity: retail, professional service, and industrial jobs. The local economy shall provide for goods and services for local resident and business needs but also have the goal of expanding the "traded sector." This sector sells goods and services outside the region to the broader state, national and international markets and/or produces goods and services that normally would have to be imported to the community. These businesses bring income into the community or region and keep local income from going elsewhere.

Tigard's future economy may include activities whose characteristics are not foreseeable at this time such as live-work arrangements; light manufacturing combined with research and development; creative crafts and arts such as film, advertising, communications, etc. Therefore the City's land use and other regulatory practices shall be flexible and adaptive so as not to preclude desirable economic development opportunities.

Tigard is sometimes perceived as a bedroom community for nearby cities. This is not accurate. Tigard businesses provided ~~38,628~~ 41,422 full and part time jobs in 2008~~05~~ (State of Oregon Employment Department). This number is greater than the number of Tigard residents over the age of 16 in the workforce: 25,537 (O.E.D, 2006). Seventy percent of Tigard residents work outside the City, so thousands of workers from throughout the region ~~are~~ regularly commuting to Tigard jobs (2000 Census). The City shall seek to expand the opportunities for residents to work closer to where they live. This will require promoting a mix of high quality housing opportunities for households with varying incomes.

Quality of life factors shall be promoted to attract economic investments and a skilled work force. Among these factors are an attractive and well-maintained community; high levels of public safety; accessible and responsive local government; availability of a variety of housing, good public schools; access to nature, high quality parks, leisure and recreation activities, safe

and convenient multi-modal transportation opportunities, and smoothly running essential infrastructure.

State and Regional Policies: The Department of Land Conservation and Development (DLCD) and Metro have developed policies that address economic opportunities, which are based on Statewide Planning Goal 9.

A major emphasis of the Goal 9 policies is to preserve and protect land for industrial and employment uses. Metro has sought to implement this on a regional basis. Title 4 of the Metro Urban Growth Management Functional Plan identifies Industrial and Other Employment Areas that are important to the region.

Goal 9 also requires cities to complete an Economic Opportunities Analysis as part of State Periodic Review. The Tigard 2011 Economic Opportunities Analysis (EOA) was adopted in May 2011. The EOA analysis showed that the land efficient need strategy is appropriate to supply adequate vacant land to accommodate projected employment and industrial uses over the next 20 years. This required no rezoning of property at the time.

The land efficient need strategy is based on findings that Tigard has a limited supply of little available vacant industrial and employment land suitable for new large-scale industrial development. The lands; the City is currently severely limited in its ability to expand its boundaries to increase its industrial/employment land base; the City has a good supply of properties that meet the definition of “high redevelopment potential”; the City’s strategy is to redevelop Downtown Tigard, the Tigard Triangle, the Washington Square Regional Center, and the Pacific Highway Corridor; and the City has an opportunity to jump-start redevelopment with the arrival of high capacity transit, so the only way to designate new industrial land would be to re-zone existing land. This is unlikely to happen at a large scale. Alternately, the City could encourage industrial-type uses that are not as land intensive.

Tigard can ensure a strong economy with these desired characteristics by working on a formal economic development program. In the near term the Downtown Urban Renewal District has the potential to redevelop and attract additional employment and economic activity.

### Key Findings

- Tigard is home to a wide range of economic activity.
- Tigard does not have a formal city-wide economic development strategy.
- Tigard’s location at the crossroads of important transportation corridors I-5, Hwy 217, and Hwy 99W is a major advantage in attracting economic activity.
- Approximately 31% of Tigard’s land area is zoned for commercial, industrial, and mixed use purposes. These properties represent about 31% of the total assessed property value.
- The major commercial and mixed-use areas of the City are Washington Square, Tigard Triangle, Downtown Tigard, and the Hwy 99W corridor. Industrially zoned properties are generally located along the freight rail line, in between Fanno Creek and I-5.

- ~~In 2005, Tigard public and private sectors provided 38,628 full and part time jobs. (This does not include self-employed workers.)~~
- ~~In 2005, 3,124 businesses paid the Tigard business tax. About half of these businesses employ four people or fewer.~~
- In Tigard, there are more jobs than people in the workforce living within the City boundaries. Seventy percent of residents commute outside the City; therefore, Tigard is a net attractor of commuters.
- In Tigard, the Wholesale Trade sector has the largest amount of sales. The Retail sector has the largest annual aggregate payroll and largest number of workers.
- ~~The Tigard 2011 EOA identified existing and emerging business clusters that pay above average wages and could be accommodated by current conditions. Financial Activities, Retail, and Construction are employment sectors with high Location Quotients (propensity to locate) in Tigard.~~
- Metro has designated approximately 1,100 acres of Industrial and Commercially zoned properties in Tigard as Title 4 Industrial and Employment Areas. ~~Tigard will have to amend its code to limit the development of retail and service uses for some I-P zone properties.~~
- There has been no large-scale encroachment of retail/office uses in industrial areas in Tigard.
- ~~In 1997 Metro assigned Tigard a capacity of 17,801 new jobs by the year 2017. Between 1997 and 2004, Tigard added approximately 3,800 jobs.~~
- ~~Tigard's supply of industrially zoned land will likely be inadequate to meet the forecasted 2024 job demand in this area. It appears that there is an adequate supply of commercial land.~~
- Tigard has little vacant industrial land available to attract new large scale industrial development.
- ~~The Tigard 2011 EOA found the supply of vacant industrial/employment lands could accommodate the 20-year needs of the efficient land growth scenario.~~
- A recent study found that Tigard was a “hub for innovation.” A study of patents and communities by the research firm iPiQ found that in 2005, Tigard had a high percentage of patents granted to individuals and small business (29). The study attributed this to Tigard’s lower rents and taxes attracting professionals from Portland and Beaverton.

## Goal

9.1 Develop and maintain a strong, diversified, and sustainable local economy.

## Policies

1. The City shall establish strategies to retain and encourage the growth of existing businesses.
2. The City shall actively encourage businesses that provide family-wage jobs to start up, expand or locate in Tigard.
3. The City’s land use and other regulatory practices shall be flexible and adaptive to promote desirable economic development opportunities, provided that required infrastructure is made available.

4. The City shall address the public facility needs of business and economic development through identifying and programming needed public facilities and services within the Public Facility and ~~Community Investment~~ Capital Improvement Plans.
5. The City shall promote well-designed and efficient development and redevelopment of vacant and underutilized industrial and commercial lands.
6. The City shall promote actions that result in greater, more efficient, utilization of its Metro-designated Employment and Industrial Areas.
7. The City shall limit the development of retail and service land uses in Metro-designated industrial areas, especially on lots of 10 or more acres, to preserve the potential of these lands for industrial jobs.
8. The City shall participate and represent Tigard's interests in economic development activities and organizations at the regional, state and federal levels.
9. The City shall strongly represent its interests at the regional, state and federal levels to acquire transportation funding, including truck and rail freight movement needed to support existing business activity, attract new business, and improve general transportation mobility throughout the community.
10. The City shall strongly support, as essential to the region's economic future, the development of efficient regional multi-modal transportation systems throughout the Portland Metropolitan area.
11. The City shall develop economic clusters by encouraging the retention, expansion and recruitment of industries that already have a presence in Tigard.
12. The City shall assure economic development promotes other community qualities, such as livability and environmental quality that are necessary for a sustainable economic future.
- ~~12-13.~~ The City shall monitor and update its buildable lands inventory to ensure adequate short and long-term supplies of buildable employment land.

#### Recommended Action Measures

- i. Develop a formal City of Tigard economic development program and strategy to implement the community's economic development goals and policies and consider the creation of an economic development director position to develop and implement the program.
- ii. Develop and periodically update Comprehensive Economic Opportunities Analyses and other employment and economic development studies to determine the status of Tigard's economy including strengths, deficiencies, and

trends.

- iii. Coordinate economic development activities with Metro, Washington County, Greenlight Greater Portland, Portland Regional Partners for Business, the Westside Economic Alliance, state agencies and other entities.
- iv. Investigate the potential of an “Economic Gardening” program in Tigard that provides information, infrastructure, and connections to local businesses with the potential for growth.
- v. Improve data collection on local economic trends by gathering up-to-date and accurate information from local, regional, state, and federal sources.
- vi. Support redevelopment of existing vacant and underutilized industrial and commercial lands rather than designating additional lands for these purposes.
- vii. Research strategies to inventory, assess, clean-up, and redevelop brownfields.
- viii. In view of the limits imposed on Tigard’s ability to expand its city limits by surrounding jurisdictions, develop strategies to increase employment growth through more intense and efficient use of existing lands.
- ix. Maintain updated land use inventories and associated characteristics of commercial, industrial, and other employment related land uses to assist in economic development planning and coordination with other jurisdictions/agencies.
- x. Consider implementing additional Urban Renewal Districts where feasible.
- xi. Develop a comprehensive “Area Plan” for the Tigard Triangle to promote its full development.
- xii. Increase opportunities for higher density housing and employment development in the Downtown Urban Renewal District, Washington Square Regional Center, Tigard Triangle, and designated Corridors to enable more intense housing and employment uses to be located in close proximity to transit and other urban uses.
- xiii. Prioritize support for businesses identified as being able to develop into regional industry clusters.
- xiv. Improve media contacts and develop a branding / marketing effort to promote Tigard as a place to live and do business.
- xv. Assist property owners with the Oregon Industrial Site Certification process to help preserve and market the City’s inventory of industrial lands.
- xvi. Work with state and regional partners to develop alternative mobility standards that will benefit the community and its economic development efforts.
- ~~xiv.~~ xvii. Explore an economic development marketing and incentives program

targeting strategic business clusters.

#### Goal

9.2 Make Tigard a center and incubator for innovative businesses, including those that focus on environmental sustainability.

#### Policies

1. The City shall institute appropriate land use regulations to accommodate a contemporary mix of economic activities.
2. The City shall periodically review and update its policies, land use regulations, and other efforts to ensure the City's land use program is responsive to changes in the economic structure, and is adaptable to businesses changing development needs.
- ~~3.~~ 3. The City shall engage with state and regional economic development organizations and agencies to sustain and expand its current economic activities and be prepared for future economic trends.
- ~~3.4.~~ 3.4. The City shall encourage businesses that are environmentally and economically sustainable.

#### Recommended Action Measures

- i. Develop a strategy to increase the number of knowledge based and traded sector jobs that pay higher than national average wages.
- ii. Investigate ways to support local innovative businesses and economic activities, as evidenced by the relatively high number of patents granted to individuals and small business in Tigard.
- iii. Investigate the potential for a business incubator or innovation center that fosters the start-up of new innovative businesses and connects regional economic partners, businesses, higher education and venture capitalists.
- iv. Improve connections with major universities to promote research connections, and access to innovative business practices.
- v. Promote Downtown Tigard as a place for innovative and emerging business to expand or relocate.
- vi. Encourage programs that promote sustainable business practices (e.g., recycling, green building or other sustainable design features, the use of green or alternative energy, commute trip reduction programs).
- ~~vi.~~ vii. Monitor local and regional economic development initiatives to assess their effectiveness related to cost and outcome.

## Goal

9.3 Make Tigard a prosperous and desirable place to live and do business.

## Policies

1. The City shall focus a significant portion of future employment growth and high-density housing development in its Metro-designated Town Center (~~Downtown~~); Regional Center (Washington Square); and High Capacity Transit Corridor (Hwy 99W); and the Tigard Triangle.
2. The City shall adopt land use regulations and standards to ensure a well-designed and attractive urban environment that supports/protects public and private sector investments.
3. The City shall commit to improving and maintaining the quality of community life (public safety, education, transportation, community design, housing, parks and recreation, etc.) to promote a vibrant and sustainable economy.
4. The City shall allow opportunities for home based businesses that are compatible with existing and planned residential living environments.
- 4.5. The City shall encourage neighborhood commercial uses that support economic opportunities, multi-modal transportation options, neighborhood vitality, and the goals of efficient land use patterns.

## Recommended Action Measures

- i. Consider instituting design regulations to ensure that new commercial, mixed-use, and industrial development are well designed and make an aesthetic contribution to the community.
- ii. Increase Tigard's supply of open space and recreational opportunities as an amenity to attract new businesses and their employees.
- iii. Promote Tigard's cultural, historic, recreational, educational, and environmental assets as important marketing tools for the City's business areas and neighborhoods.
- iv. Support environmental conservation and wildlife enhancement activities for their contribution to the local economy as quality of life amenities for residents, business owners, and their employees.
- v. Investigate ways to improve the appearance and function of Hwy 99W and other transportation corridors.
- vi. Develop high quality work force housing to increase the opportunity for employees who work in Tigard to also live in the community.

- vii. Streamline the City processes required to start or expand a business by techniques such as online permits and business tax applications.
- viii. Develop long-term and active working relationships between business organizations (such as the Tigard Area Chamber of Commerce), community groups, public agencies, and elected leadership.
- ix. Produce a “Doing Business in Tigard” packet for businesses.
- x. Support catalyst projects outlined in the Tigard Downtown Improvement Plan and make public investments in infrastructure such as streets, sidewalks, and public areas to leverage desirable development in the Downtown Urban Renewal District.
- xi. Attract new businesses and retain existing ones that will assist in creating an Urban Village in the Downtown Urban Renewal District.
- ~~xii. Institute new land use regulations, including design regulations, to ensure high quality development in the Downtown.~~
- ~~xiii-xii.~~ Work with Work Systems, Inc., Tigard-Tualatin School District, and Portland Community College on ensuring business employment needs and trends are in line with educational curriculums.
- ~~xiv-xiii.~~ Consider joining an international “Sister Cities” program to develop reciprocal cultural, educational, municipal, business, professional, and technical exchanges and projects with foreign cities.
- ~~xv-xiv.~~ Monitor emerging wireless and high-speed internet technologies to ensure competitively priced access for Tigard residents and businesses.
- ~~xvi-xv.~~ Recognize and promote community events as having potential for positive economic impacts and as important for community identity.

## **Tigard Comprehensive Plan Glossary**

**Metro-designated Employment Area** – a Metro design-type, whose boundary is defined on the Metro Title 4, Industrial and Other Employment Areas Map, that mixes various types of employment and some residential development, with limited retail commercial uses primarily to serve the needs of people working or living in the immediate area.

**Metro-designated Corridor or High Capacity Transit Corridor** – a Metro design-type, whose boundary is defined on the Metro Title 6, Centers, Corridors, Station Communities and Main Street Map, that are located along major transportation routes and feature increased densities, a high-quality pedestrian environment, and convenient access to transit.

**Metro-designated Industrial Area** – a Metro design-type, whose boundary is defined on the Metro Title 4, Industrial and Other Employment Areas Map, that is set aside primarily for industrial activities with limited supporting uses.

**Metro-designated Regional Center or Washington Square Regional Center** – a Metro design-type, whose boundary is defined on the Metro Title 6, Centers, Corridors, Station Communities and Main Street Map, that focuses on compact development, redevelopment and high-quality transit service, multimodal street networks, and act as major nodes along regional through-routes.

**Metro-designated Town Center or Tigard Town Center** – a Metro design-type, whose boundary is defined on the Metro Title 6, Centers, Corridors, Station Communities and Main Street Map, that provides local shopping, employment, and services with compact development and transit service.

**Tigard Triangle** – area of Tigard bounded by Pacific Highway, Interstate 5, and Highway 217.

**Downtown Urban Renewal District** – an area encompassing Downtown Tigard and defined in the City Center Urban Renewal Plan.



# City of Tigard Memorandum

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**To:** Mayor Dirksen and City Council

**From:** Darren Wyss, Senior Planner

**Re:** Supplemental Staff Report - CPA2011-00002

**Date:** May 11, 2011

On May 10, 2011, City Council held a public hearing regarding the Tigard 2011 Economic Opportunities Analysis (CPA2011-00002). Council took public testimony, closed the public hearing, and directed staff to return with alternative definitions based on the letters submitted by the Oregon Department of Transportation (ODOT) and Metro.

As part of CPA2011-00002, the city proposed to adopt an expanded Tigard Town Center boundary through a definition in the Tigard Comprehensive Plan that referenced the Metro Title 6 map. Council passed Resolution 10-24 in May 2010 supporting a boundary change proposal to Metro. In December 2010, Metro changed the Tigard Town Center boundary on its Title 6 map as proposed in Resolution 10-24. The final step was city adoption of the expanded boundary.

Initial indication from Metro was that the approach of using a definition would be sufficient to comply with Title 6. ODOT submitted a letter (see Exhibit C) to the Planning Commission disputing the sufficiency of the definition approach. Planning Commission made its decision, but suggested staff secure a letter from Metro stating its position. Metro sent a letter (see Exhibit C) in advance of the Council public hearing stating the definition approach is not sufficient. The city will need to bring forward a separate amendment adopting a map. As a result of the letters, the reference to Title 6 maps is not needed and it is proposed to be removed from the Planning Commission recommended definitions as follows:

**Metro-designated Corridor or High Capacity Transit Corridor** – a Metro design-type, whose boundary is defined on the Metro Title 6, Centers, Corridors, Station Communities and Main Street Map, that are located along major transportation routes and feature increased densities, a high-quality pedestrian environment, and convenient access to transit.

**Metro-designated Regional Center or Washington Square Regional Center** – a Metro design-type, whose boundary is defined on the Metro Title 6, Centers, Corridors, Station Communities and Main Street Map, that focuses on compact development, redevelopment and high-quality transit service, multimodal street networks, and act as major nodes along regional through-routes.

**Metro-designated Town Center or Tigard Town Center** – a Metro design-type, whose boundary is defined on the Metro Title 6, Centers, Corridors, Station Communities and Main Street Map, that provides local shopping, employment, and services with compact development and transit service.



April 15, 2011

Darren Wyss  
Senior Planner  
Community Development  
City of Tigard  
13125 SW Hall Boulevard  
Tigard, OR 97223

Re: Metro staff comments on proposed amendments to Tigard's Comprehensive Plan (CPA 2011-00002)

Dear Mr. Wyss:

Thank you for the opportunity to review and comment on the proposed amendments to Tigard's Comprehensive Plan and the city's draft 2011 Economic Opportunities Analysis (EOA). The EOA is an important source of information for informing the City's update of its comprehensive plan. Metro staff finds the draft EOA to be a thoughtful analysis of Tigard's future employment growth and believes that its underlying assumptions are sound and reflect regional coordination. Staff finds the Comprehensive Plan amendments supportive of regional policies, though we have a concern about the approach to the town center boundary as proposed. More specific comments follow.

#### **Center boundaries**

The proposed amendments to the Tigard Comprehensive Plan include adoption of the Tigard Town Center and other boundaries in the glossary with reference to Metro's maps of centers and corridors and employment and industrial areas. In December 2010, Metro Council amended the titles in the Urban Growth Management Functional Plan (UGMFP) that specify the process for local jurisdictions to adopt a boundary designating a center or corridor. Prior to December, local jurisdictions were required to adopt center and corridor boundaries, as specified in Title 1 of the UGMFP. The December Metro ordinance changed that requirement to one in which a city is required to adopt boundaries and take other actions in order to be eligible for regional investments such as high capacity transit as well as to be eligible for ODOT's lower mobility standards and standards in the transportation planning rule. The adoption of the boundaries is an important part of a package of actions that signal that a community is taking the steps to focus investments and adopt policies to support more compact development consistent with regional policies for centers.

Staff finds the proposed approach of including the definition of the boundary in a glossary does not meet the intent of Title 6 and may be unclear to citizens interested in understanding the location of the centers in Tigard. In May 2010, Tigard City Council adopted Resolution 10-24, which "...expressed support for the preparation and submission of a Tigard Town Center boundary change..." to the Metro Council. In December, the Metro Council amended the 2040 Growth Concept Map and the map of center boundaries to reflect the intent expressed in Tigard's resolution. We encourage the city to proceed with other proposed amendments to the Comprehensive Plan (including adoption of the EOA), and, in order to be eligible for regional investments and other incentives, make center boundary designations in a separate ordinance, which clearly depicts the boundary on a map and follows the notice requirements in section 3.07.620 B4 of Metro's UGMFP.

#### **Employment forecast**

Tigard's EOA is informed by the region's most recently adopted forecast allocation (2005 to 2030). The use of this forecast helps to ensure regional coordination. The EOA includes appropriate adjustments to reflect the impacts of the recent recession. The EOA's use of a range forecast is also a useful approach given the significant economic uncertainty created by the recession. Finally, the EOA's assessment of the clusters that may grow in Tigard balances a realistic analysis with city aspirations.

**Employment capacity**

We appreciate the use of buildable land inventory data that are consistent with data used in the 2009 urban growth report (UGR). As with the EOA's use of the most recent regional forecast allocation, the use of the regional buildable land inventory data helps to ensure coordination.

The draft EOA recognizes the important role that redevelopment will play in providing future employment capacity. The refill assumptions used in the EOA are, in fact, more ambitious than those modeled for the 2009 UGR (for the Inner Westside market subarea), but are justifiable given the city's intention to focus growth within its existing urban service area.

**Space usage assumptions and land need**

We find the EOA's assumptions about employment space usage to be reasonable and consistent with those used in the 2009 UGR. These assumptions include square footage per employee and floor area ratios for different building types. Metro staff supports the EOA's recommendation to pursue an efficient land need scenario, focusing a significant amount of growth in downtown Tigard, Washington Square Regional Center, the Tigard Triangle, and along the Southwest High-Capacity Transit corridor.

**Policy and implementation action recommendations**

Metro staff is supportive of the policy and implementation action recommendations found in the EOA, including the protection of large lots for industrial uses, the promotion of employment in centers and corridors, and the stated intention to work with ODOT and Metro to develop alternative mobility standards that complement the city's aspiration to promote growth in its centers and corridors.

Sincerely,



Ted Reid

Associate Regional Planner

cc: Robin McArthur, Planning and Development Director  
Chris Deffebach, Long Range Planning Manager  
Gerry Uba, Principal Regional Planner



# Oregon

John A. Kitzhaber, MD, Governor

## Department of Transportation

Region 1 Headquarters  
123 NW Flanders Street  
Portland, Oregon 97209  
(503) 731.8200  
FAX (503) 731.8531

April 4, 2011

City of Tigard Planning Commission  
City of Tigard  
13125 SW Hall Blvd  
Tigard, OR 97223

SUBJECT: CPA 2011-00002

The Oregon Department of Transportation (ODOT) has reviewed the proposed language adopting the Tigard 2011 Economic Opportunities Analysis and amending the Comprehensive Plan Glossary. We understand that it is the City's intent to amend the Tigard Town Center boundary to include the Tigard Triangle area (defined in the CP Glossary as the area of Tigard bounded by Pacific Hwy OR 99W, I-5, and OR 217), but this is not clear from the package provided to the Planning Commission for its April 4, 2011 meeting. No map has been provided showing revised Town Center boundaries and there is no description of a proposed action adopting or amending the Town Center boundary or other 2040 design type boundaries.

### **Issue 1: The proposed Glossary definitions reference incorrect map boundaries**

The proposed Glossary definitions reference boundaries "defined on the Metro 2040 Growth Concept Plan". However, the Metro 2040 Growth Concept Plan Map only depicts general locations of 2040 Centers. The Planning Commission and City Council should be aware that Metro does not adopt or designate specific 2040 Growth Concept Center boundaries, but depicts locally adopted boundaries on the Urban Growth Management Functional Plan (UGMFP) Title 6 *Centers, Corridors, Station Communities, and Main Streets Map*, as well as in its State of the Centers Report and other publications.

### **Issue 2: The City of Tigard did not follow requirements set forth in UGMFP Title 6, section 3.07.620.B.4, and did not provide notice to ODOT of a proposed boundary action**

While the City's intended Town Center boundary is currently shown on the *Centers, Corridors, Station Communities, and Main Streets Map*, that boundary is not based on adoption by City Council following notice to ODOT, and therefore is not valid in our opinion.

The UGMFP Title 6, section 3.07.620.B.4 specifically requires that "*Center boundaries be adopted and may be revised by the City Council ... following notice of the proposed boundary action to the Oregon Department of Transportation and Metro in the manner set forth in subsection A of section 3.07.820 of this chapter*". The City's request to Metro in December of 2010 to show the Tigard Triangle area as part of the Town Center did not follow this process as there was no City Council adoption and no notice was provided to ODOT. The proposed adoption *at this time* of amendments to the Comprehensive Plan Glossary - referencing a different Metro map - does not constitute adoption by City Council of a proposed boundary action.

### **Issue 3: The proposal lacks a Plan of Actions and Investments and land use regulations for the Town Center area, per Section 3.07**

It is not clear what the City's intent is in revising its Town Center boundaries to include the Tigard Triangle. If the City wishes to be eligible for regional investments, lower mobility standards, and

lower trip generation rates, as set forth in the UGMFP Title 6, the Planning Commission and City Council should be made aware that adoption of Town Center boundaries is not sufficient to gain such eligibility. In addition to adoption of a Center boundary, Section 3.07.620 requires performance of an Assessment and adoption of a Plan of Actions and Investments to enhance the Center in order to be eligible for regional investments.

In addition to adoption of a boundary, Section 3.07.630.A requires adoption of land use regulations to allow the mix and intensity of uses specified in subsection B of section 3.07.620 of the UGMFP in order to be eligible to apply the V/C standards applicable to Town Centers in Table 7 of the Oregon Highway Plan (OHP). Table 7 designates Pacific Highway 99W in Tigard (from I-5 to Tualatin Road) as an Area of Special Concern with a V/C standard of .95, so the Town Center V/C standards of 1.1 and .99 do not apply to OR 99W. It is the intent of ODOT, Metro, and the City of Tigard to develop alternative mobility standards along OR 99W as part of the Southwest Corridor Transportation Refinement Plan, which would replace both the Area of Special Concern and the Town Center V/C standards. Alternative mobility standards will be designed to allow adoption of higher densities and intensities of land uses supportive of High Capacity Transit in the corridor. ODOT is supporting this effort through its TGM grants for the Tigard HCT Land Use Plan and the SW Corridor Refinement Plan, as well as with significant additional resources.

**Issue 4: The proposal lacks transportation actions to support the reduced trip generation rate assumptions for a Town Center.**

Finally, section 3.07.630 B applies to eligibility for trip reduction credits as part of Plan Amendments subject to the Transportation Planning rule (TPR) section -0060. In addition to adopting boundaries and land use regulations to allow the appropriate mix and intensity of land uses, the City must adopt a number of transportation actions that support the reduced trip generation rate assumptions, including local and arterial street design and connectivity, bicycle and pedestrian improvements, TSM and TDM, and a parking management program.

**Summary**

In summary, the proposed Comprehensive Plan Amendment does not constitute adoption of Center boundaries. More importantly, the City will need to adopt land use and transportation provisions in addition to Center boundaries in order to be eligible for regional investments, lower mobility standards, and lower trip generation rates. ODOT is supportive of the City's vision for its future and looks forward to continuing to work with the City on these critical additional steps.



Lidwien Rahman  
Principal Planner  
Oregon Department of Transportation

**STAFF REPORT TO THE  
PLANNING COMMISSION  
FOR THE CITY OF TIGARD, OREGON**



120 DAYS = N/A

**SECTION I. APPLICATION SUMMARY**

**FILE NAME:** TIGARD 2011 ECONOMIC OPPORTUNITIES ANALYSIS ADOPTION

**FILE NO.:** Comprehensive Plan Amendment (CPA) CPA2011-00002

**PROPOSAL:** To adopt the Tigard 2011 Economic Opportunities Analysis as a component of Tigard Comprehensive Plan Goal 9: Economic Development; to amend the current Tigard Comprehensive Plan Goal 9: Economic Development goals, policies, and recommended action measures; and to amend Tigard Comprehensive Plan Glossary.

**APPLICANT:** City of Tigard  
13125 SW Hall Boulevard  
Tigard, OR 97223

**OWNER:** N/A

**LOCATION:** Citywide

**ZONING**

**DESIGNATION:** All City zoning districts

**COMP PLAN:** All City comprehensive plan designations

**APPLICABLE REVIEW CRITERIA:**

Community Development Code Chapters 18.380 and 18.390; Comprehensive Plan Goals 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and Special Planning Area: Downtown; Metro Urban Growth Management Functional Plan Title 4; Oregon Administrative Rule 660, Division 9; and Statewide Planning Goals 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14.

**SECTION II. STAFF RECOMMENDATION**

Staff recommends the Planning Commission finds this request to meet the necessary approval criteria and RECOMMENDS the Tigard City Council amends the Tigard Comprehensive Plan as determined through the public hearing process.

## **SECTION III. BACKGROUND INFORMATION**

### **Project History**

The City of Tigard is in State Periodic Review. One of the required Periodic Review work tasks is to conduct an economic opportunities analysis. The City received grant funds from the Oregon Department of Land Conservation and Development for technical consultant assistance to complete this task.

The *Tigard 2011 Economic Opportunities Analysis (Tigard 2011 EOA)* was developed in compliance with OAR 660 Division 9 (Statewide Planning Goal 9: Economic Development) and is a technical study that compares projected demand for land for industrial and other employment uses to the existing supply of such land. The purpose of the *Tigard 2011 EOA* is to improve opportunities for Tigard to attract and maintain the type and quality of employment desired by its citizens, grow its economy, and maintain its quality of life. Goal 9 emphasizes the preservation and protection of vacant land for industrial and employment uses. This will happen by adopting policies that ensure an adequate supply of industrial and other employment lands within the City of Tigard.

The Tigard Planning Commission acted as the advisory committee for the project, reviewing each task during the process to complete the *Tigard 2011 EOA*. The six tasks reviewed by the Planning Commission included:

1. Economic Development Vision and Goals
2. Economic Trends Analysis
3. Site Suitability Analysis (Land Demand)
4. Inventory of Suitable Sites (Land Supply)
5. Assessment of Potential (Reconciliation of Demand and Supply)
6. Implementation Policies and Action Measures

The tasks included examining key demographic and employment opportunities and trends to assess Tigard's economic development potential, projecting employment growth, and determining short- and long term demand for employment land. This demand is compared to an inventory of suitable commercial and industrial properties (supply) to assess the sufficiency of immediate and longer-term (20-year) supply of commercial and industrial employment land in the City's Urban Planning Area (UPA).

The document meets the state requirements for an economic opportunities analysis and acts as a resource for staff, decision makers, and the public. It identifies the preferred land need scenario that will accommodate the type of economic development activity projected and wanted by the community. One important task in the development of the *Tigard 2011 EOA* was to consider land use planning efforts already completed and the City's expectations for redevelopment of its centers and corridors. This allowed the process to build upon previously adopted plans to ensure consistency and continuity.

The *Tigard 2011 EOA* serves as a component of the *Tigard Comprehensive Plan* Goal 9. It identifies the amount of needed employment and industrial land for the next 20 years and recommends goals and policies to preserve this land. These goals and policies will help to guide future decisions so it was important to ensure the goals and policies were coordinated with the entire Comp Plan. As part of the process, existing Goal 9 language, which was revised and adopted in March 2008, proved to be very comprehensive and only minor changes were recommended. In general, all goals

and policies contained within the *Tigard Comprehensive Plan* are intended to be supportive of one another.

### **Proposal Description**

The primary intent of the amendment is to ensure the City's Comprehensive Plan remains a viable tool for decision-makers. By adopting the amendment, the City will ensure it is in compliance with applicable laws, rules, regulations, plans, and programs. As importantly, the update will also ensure that Goal 9 of the Comprehensive Plan reflects current community conditions and values.

## **SECTION IV. SUMMARY OF REPORT**

*Applicable criteria, Commission findings and conclusions*

- Tigard Community Development Code
  - o Chapter 18.380
  - o Chapter 18.390
- Applicable Comprehensive Plan Policies
  - o Chapter 1: Citizen Involvement
  - o Chapter 2: Land Use Planning
  - o Chapter 5: Natural Resources and Historic Areas
  - o Chapter 6: Environmental Quality
  - o Chapter 7: Hazards
  - o Chapter 8: Parks, Recreation, Trails, and Open Space
  - o Chapter 9: Economic Development
  - o Chapter 10: Housing
  - o Chapter 11: Public Facilities and Services
  - o Chapter 12: Transportation
  - o Chapter 13: Energy Conservation
  - o Chapter 14: Urbanization
  - o Special Planning Area: Downtown
- Metro Urban Growth Management Functional Plan Title 4
- Oregon Administrative Rule 660, Division 9
- Statewide Planning Goals
  - o Goals 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14.

*City Department and outside agency comments*

## **SECTION V. APPLICABLE CRITERIA AND COMMISSION FINDINGS**

### **CITY OF TIGARD COMMUNITY DEVELOPMENT CODE (TITLE 18)**

#### **Chapter 18.380: Zoning Map and Text Amendments**

##### **Chapter 18.380.020 Legislative Amendments to the Title and Map**

**A. Legislative amendments. Legislative zoning map and text amendments shall be undertaken by means of a Type IV procedure, as governed by Section 18.309.060G**

Findings: The amendment to the Tigard Comprehensive Plan establishes policies to be applied generally throughout the City of Tigard; and therefore, the application is being processed as a Type IV procedure, Legislative Amendment, as governed by Section 18.390.060G.

## **Chapter 18.390: Decision-Making Procedures**

### **Chapter 18.390.020. Description of Decision-Making Procedures**

**B.4. Type IV Procedure.** Type IV procedures apply to legislative matters. Legislative matters involve the creation, revision, or large-scale implementation of public policy. Type IV matters are considered initially by the Planning Commission with final decisions made by the City Council.

Findings: The amendment to the Tigard Comprehensive Plan establishes policies to be applied generally throughout the City of Tigard. Therefore was reviewed under the Type IV procedure as detailed in Section 18.390.060.G. In accordance with this section, the amendment was initially considered by the Planning Commission with City Council making the final decision.

**Chapter 18.390.060.G. Decision-making considerations.** The recommendation by the Commission and the decision by the Council shall be based on consideration of the following factors:

- 1. The Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes Chapter 197;**
- 2. Any federal or state statutes or regulations found applicable;**
- 3. Any applicable Metro regulations;**
- 4. Any applicable comprehensive plan policies; and**
- 5. Any applicable provisions of the City's implementing ordinances.**

Findings: The Commission reviewed applicable Statewide Planning Goals, Metro Urban Growth Management Functional Plan, Oregon Administrative Rule 660, Division 9, the Tigard Community Development Code, and the Tigard Comprehensive Plan. As indicated pursuant to the Commission's findings and conclusions found within this staff report the amendment is consistent with this criterion.

**CONCLUSION:** Based on the analysis above, the Commission finds that the proposed amendment satisfies the applicable review criteria within the Tigard Community Development Code.

## **CITY OF TIGARD COMPREHENSIVE PLAN POLICIES:**

### **General Findings**

Finding: The City's Comprehensive Plan was adopted by the Tigard City Council in 1983, and acknowledged as being in conformance with the Statewide Planning Goals by the Land Conservation and Development Department (LCDC) on October 11, 1984. LCDC re-acknowledged the plan's compliance with the statewide planning goals through the Periodic Review process.

Finding: The Commission finds that the following Comprehensive Plan goals and policies apply to the amendment and the amendment satisfies the applicable goals and policies for the reasons stated below. During the course of public hearings, the Community Development Department and the Planning Commission provided all interested parties opportunities to identify, either orally or in writing, any other Comprehensive Plan goals or policies that might apply to the amendment. No additional provisions were identified.

## **Chapter 1: Citizen Involvement**

**Goal 1.1 Provide citizens, affected agencies, and other jurisdictions the opportunity to participate in all phases of the planning process.**

**Policy 2. The City shall define and publicize an appropriate role for citizens in each phase of the land use planning process.**

Findings: The proposal has complied with all notification requirements pursuant to Chapter 18.390.060 of the Tigard Community Development Code. This staff report was also available seven days in advance of the hearing pursuant to Chapter 18.390.070.E.b of the Tigard Community Development Code.

Information was distributed throughout the process via Cityscape articles and public meetings with the Tigard Planning Commission acting as the advisory committee. Involvement opportunities included a series of seven public meetings held by the advisory committee and submitting written or oral comments at the meetings. Outreach methods also included updates to City boards and commissions.

As part of the Comprehensive Plan Amendment process, public notice of the Planning Commission and City Council public hearings was sent to the interested party list and published in the March 17, 2011 issue of The Times. The notice invited public input and included the phone number of a contact person to answer questions. The notice also included the address of the City's webpage where the entire draft of the proposed amendment could be viewed.

**Policy 3. The City shall establish special citizen advisory boards and committees to provide input to the City Council, Planning Commission, and City staff.**

Findings: The Tigard Planning Commission acted as the advisory committee for the Tigard 2011 Economic Opportunities Analysis. The advisory committee helped guide the completion of the project by reviewing work products and providing advice and feedback to ensure the community's needs and aspirations were being captured in the update. The committee met seven times in public settings from July 2010 to March 2011.

**Policy 5. The opportunities for citizen involvement provided by the City shall be appropriate to the scale of the planning effort and shall involve a broad cross-section of the community.**

Findings: As outlined above, the community was given multiple venues to get information and get involved. This included a number of articles in the Cityscape newsletter that is delivered to every household in Tigard. Staff also made a good faith effort to ensure a diversity of representation on the advisory committee and the opportunity for citizen input at the advisory committee meetings.

**Goal 1.2 Ensure all citizens have access to:**

- A. opportunities to communicate directly to the City; and**
- B. information on issues in an understandable form.**

**Policy 1. The City shall ensure pertinent information is readily accessible to the community and presented in such a manner that even technical information is easy to understand.**

Findings: Information regarding the topics included in this Comprehensive Plan Amendment was available in multiple locations in an understandable format for the duration of the process. This included paper and electronic copies that were available in the permit center and also on the website.

**Policy 2. The City shall utilize such communication methods as mailings, posters, newsletters, the internet, and any other available media to promote citizen involvement and continue to evaluate the effectiveness of methods used.**

Findings: Information was distributed throughout the process via the City's website, Cityscape articles, and a series of seven public meetings held by the advisory committee. Outreach methods also included updates to City boards and commissions.

**Policy 5. The City shall seek citizen participation and input through collaboration with community organizations, interest groups, and individuals in addition to City sponsored boards and committees.**

Findings: Outreach methods included updates to City boards and commissions and a survey of community organizations, interest groups, and individuals with economic development backgrounds. The survey results can be found in Appendix I of the EOA.

## **Chapter 2: Land Use Planning**

**Goal 2.1 Maintain an up-to-date Comprehensive Plan, implementing regulations and action plans as the legislative basis of Tigard's land use planning program.**

**Policy 1: The City's land use program shall establish a clear policy direction, comply with state and regional requirements, and serve its citizens' own interests.**

Findings: The amendment refines the general policy direction related to Tigard Comprehensive Plan Goal 9: Economic Development for the community. The policy statements are clear and serve the interests of the citizens. The development of the Tigard 2011 Economic Opportunities Analysis was required as a component of State Periodic Review and complies with Oregon Administrative Rule 660, Division 9, which governs the development of these studies in the state.

**Policy 2: The City's land use regulations, related plans, and implementing actions shall be consistent with and implement its Comprehensive Plan.**

Findings: The amendment refines the general policy direction related to Tigard Comprehensive Plan Goal 9: Economic Development for the community. The Tigard 2011 Economic Opportunities Analysis compares projected demand to current supply of vacant employment and industrial lands to ensure the City's policies and implementing actions are sufficient to preserve the needed 20-year supply of these vacant lands. The development of the Tigard 2011 EOA used current Tigard Comprehensive Plan policies and land use designations as part of the analysis of future vacant land needs as required by state law. The amendment is consistent with this policy.

**Policy 3. The City shall coordinate the adoption, amendment, and implementation of its land use program with other potentially affected jurisdictions and agencies.**

Findings: The City sent out request for comments on the proposed amendment to all potentially affected jurisdictions and agencies. All were given 14 days to respond. Any comments that were received are addressed in Section VII: Outside Agency Comments of this Staff Report. Additionally, Metro and the Department of Land Conservation and Development staff provided input throughout the development of the Tigard 2011 EOA.

**Policy 5. The City shall promote intense urban level development in Metro-designated Centers and Corridors, and employment and industrial areas.**

Findings: The Tigard 2011 EOA identified and acknowledged the City's desire for, and the potential for redevelopment of these areas. Assumptions made about redevelopment and refill potential were based on City policy and Metro guidance to determine the amount of vacant employment and industrial lands needed for the next 20-years. The amendment is consistent with the policy.

**Policy 20. The City shall periodically review and if necessary update its Comprehensive Plan and regulatory maps and implementing measures to ensure they are current and responsive to community needs, provide reliable information, and conform to applicable state law, administrative rules, and regional requirements.**

Findings: The amendment is an update to Goal 9 of the Tigard Comprehensive Plan as required by State Periodic Review. The amendment adopts the Tigard 2011 EOA, which used the most reliable, up-to-date information to determine the 20-year vacant employment and industrial land needs. The Tigard 2011 EOA ensures compliance with Oregon Administrative Rule 660-009, which governs economic development planning in the state and requires this analysis. Findings of conformance to applicable state and regional requirements can be found in Section V of this Staff Report.

**Chapter 5: Natural Resources and Historic Areas**

**Goal 5.1 Protect natural resources and the environmental and ecological functions they provide and, to the extent feasible, restore natural resources to create naturally functioning systems and high levels of biodiversity.**

Findings: As discussed in the findings made for Statewide Planning Goal 5, the amendment does not alter the City's acknowledged Goal 5 inventories or land use programs. No changes will occur to current Natural Resource protections as the result of adopting the Tigard 2011 EOA. The amendment does not conflict with goals and policies of this chapter of the Tigard Comprehensive Plan.

**Chapter 6: Environmental Quality**

**Goal 6.1 Reduce air pollution and improve air quality in the community and region.**

**Policy 3: The City shall promote land use patterns, which reduce dependency on the automobile, are compatible with existing neighborhoods, and increase opportunities for walking, biking, and /or public transit.**

Findings: The amendment is consistent with this policy as the Tigard 2011 EOA identifies the redevelopment of centers and corridors as an important economic development activity to ensure a 20-year supply of vacant employment and industrial lands. This redevelopment will result in more intense urban land uses that reduce the dependency on the automobile and increase opportunities for walking, biking, and public transit. The Tigard 2011 EOA analysis shows no rezoning of property is needed under the land efficient need scenario, thus avoiding potential conflict with existing neighborhoods.

## **Chapter 7: Hazards**

### **Goal 7.2 Protect people and property from flood, landslide, earthquake, wildfire, and severe weather hazards.**

Findings: The adoption of the Tigard 2011 EOA has no impact on City policies or programs related to hazards. The development of the Tigard 2011 EOA used the City's buildable lands inventory to identify vacant employment and industrial lands. The buildable lands inventory excludes sensitive lands, including the 100-year floodplain. The amendment is consistent with the policy.

## **Chapter 8: Parks, Recreation, Trails, and Open Space**

Findings: The adoption of the Tigard 2011 EOA has no impact on City policies or programs related to parks, recreation, trails, or open space. However, Goal 9 acknowledges the benefits of these community amenities in attracting economic development. The amendment is consistent with this policy.

## **Chapter 9: Economic Development**

### **Goal 9.1 Develop and maintain a strong, diversified, and sustainable local economy.**

Findings: The City is under State Periodic Review and required to complete an economic opportunities analysis. The development of the Tigard 2011 EOA complies with OAR 660, Division 9. It also used existing Tigard Comprehensive Plan policies, which were revised and adopted on March 6, 2008, as guidance during the process to complete the EOA. The amendment adopts the Tigard 2011 EOA, which compared the 20-year projected demand for employment and industrial land to the existing supply. The EOA found that the land efficient need scenario would provide the necessary 20-year supply of vacant employment and industrial lands. An adequate supply of land will support the development of the local economy. The EOA also recommended the addition of a policy to update the buildable land supply to monitor short and long-term supply as required by Statewide Planning Goal 9.

### **Goal 9.2 Make Tigard a center and incubator for innovative businesses, including those that focus on environmental sustainability.**

Findings: The amendment adopts the Tigard 2011 EOA, which compared the 20-year projected demand for employment and industrial land to the existing supply. The EOA found that the land efficient need scenario would provide the necessary 20-year supply of vacant employment and

industrial lands. An adequate supply of land supports this goal. The EOA also recommended the addition of a policy to encourage businesses that are economically and environmentally sustainable, which supports this goal.

### **Goal 9.3 Make Tigard a prosperous and desirable place to live and do business.**

Findings: The amendment adopts the Tigard 2011 EOA, which compared the 20-year projected demand for employment and industrial land to the existing supply. The EOA found that the land efficient need scenario would provide the necessary 20-year supply of vacant employment and industrial lands. An adequate supply of land supports this goal. The EOA also recommended the addition of a policy to encourage neighborhood commercial uses for economic opportunity, efficient land use patterns, multi-modal transportation and neighborhood vitality, which supports this goal.

## **Chapter 10: Housing**

### **Goal 10.1 Provide opportunities for a variety of housing types to meet the diverse housing needs of current and future City residents.**

**Policy 2: The City's land use program shall be consistent with applicable state and federal laws.**

Findings: The amendment establishes the general policy direction related to Tigard Comprehensive Plan Goal 9: Economic Development for the community. The development of the Tigard 2011 Economic Opportunities Analysis was completed as a requirement of State Periodic Review and complies with Oregon Administrative Rule 660, Division 9, which governs the development of these studies in the state.

**Policy 5: The City shall provide for high and medium density housing in the areas such as town centers (Downtown), regional centers (Washington Square), and along transit corridors where employment opportunities, commercial services, transit, and other public services necessary to support higher population densities are either present or planned for in the future.**

Findings: The amendment is consistent with this policy as the Tigard 2011 EOA identifies the redevelopment of centers and corridors, for housing and employment, as an important economic development activity to ensure a 20-year supply of vacant employment and industrial lands. This redevelopment will result in more intense urban land uses that reduce the dependency on the automobile and increase opportunities for walking, biking, and public transit. The Tigard 2011 EOA analysis shows no rezoning of property is needed to accomplish this policy.

## **Chapter 11: Public Facilities and Services**

### **Goal 11.2 Secure a reliable, high quality, water supply to meet the existing and future needs of the community.**

Findings: The amendment adopts the Tigard 2011 EOA, which compared the 20-year projected demand for employment and industrial land to the existing supply. The EOA found that the land efficient need scenario would provide the necessary 20-year supply of vacant employment and

industrial lands. The EOA also analyzed the capacity of the water supply and determined it was sufficient to accommodate short-term land needs and 20-year projected employment growth as required by Statewide Planning Goal 9.

**Goal 11.3 Develop and maintain a wastewater collection system that meets the existing and future needs of the community.**

Findings: The amendment adopts the Tigard 2011 EOA, which compared the 20-year projected demand for employment and industrial land to the existing supply. The EOA found that the land efficient need scenario would provide the necessary 20-year supply of vacant employment and industrial lands. The EOA also analyzed the capacity of the wastewater system and determined it was sufficient to accommodate short-term land needs and 20-year projected employment growth as required by Statewide Planning Goal 9.

**Chapter 12: Transportation**

**Goal 12.1 Develop mutually supportive land use and transportation plans to enhance the livability of the community.**

**Goal 12.2 Develop and maintain a transportation system for the efficient movement of people and goods.**

**Goal 12.3 Provide and accessible, multi-modal transportation system that meets the mobility needs of the community.**

Findings: The amendment is consistent with these goals as the Tigard 2011 EOA identifies the redevelopment of centers and corridors, for housing and employment, as an important economic development activity to ensure a 20-year supply of vacant employment and industrial lands. This redevelopment will result in more intense urban land uses that reduce the dependency on the automobile and increase opportunities for walking, biking, and public transit.

**Chapter 13: Energy Conservation**

**Goal 13.1 Reduce energy consumption.**

**Policy 1: The City shall promote the reduction of energy consumption associated with vehicle miles traveled through:**

- A. land use patterns that reduce dependency on the automobile;**
- B. public transit that is reliable, connected, and efficient; and**
- C. bicycle and pedestrian infrastructure that is safe and well connected.**

Findings: The amendment is consistent with this policy as the Tigard 2011 EOA identifies the redevelopment of centers and corridors, for housing and employment, as an important economic development activity to ensure a 20-year supply of vacant employment and industrial lands. This redevelopment will result in more intense urban land uses that reduce the dependency on the automobile and increase opportunities for walking, biking, and public transit.

**Chapter 14: Urbanization**

**Goal 14.1 Provide and/or coordinate the full range of urban level services to lands and citizens within the Tigard City Limits.**

**Policy 6: The City shall, as needed, coordinate and/or participate in planning activities or development decisions within the Tigard Urban Services Area.**

Findings: The amendment adopts the Tigard 2011 EOA, which compared the 20-year projected demand for employment and industrial land to the existing supply. The EOA found that the land efficient need scenario would provide the necessary 20-year supply of vacant employment and industrial lands within the Tigard Urban Planning Area, which is coincident with the Tigard Urban Services Area.

**Goal 14.2 Promote Tigard citizens' interests in urban growth boundary expansion and other regional and state growth management decisions.**

**Policy 6: The City shall maintain the low-density residential character of its existing single family residential neighborhoods and accommodate more intense urban land uses in its regional and town centers and within major transportation corridors to be consistent with Statewide Planning Goals and the Metro Framework Plan.**

Findings: The amendment is consistent with this policy as the Tigard 2011 EOA identifies the redevelopment of centers and corridors, for housing and employment, as an important economic development activity to ensure a 20-year supply of vacant employment and industrial lands without the need for any rezoning at this time. This redevelopment will help maintain the low-density residential character of single family neighborhoods.

**Special Planning Area: Downtown**

**Goal 15.1 The City will promote the creation of a vibrant and active urban village at the heart of the community that is pedestrian oriented, accessible by many modes of transportation, recognizes natural resources as an asset, and features a combination of uses that enables people to live, work, play, and shop in an environment that is uniquely Tigard.**

Findings: The amendment is consistent with this goal as the Tigard 2011 EOA identifies the redevelopment of centers (including Downtown) and corridors, for housing and employment, as an important economic development activity to ensure a 20-year supply of vacant employment and industrial lands. This redevelopment will result in more intense urban land uses that reduce the dependency on the automobile and increase opportunities for walking, biking, and public transit.

**CONCLUSION:** Based on the analysis above, the Commission finds that the proposed amendment satisfies the applicable goals and policies contained in the City of Tigard Comprehensive Plan.

**METRO URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN TITLE 4**

Findings: The Regional Framework Plan calls for a strong regional economy. To improve the economy, Title 4 seeks to provide and protect a supply of sites for employment by limiting the

types and scale of non-industrial uses in Regionally Significant Industrial Areas (RSIAs), Industrial and Employment Areas. Title 4 also seeks to provide the benefits of "clustering" to those industries that operate more productively and efficiently in proximity to one another than in dispersed locations. Title 4 further seeks to protect the capacity and efficiency of the region's transportation system for the movement of goods and services and to encourage the location of other types of employment in Centers, Corridors, Main Streets and Station Communities.

Metro staff has confirmed that the City of Tigard is in compliance with Title 4. The development of the Tigard 2011 Economic Opportunities Analysis involved discussions with Metro staff and Oregon Department of Land Conservation and Development staff. They were provided the opportunity to review and comment on all work leading up to the document proposed for adoption. The purpose of the collaboration was to ensure consistency and compliance with state and regional requirements.

This amendment (CPA2011-00002) adopts the Tigard 2011 Economic Opportunities Analysis, which was completed following the rules outlined in OAR 660, Division 9. The amendment sets policy related to a 20-year supply of land and does not affect compliance with Title 4. The amendment is consistent Title 4.

**CONCLUSION:** Based on the analysis above, the Commission finds that the proposed amendment is consistent with the Metro Urban Growth Management Functional Plan Title 4.

### **OREGON ADMINISTRATIVE RULE 660, DIVISION 9**

Findings: The Land Conservation and Development Commission adopted Oregon Administrative Rule 660, Division 9 to implement Statewide Planning Goal 9 and "to provide an adequate land supply for economic development and employment growth in Oregon." The City of Tigard is currently in State Periodic Review, and Section 10 requires the review and amendment of comprehensive plans and land use regulations during periodic review. The City was required to complete an economic opportunities analysis as part of its periodic review work program to ensure compliance with this rule.

The development of the Tigard 2011 Economic Opportunities Analysis complied with the rules outlined in Section 30, which requires multi-jurisdiction coordination. This was accomplished through collaboration with the Oregon Department of Land Conservation and Development and Metro, to ensure consistency with policies and regulations associated with Division 9 and the Metro Urban Growth Management Functional Plan Title 4. Both organizations were given the opportunity to review work products throughout the process. They were also afforded the opportunity for a final review with other affected jurisdictions/organizations.

In addition, the Tigard 2011 EOA followed the rules set forth in Sections 15, 20, and 25. Section 15 outlines the necessary elements of an economic opportunities analysis. The Tigard 2011 EOA contains all necessary elements. Section 20 outlines the required and recommended policies to address in the comprehensive plan. The Tigard Comprehensive Plan, the Tigard 2011 EOA and associated amendments comply with Section 20. Section 25 requires measures adequate to implement policies. The Tigard 2011 EOA addressed all necessary elements of Section 25 and is in compliance with Division 9.

**CONCLUSION:** Based on the analysis above, the Commission finds that the proposed amendment satisfies the requirements of Oregon Administrative Rule 660, Division 9.

**THE STATEWIDE PLANNING GOALS AND GUIDELINES ADOPTED UNDER OREGON REVISED STATUTES CHAPTER 197**

***Statewide Planning Goal 1 – Citizen Involvement:***

**This goal outlines the citizen involvement requirement for adoption of Comprehensive Plans and changes to the Comprehensive Plan and implementing documents.**

Findings: This goal was met through an extensive public involvement process. Information was distributed throughout the process via the City’s website, Cityscape articles, and a series of seven public meetings with the Tigard Planning Commission, who acted as the advisory committee. Outreach methods also included updates to City boards and commissions.

As part of the Comprehensive Plan Amendment process, public notice of the Planning Commission and City Council public hearings was sent to the interested parties list and published in the March 17, 2011 issue of The Times (in accordance with Tigard Development Code Chapter 18.390). The notice invited public input and included the phone number of a contact person to answer questions. The notice also included the address of the City’s webpage where the entire draft of the text changes could be viewed.

***Statewide Planning Goal 2 – Land Use Planning:***

**This goal outlines the land use planning process and policy framework. The Comprehensive Plan was acknowledged by DLCD as being consistent with the statewide planning goals.**

Findings: The amendment to the Tigard Comprehensive Plan is being undertaken to update the City’s acknowledged Comprehensive Plan in a manner consistent with current conditions and citizen values. The amendment to the Tigard Comprehensive Plan is being processed as a Type IV procedure, which requires any applicable statewide planning goals, federal or state statutes or regulations, Metro regulations, comprehensive plan policies, and City’s implementing ordinances, be addressed as part of the decision-making process. The amendment is included as a periodic review work program task. The City of Tigard was notified of commencement of periodic review in May 2008 and had its work program approved in April 2010. All noticing requirements have been met. All applicable review criteria have been addressed within this staff report; therefore, the requirements of Goal 2 have been met.

***Statewide Planning Goal 5 – Natural Resources***

**This goal requires the inventory and protection of natural resources, open spaces, historic areas and sites.**

Findings: The City is currently in compliance with the State’s Goal 5 program and Metro’s Title 13: Nature in Neighborhoods program, which implements Goal 5. The amendment does not alter the City’s acknowledged Goal 5 inventories or land use programs. No changes will occur to current natural resource protections. As a result, the amendment to the Tigard Comprehensive Plan is in compliance with Goal 5 process requirements.

***Statewide Planning Goal 6: Air, Water, and Land Resources Quality***

**To maintain and improve the quality of the air, water, and land resources of the state.**

Findings: The City is currently in compliance with Metro's Title 3: Water Quality and Flood Management program, which implements Goal 6. The amendment does not alter the City's acknowledged land use programs regarding water quality and flood management protections. As a result, the amendment to the Tigard Comprehensive Plan is in compliance with Goal 6.

***Statewide Planning Goal 7 – Areas Subject to Natural Hazards***

**To protect people and property from natural hazards.**

Findings: The City is currently in compliance with Metro's Title 3: Water Quality and Flood Management program, which implements Goal 7. The amendment does not alter the City's acknowledged land use programs regarding water quality and flood management protections. The City is currently a participant in the National Flood Insurance Program administered by the Federal Emergency Management Agency. The amendment does not alter the City's participation. As a result, the amendment to the Tigard Comprehensive Plan is in compliance with Goal 7.

***Statewide Planning Goal 8 – Recreational Needs***

**This goal requires the satisfaction of the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.**

Findings: The City is currently in compliance with Statewide Planning Goal 8. The amendment does not alter the City's acknowledged Goal 8 policies or land use programs. As a result, the amendment to the Tigard Comprehensive Plan is in compliance with Goal 8.

***Statewide Planning Goal 9: Economic Development***

**To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.**

Findings: The City is currently in compliance with Goal 9 and Metro's Title 4: Industrial and Other Employment Areas through its acknowledged Comprehensive Plan. This amendment is required as part of State Periodic Review and OAR 660, Division 9. The amendment adopts the Tigard 2011 EOA, which was completed following the rules outlined in Division 9 and compares projected demand to current supply of vacant employment and industrial lands to ensure the City's policies and implementing actions are sufficient to preserve the needed 20-year supply of these vacant lands. The Department of Land Conservation and Development, who administers Division 9, was consulted throughout the process and were requested to submit comments. Any comments can be found in the Outside Agency Comments section. The adoption of the Tigard 2011 EOA and the amendment to the Tigard Comprehensive Plan maintains the City's compliance with Goal 9.

***Statewide Planning Goal 10: Housing***

**To provide adequate housing for the needs of the community, region and state.**

Findings: The City is currently in compliance with Goal 10 and the Metropolitan Housing Rule (OAR 660-007/Division 7), and Metro's Title 1: Requirements for Housing and Employment Accommodation, and Title 7: Affordable Housing. The adoption of the Tigard 2011 EOA does not alter the City's compliance with Goal 10. The amendment compares projected demand to current supply of vacant employment and industrial lands to ensure the City's policies and

implementing actions are sufficient to preserve the needed 20-year supply of these vacant lands. The amendment to the Comprehensive Plan is in compliance with Goal 10.

***Statewide Planning Goal 11: Public Facilities and Services***

**To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.**

Findings: The City is currently in compliance with Goal 11 through its acknowledged Comprehensive Plan. This includes an adopted Public Facility Plan as required by Oregon Revised Statute 197.712 and Oregon Administrative Rule 660-011. The amendment does not alter the City's acknowledged Goal 11 policies or plans. As a result, the amendment to the Tigard Comprehensive Plan is in compliance with Goal 11.

***Statewide Planning Goal 12: Transportation***

**To provide and encourage a safe, convenient, and economic transportation system.**

Findings: The City is currently in compliance with Goal 12 and Metro's Regional Transportation Plan through its acknowledged Comprehensive Plan and Transportation System Plan as required by Oregon Administrative Rule 660-012 (Transportation Planning Rule). The amendment adopts the Tigard 2011 EOA and does not alter Goal 12 plans or policies. As a result, the amendment to the Tigard Comprehensive Plan is in compliance with Goal 12.

***Statewide Planning Goal 13: Energy Conservation***

**Land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based on sound economic principles.**

Findings: The City is currently in compliance with Goal 13 through its acknowledged Comprehensive Plan. The adoption of the Tigard 2011 EOA does not alter the City's compliance with Goal 13. As a result, the amendment to the Tigard Comprehensive Plan is in compliance with Goal 13.

***Statewide Planning Goal 14: Urbanization***

**To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.**

Findings: The City is currently in compliance with Goal 14 and Metro's Title 11: Planning for New Urban Areas through its acknowledged Comprehensive Plan and land use regulations. The City also has a signed Urban Planning Area Agreement and Urban Services Agreement as required by ORS 195.065 and ORS 197. This amendment is required as part of State Periodic Review and OAR 660, Division 9. The amendment adopts the Tigard 2011 EOA, which was completed following the rules outlined in Division 9 and compares projected demand to current supply of vacant employment and industrial lands to ensure the City's policies and implementing actions are sufficient to preserve the needed 20-year supply of these vacant lands. The adoption of the Tigard 2011 EOA does not alter the City's compliance with Goal 14. The amendment is consistent with this goal.

**CONCLUSION:** Based on the analysis above, the Commission finds that the proposed amendment is consistent with the applicable Statewide Planning Goals.

## **SECTION VI. ADDITIONAL CITY STAFF COMMENTS**

The City of Tigard's Current Planning Division, Administrative Department, Public Works Department, and Police Department has had an opportunity to review this proposal and have no objections.

**CONCLUSION:** Based on no comment from City staff, staff finds the proposed amendment does not interfere with the best interests of the City.

## **SECTION VII. OUTSIDE AGENCY COMMENTS**

The following agencies/jurisdictions had an opportunity to review this proposal and did not respond:

**City of Beaverton**  
**City of Durham**  
**City of King City**  
**City of Lake Oswego**  
**City of Portland**  
**City of Tualatin**  
**Clean Water Services**  
**Metro Land Use and Planning**  
**Oregon Department of Land Conservation and Development**  
**Oregon Department of Transportation, Region 1**  
**Oregon Department of Transportation, Region 1, District 2A**  
**Tualatin Hill Parks and Recreation District**  
**Tualatin Valley Fire & Rescue**  
**Washington County, Department of Land Use and Transportation**

**Tualatin Valley Water District** had an opportunity to review this proposal and has no objections.

**CONCLUSION:** Based on responses from outside agencies listed above, the Commission finds the proposed amendment meets all requirements of these agencies and is consistent with the best interests of the City.

## **SECTION VIII. CONCLUSION**

The proposed changes comply with the applicable Statewide Planning Goals, applicable regional, state and federal regulations, the Tigard Comprehensive Plan, and applicable provisions of the City's implementing ordinances.

Therefore, Staff recommends that the Planning Commission recommend approval of the Comprehensive Plan Amendment to the Tigard City Council as determined through the public hearing process.

ATTACHMENT:

**EXHIBIT A: PROPOSED AMENDMENT TO THE TIGARD COMPREHENSIVE PLAN.**



PREPARED BY: Darren Wyss  
Senior Planner

March 28, 2011  
DATE



APPROVED BY: Ron Bunch  
Community Development Director

March 28, 2011  
DATE

**CITY OF TIGARD  
PLANNING COMMISSION  
Meeting Minutes  
April 4, 2011**

**CALL TO ORDER**

President Walsh called the meeting to order at 7:05 p.m. The meeting was held in the Tigard Civic Center, Town Hall, at 13125 SW Hall Blvd.

**ROLL CALL**

**Present:** President Walsh  
Vice President Anderson  
Commissioner Doherty  
Commissioner Rogers  
Commissioner Shavey

**Absent:** Commissioner Muldoon; Commissioner Hasman; Commissioner Ryan;  
Commissioner Schmidt

**Staff Present:** Susan Hartnett, Assistant Community Development Director; Darren Wyss, Senior Planner; and Doreen Laughlin, Confidential Executive Assistant

**Also Present:** City Council Liaison Marc Woodard

**COMMUNICATIONS** – Commissioner Shavey reported he'd gone to a meeting on Tuesday night regarding downtown. He said it was a good meeting with 30 or 40 people there. He gave a brief overview of the agenda of that meeting.

President Walsh spoke about the positive changes that he'd seen and experienced on Pacific Highway lately. He wanted to go on record that he would like to commend the excellent work of the Tigard staff – particularly Engineering and Public Works - on that project. He said the improvements are remarkable and that everyone who drives it is benefiting from it. The rest of the commissioners agreed and wanted to be included in commending staff on their fine work.

**CONSIDER MEETING MINUTES**

**March 21 Meeting Minutes:** President Walsh asked if there were any additions, deletions, or corrections to the March 21 minutes; there being none, Walsh declared the minutes approved as submitted.

## **PUBLIC HEARING OPENED:**

### **(CPA) 2011-00002- TIGARD COMPREHENSIVE PLAN AMENDMENT TO ADOPT THE TIGARD 2011 ECONOMIC OPPORTUNITIES ANALYSIS**

**REQUEST:** To adopt the Tigard 2011 Economic Opportunities Analysis as a component of Tigard Comprehensive Plan Goal 9: Economic Development; to amend the current Tigard Comprehensive Plan Goal 9: Economic Development goals, policies, and recommended action measures; and to amend Tigard Comprehensive Plan Glossary. The complete text of the proposed amendment can be viewed on the City's website at [http://www.tigard-or.gov/code\\_amendments](http://www.tigard-or.gov/code_amendments). **LOCATION:** Citywide

## **STAFF REPORT**

Darren Wyss, Senior Planner, went over the staff report (the staff report is available to the public one week before the hearing.) He then presented a PowerPoint presentation (**Exhibit A**).

Wyss entered into the record a letter dated 4/4/11 (**Exhibit B**) in which ODOT had 4 issues. Wyss explained how the city had addressed, and is addressing, these issues:

- Issue 1: Map Reference
  - Changes to map reference in Glossary (See replacement page 9 – (**Exhibit C**) which Wyss entered into the record.
- Issue 2: Adoption requirements
  - ODOT does not feel we're following proper adoption requirements; however, we've been following Metro's guidance on this and have spoken to them. They said it was up to them (Metro) to determine whether we've appropriately adopted it into our Comprehensive Plan. We have been following Metro's guidelines so we believe we're doing the appropriate thing. It's up to Metro to make that decision – not ODOT.
- Issue 3: Plan of Actions/Investments/Land Use Regulations
- Issue 4: Need for Transportation Actions – spelled out in the Metro Functional Plan
  - The City of Tigard is fully cognizant of the need to do these things but the adoption of the expanded Triangle boundaries through this glossary is just the first step towards setting the foundation – we're doing those actions as part of the Tigard Triangle planning process and also the High Capacity Land Use Planning process that is currently beginning at this point in time. We feel there is no issue moving forward with the amendment as proposed and if Metro decides that this wasn't the appropriate way to do it we'll address that in the future.

## **QUESTIONS FROM THE COMMISSIONERS**

**So we'll just move forward being aware of this? Is that what you're saying?** The purpose of this is to adopt the Economic Opportunity Analysis – so regardless of whether this definition adopts the expanded boundary into our Comprehensive Plan – it has no bearing as to whether or not the EOA is getting adopted.

**So the glossary can be changed at a future time – which would, in essence, change that boundary?** Yes. Or if they required us to actually bring a map forward and adopt the map, then we could do that.

## **STAFF RECOMMENDATION**

Staff recommends the Planning Commission finds this request to meet the necessary approval criteria and RECOMMENDS the Tigard City Council amends the Tigard Comprehensive Plan as determined through the public hearing process.

**TESTIMONY IN FAVOR -** None

**TESTIMONY IN OPPOSITION –** None

## **CLOSED PUBLIC HEARING**

At this point, President Walsh opened the meeting up for deliberations.

## **DELIBERATIONS**

None

## **MOTION**

The following motion was made by Commissioner Doherty, seconded by Commissioner Shavey:

“I move for approval and adoption of the findings and conditions of approval contained in the staff report of the 2011 Economic Opportunities Analysis that staff recommended for draft application CPA2011-00002- along with the replacement page 9 glossary.”

The motion was approved unanimously.

At this point, Wyss explained that the next step would be to draft the transmittal memo and distribute it to the Planning Commission for their review. The resulting memo will be passed along to Council. He reminded them that Commissioner Shavey had volunteered to attend the Council hearing and say a few words in support.

## WORK SESSION – PLANNING COMMISSION GOALS AND WORKPLAN

Susan Hartnett, Assistant Community Development Director, updated the commissioners on the PC Matrix which was the tool developed for the Planning Commission last year. The primary purpose of that Matrix is to give the Commissioners an idea of when important projects will be coming before them and in what type of situation, workshop versus public hearing - that kind of thing.

There was a lengthy discussion on the Planning Commissioners ideas for their 2011 goals and work plan. Hartnett summed up the discussion at the end and reviewed the main points below:

- Intercity/interregional outreach and better understanding agendas for adjoining cities and regional organizations – and perhaps attending some meetings. Hartnett will figure out how to frame that as a goal statement.
- Technical growth/education/knowledge expansion... a goal related to that. She has a list of about five different topic areas but will probably make a statement about trying to incorporate maybe one major event a year and a couple of minor events. The thinking being Sheila Martin's discussion on Economic Development as being a fairly major event. Judith Gray's presentation on TPR would be considered a "minor" event. That's kind of the scale in terms of what would be put into a goal statement.
- Not only will there be goal statements but also "goal objectives." Hartnett believes it's helpful to have an objective by which you can measure your progress. So if we say we want to do some educational activities and say – one major and three minor events – we can check them off as we do them. The idea is to have them be measurable.
- The last two have to do with supporting the broader city goals – some of which are found in the Council goals and some of which are found in the Planning Commission's charge as a hearing body and a decision making body on quasi-judicial items.
- Some sort of measurable objective on the Tigard Triangle.

The Commission agreed that was a good synopsis of the ideas that had been brought forward.

At this point Hartnett reminded the Commissioners that there is a joint Planning Commission /Council meeting scheduled for Tuesday, May 17<sup>th</sup>. It would be their annual opportunity to get together with Council and talk about the Planning Commission's goals... the Council goals... what's happening – what's working and what's not - that kind of thing. President Walsh asked the Planning Commission Secretary that, if at all possible, some time could be budgeted during the May 2<sup>nd</sup> Planning Commission meeting to get their heads together about this - basically a short period of time to plan for that upcoming joint meeting.

Laughlin advised them that two hours was already scheduled for that evening but that they could put aside some time in there to have that discussion.

The question was asked if there will be a May 16<sup>th</sup> Planning Commission meeting. Laughlin answered that yes, there is a public hearing and a workshop as well scheduled for that night - so the Commissioners will have two meetings in a row that week. Monday, the 16<sup>th</sup>, is the regular Planning Commission meeting and Tuesday the 17<sup>th</sup>, is the joint PC/Council meeting. She said she tried to make it so that the 16<sup>th</sup> was a free night for the commissioners but, due to the public hearing, that couldn't be done.

## **HIGH CAPACITY TRANSIT (HCT) / TIGARD TRIANGLE**

Hartnett took some time to talk about the High Capacity Transit / Tigard Triangle activities. She reminded the commissioners that last year she had promised that staff would put together some sort of Tigard Triangle Visioning exercise – and that she wanted to see it happen in conjunction with the HCT Land Use Plan. She said getting going on that plan got delayed quite a long time outside of their control – however, it is up and running now.

Some of the main timelines she spoke about are below:

- A Design Workshop is scheduled for May 25<sup>th</sup> to talk about the full range of typologies – what would a neighborhood, downtown, office oriented area, Hwy 99 redevelopment type of thing - look like – what would the characteristics be?
- Consultants and the HCT Team will come to the Planning Commission's regularly scheduled meeting on June 6<sup>th</sup>. It will be a workshop style of setting. The commissioners will not be behind the dais but everyone will sit around a large table, and the consultants and HCT team will walk them through the typologies they've come up with. Are there fatal flaws? They will zero in on typologies that might apply to the Tigard Triangle.
- After the workshop, the consultants will develop an alternatives technical memo saying if you have this typology and this location – how will they function?
- After the memo - sometime in July, there will be a 4 to 6 hour event scheduled for a visioning exercise regarding the typologies.

## **OTHER BUSINESS**

Susan Hartnett announced to the commissioners that the Planning Commission Secretary, Doreen Laughlin, had been promoted to the position of Confidential Executive Assistant for the Community Development Department. She will be working directly for CD Director, Ron Bunch. At Doreen's request, she will continue to support the Planning Commission as long as she is able to handle it along with her other work. If/when the economy (and development) picks up to the point of being very busy again, she may need to pass the PC support baton along to the new (yet to be hired) Senior Administrative Assistant. But for

now, she plans to continue with the group. Everyone congratulated her and wished her well in her new position.

## **ADJOURNMENT**

President Walsh adjourned the meeting at 8:25 p.m.

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Doreen Laughlin, Planning Commission Secretary

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ATTEST: President Walsh

**AIS-525**

**Item #: 6.**

**Business Meeting**

**Date:** 05/24/2011

**Length (in minutes):** 45 Minutes

**Agenda Title:** City Manager Recruitment - Discussion of Candidate Profile

**Submitted By:** Sandy Zodrow  
City Management

**Item Type:** Update, Discussion, Direct Staff

**Meeting Type:**

Council Business  
Meeting - Main

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**ISSUE**

City Manager Recruitment - Discussion of the candidate profile and feedback from citizen and staff interviews to date by City Council

**STAFF RECOMMENDATION / ACTION REQUEST**

Identify desired characteristics of City Manager applicants so that the recruiter can develop a candidate profile to include in recruitment materials.

**KEY FACTS AND INFORMATION SUMMARY**

Executive Recruiter, Eric Middleton, will discuss with Council the key characteristics of a successful City Manager applicant. Council will be asked for their thoughts in these key characteristics based on their own perceptions and priorities and upon the community interviews that Councilors have been conducting.

Mr. Middleton will share his perceptions based on Executive Staff interviews, his own research, and his knowledge of the likely candidate pool.

Following this meeting, Mr. Middleton will have the information needed to develop the candidate profile to be included in recruiting materials.

**OTHER ALTERNATIVES**

**COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS**

**DATES OF PREVIOUS COUNCIL CONSIDERATION**

Council previously discussed this matter at their May 10, 2011 meeting

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