City *of* Tigard

Tigard Business Meeting – Agenda

TIGARD CITY COUNCIL

MEETING DATE AND TIME: December 16, 2014 - 6:30 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

VIEW LIVE VIDEO STREAMING ONLINE:
http://live.tigard-or.gov
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.

City *of* Tigard

Tigard Business Meeting – Agenda

TIGARD CITY COUNCIL

MEETING DATE AND TIME: December 16, 2014 - 6:30 p.m. Business Meeting

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

6:30 PM

- EXECUTIVE SESSION: The Tigard City Council may go into Executive Session. If an Executive Session is called to order, the appropriate ORS citation will be announced identifying the applicable statute. 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.

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. 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:

   6:35 p.m. estimated time

A. APPROVE CITY COUNCIL MINUTES:

- September 16, 2014
- October 14, 2014
- October 21, 2014

B. APPROVE RESOLUTION WAIVING TEMPORARY SIGN PERMIT FEES FOR SOUTHWEST METRO BABE RUTH BASEBALL

- *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. APPROVE RESOLUTION OF APPRECIATION FOR GRETCHEN BUEHNER **6:40 p.m. estimated time**

5. APPROVE RESOLUTION APPOINTING JASON ROGERS, BRET LIEUALLEN, CHRIS MIDDAUGH AND JOHN WILLIAM SMITH AS VOTING MEMBERS AND MICHAEL ENLOE AS A NON-VOTING MEMBER TO THE PLANNING COMMISSION **6:45 p.m. estimated time**

6. LEGISLATIVE PUBLIC HEARING - CONSIDER ORDINANCES ADOPTING THE RIVER TERRACE COMMUNITY PLAN, COMPREHENSIVE PLAN MAP UPDATES, AND TRANSPORTATION SYSTEM PLAN **6:50 p.m. estimated time**

7. CONSIDER A RESOLUTION TO ADOPT THE PARK SYSTEM MASTER PLAN ADDENDUM FOR RIVER TERRACE **8:05 p.m. estimated time**

8. CONSIDER RESOLUTION TO ADOPT THE RIVER TERRACE INFRASTRUCTURE FUNDING STRATEGY **8:30 p.m. estimated time**

9. COUNCIL LIAISON REPORTS **9:45 p.m. estimated time**

10. NON AGENDA ITEMS **9:50 p.m. estimated time**

11. EXECUTIVE SESSION: The Tigard City Council may go into Executive Session. If an Executive Session is called to order, the appropriate ORS citation will be announced identifying the applicable statute. 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.

12. ADJOURNMENT **9:55 p.m. estimated time**

AIS-2010 **3. A.**

Business Meeting

Meeting Date: 12/16/2014

Length (in minutes): Consent Item

Agenda Title: Approve City Council Meeting Minutes

Submitted By: Carol Krager, City Management

Item Type: Motion Requested **Meeting Type:** Consent Agenda

Public Hearing: **Publication Date:**

Information

ISSUE

Approve City Council meeting minutes.

STAFF RECOMMENDATION / ACTION REQUEST

Approve minutes as submitted.

KEY FACTS AND INFORMATION SUMMARY

Attached council minutes are submitted for City Council approval:

- September 16, 2014
- October 14, 2014
- October 21, 2014

OTHER ALTERNATIVES

N/A

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

N/A

DATES OF PREVIOUS COUNCIL CONSIDERATION

N/A

Attachments

Minutes for Sept 16, 2014

Minutes for October 14, 2014

Minutes for October 21, 2014

City *of* Tigard
Tigard City Council Meeting Minutes
September 16, 2014

1. WORKSHOP MEETING

A. At 6:31 p.m. Mayor Cook called the Tigard City Council workshop meeting to order.

B. City Recorder Krager called the roll:

	Present	Absent
Councilor Snider	x	
Councilor Woodard	x	
Mayor Cook	x	
Councilor Buehner	x	
Council President Henderson	x	

C. Mayor Cook asked everyone to join him in the Pledge of Allegiance.

D. Council Communications and Liaison Reports: Councilor Buehner and Council President Henderson said they would defer reports until the next council meeting.

E. Call to Council and Staff for Non-Agenda Items: There were none.

2. JOINT MEETING WITH TRANSPORTATION ADVISORY COMMITTEE

TTAC Chair Steve Bass said their advisory committee assists the city council on planning and transportation issues, whether they involve moving by vehicle or on foot throughout the community. According to TTAC bylaws the committee is tasked with advising council on projects for use of the city's gas tax. They are involved in studying proposals from TriMet, Metro and recently, proposed vehicle registration changes and the development of station locations for high capacity transit. A major task is Capital Improvement Plan (CIP) project prioritization, identifying what is important to them as citizens and aligning that with staff and resources. He said their focus is on safety and transportation modes within in the community

Steve Boughton, of the Pedestrian/Bike Advisory Sub-committee of the TTAC said they partnered with Washington County Bicycle Transportation Alliance on a Tour de Parks event last Saturday. There were 60 riders, including former Mayor Dirksen, and the event went very well. He thanked council for their support in the form of a grant for this event. Another current activity is helping with regional trail counts. New members have joined recently and the committee communicates with the Beaverton Transportation Advisory group. The Pedestrian/Bike Subcommittee wants to give input on project prioritization. He said they will continue these activities and would like to see council support of these events to help create interest in these events. He mentioned Washington County's Safe Routes to Schools program and said the city could get involved in this program.

Chair Bass said the committee wanted to show council who is part of their diverse group and what their passion is. Each member described to council their interests and shared why they are motivated to get involved in community transportation issues.

- Chair Bass said his transportation knowledge is small but he has two young children and is concerned about safe sidewalks, bike lanes, crosswalks and connections to parks. He is interested in safety factors and also creating a community that is not bypassed by Highway 99W.
- Kevin Watkins is a 30-year Tigard resident and this is his first volunteer work with the city. His initial interest was how Tigard fits into the broad regional picture. Growth stresses the road systems. His second interest is engineering, and his last project before he retired was a smart grid program. The analogy is with high capacity transit and optimizing the existing transportation system, technology can help us do a lot. He said he was impressed with the other members of the committee and their commitment to the health and livability of Tigard.
- Mark Carlton moved to Tigard 10 years ago. He said there is a lack of choices of transportation. When he lived in Portland there was light rail, sidewalks, etc. and moving to Tigard required getting into a car to go places. He has noticed a slow turn of trying to change this in Tigard and wants to be part of that movement and wants to foster this. He said 99W is a barrier and the way to solve congestion is not to build more roads or bypasses, but to figure out how to get people out of their cars and into alternate transportation modes.
- Elise Shearer said she is motivated by social justice issues and even though Tigard is family-friendly, there is an inability of the aging population to get around to essential services. She is glad Tigard is improving our transit system by working closely with TriMet but also the strategic plan will benefit seniors and families. Would like us to focus on east west connectors.
- Jen Stanfield has lived here six years and has an engineering background. She said when she first moved here she got feedback about what does Tigard have to offer. She said getting involved with a city committee would be a good way to see what Tigard has to offer. She came to the team with mass transit in mind and her primary focus is to get people her age to live in Tigard and find ways to get to their jobs that are not near Tigard. Her perspective has changed since the birth of her child and she is interested in safety and bike lanes.

- Mark Bogert is a lifelong Tigard resident. He started walking with his wife and became aware of areas needing attention. He wants to find ways to make walking and bike riding easier by filling in gaps. The city has adopted the idea of making Tigard a great place to walk. As more people are able to get around, this will be reinforced and the entire community will become more pedestrian friendly.
- Steve Boughton has lived in Tigard 30 years. He has a passion for cycling and believes this is a viable and important way to transport people. He is trying to get walking and biking to be more mainstream, supported and a lot more common in Tigard.
- Evelyn Murphy is a 20-year Tigard resident and has been on the TTAC three years. She works at OHSU where with very few exceptions employees may not drive their cars. Getting there by bus from Southwest Portland and Tigard was painful and inconvenient. Over the past 26 years slow improvements have been to make it easier to for people in to reach this major employer in the Metro area. Her transportation focus shifted after having teenaged stepchildren. She learned lessons about safety and the lack of desire teenagers have to walk to school, even if they live very close by. She said from her experience in different life stages, as a young adult, a parent and now an older individual she realizes having choices in transportation is a necessity. She said we contribute to and are beneficiaries of a just society including a just, equitable, user friendly transportation system, and she is in awe of the energy, passion and faithfulness of committee members, staff and elected officials who contribute to this.
- Erik Halstead chose Tigard as a place to live six years ago because it is a good place to raise a family. He has grown up around 99W his entire life and lived in many different communities along 99W. Tigard has great schools and he enjoys riding his bike again along the Fanno Creek Trail. What brought him to TTAC is his ability to get to and from work. He rode the bus to work from Beaverton and Tigard to downtown and wishes he could say it was a good experience, but it was not. His involvement with TTAC is to try and get Tigard to be more proactive and fight for citizens to get the same quality and frequency of service that others in the Metro area enjoy. He would like better bus service and safer places to wait for a bus.

TTAC Chair Bass said Tigard citizens are well represented by these diverse committee members. He thanked staff liaisons, including Senior Transportation Project Engineer McCarthy, Senior Transportation Planner Gray, Analyst Collins and Finance and Information Services Director LaFrance.

Councilor Buehner said she joined a predecessor committee to the transportation financing committee because she was concerned about safety on Walnut Street and why a transportation bond measure failed. She said she was pleased that the Walnut Street project is finally going to happen. She asked TTAC if they had discussed the proposed county vehicle registration fee which will be on the ballot in November. Chair Bass said city could benefit from their fair share of those county funds and TTAC is in favor of the transportation funding fee. Councilor Buehner mentioned she will be going off of council at the end of 2014 but urged continued discussions on where funding could be applied. TTAC Chair Bass replied that they have developed a list.

Councilor Woodard thanked the TTAC members for sharing. He said he picked up on references to social justice and meeting the needs of people at different stages of life. He said universal design should be developed for housing. There are a few years to think of the SW Corridor and he encouraged the TTAC to remain balanced in their endeavors and make recommendations with children and older people in mind. He said sacrifices may need to be made now so that services are available in the future for our children.

Councilor Snider commented that a few of the members referenced the proposed strategic plan. He said it is a big decision and council wants to check in to see if it was the right decision. He asked the members of the TTAC why the vision does or does not resonate with them.

TTAC Member Shearer said she would like to see destination spots shown on Tigard's pedestrian map, not only showing parks but shopping and neighborhood pubs, etc. She said residents may need an impetus to walk to a location.

TTAC Member Murphy supported connections with schools and young people. She said walking is not considered "cool" yet in many cities walking or using mass transit is a way of life. She said consideration should be given to the increasing levels of obesity and diabetes in young people. So many teenagers feel they must have a car and we need to make a cultural change.

TTAC Member Stanfield asked why a walkability vision was a tough decision. Councilor Snider said it was not tough but it was a big decision. Ms. Stanfield said that TTAC as a group was favorable and that no one found anything wrong with it. She asked what the cons might be of walkability as a vision for a city. Councilor Snider replied that from a strategic and high level, selecting any vision for a city with 50,000 residents is a serious decision.

TTAC comments on the proposed strategic vision:

- It is great; broad yet focused.
- I thought of bicycling and many other factors including safety, livability, generational perspective, social justice, all flow from this vision.
- It is ambitious of Tigard to establish this and it will drive all other decisions.
- I was impressed.
- We have a lot of retro work to do. Walking from Durham Road to City Hall on Hall Boulevard makes gaps in walkability apparent. We can't call ourselves a walkable city if citizens cannot walk safety on a major arterial road.
- We should not lose sight of businesses to attract people to walk to places. We need anchor stores and reasons to walk down these streets.

Council President Henderson said looking back 20 years from now will show that building corridors should be our focus. He said he realizes that we are remodeling our community from an auto-centric society. He congratulated the TTAC for taking on the CIP project prioritization and street maintenance program.

Mayor Cook said he listed main themes such as connectivity, circulation and grid systems. He said there are citizens in the community that do not want connectivity. He asked if someone moving onto a dead end street should assume it will remain that way. He asked the TTAC for reasons why this is important in the face of some resistance from these citizens.

TTAC Member Shearer said connectivity and a good grid system eases business transport. It also provides residents with options to get off the busiest roads.

TTAC Member Murphy said people think that the transportation needs they have now are what is most important but the 35-year old driving her kids to school and gym classes will be in 30 years a 60-year old who may not want to drive as much and 10 years later may even be a non-driver. She said it is important to remind people that, "now is not forever."

Councilor Buehner said she wanted to respond to TTAC Member Stanfield's question on the cons of a walkability vision. She said prior to 2000, the Vision Task Force recommendation was that infrastructure had been ignored and needed upgrading. Everything was going well until the economy crashed, requiring the city to lay off employees and cramping the ability to continue projects. She said the new vision is saying, "OK, we made it through. Let's step out, be positive and make this a better place to live."

Senior Transportation Project Engineer McCarthy thanked each member of the TTAC and the Pedestrian/Bike Sub-committee and remarked that the city was blessed to have a great committee that is cooperative and respectful of others' opinions. He noted for the audience that the TTAC meets every first Wednesday at 6:30 p.m. in the Library and the Bike and Pedestrian Subcommittee meets on third Thursdays at 5:00 p.m. in the Red Rock Creek Conference Room.

3. TRIMET PRESENTATION: DRAFT SOUTHWEST SERVICE ENHANCEMENT PLAN

Community Development Director Asher introduced TriMet Senior Planner Tom Mills who has been working on a strategic plan whereby the agency can put more service on the streets in the underserved southwest region of the Metro area. This is a difficult area to serve but things are getting better.

TriMet Senior Planner Mills described the Southwest Service Enhancement Plan. He said he was pleased to inform the council that TriMet has been increasing service. Some frequent service lines were restored in March running from 6 a.m. to 6 p.m. and then in September, weekday evening service was restored for Line 12 which runs along Highway 99W. He said they desire to start restoring Lines 94 and 93 because they have experienced increased ridership. He said TriMet is in a restoration and hopefully, growth mode.

Mr. Mills had a PowerPoint presentation which is included in the packet for this meeting. The SW Service Enhancement Plan includes community engagement and talking about how to grow the system. Citizen input is balanced with data and an examination of where people live and work. The SW Corridor Plan is in progress and whether or not high capacity transit comes to the corridor, the number one request in the first phase of that planning process was for TriMet to conduct a process

to look at local bus service in Tigard and other areas in the southwest to see how it could be improved. He said this dovetails nicely with Tigard's walkability vision and by doing this Tigard can support the transit system and it can also support the city.

Mr. Mills brought some copies of the draft vision for future services that was distilled from community outreach and surveys. Community Meetings were held in addition to a charette meeting with TTAC. There were also four meetings specifically for populations who do not usually come out to meetings. We reached out to youth, seniors, and Spanish and Vietnamese language speakers as well as social service providers and chambers of commerce. The online survey will remain available through October. The vision will be revised and he hopes to report back to council in January. The final SW Service Enhancement Plan will be completed in early March.

Mr. Mills showed maps indicating where people live and work. Questions were asked such as where do people who work at Washington Square live, and where people who live in Sherwood work. Downtown Portland always lights up on every map due to density. A charette map showed lines where people mapped destinations they want to reach. Durham Road was the number one suggestion for improvement throughout Tigard. Another popular suggestion was a connection between downtown Tigard on Walnut, to Progress Ridge. A connection to Kruse Way as also desired.

TriMet Senior Planner Mills said in 1969 and largest share of jobs was in the Portland city center. Over the years, new job centers emerged, creating new travel patterns. TriMet kept the downtown Portland service but has added service to and from the suburbs. He noted that the draft vision assumptions do not include high capacity transit but it can be amended when the status is known.

TriMet Senior Planner Mills said the line mirroring WES (Line 76) would be increased and allow people to get off at stops between the Wes stations. Community Development Director Asher asked if WES service would be increased. Mr. Mills said not at this time. TriMet doesn't own the alignment and negotiations would be required. He said there are now 10,000 trips per week and the ridership cost per trip has been cut in half ($12.00) A Max passenger costs $1.50 and a bus rider $2.50.

Mr. Mills discussed potential service increases:

- A line from Tigard Transit Center through the Tigard Triangle then down to Bridgeport and into the Tualatin Industrial area and Sherwood.
- New service on Durham Road could go to Meridian Park or could also connect to a line in Lake Oswego.
- Councilor Buehner asked about the former Country Club Road bus line and asked if it would be resurrected. Mr. Mills replied that today's Line 37 goes on Country Club to Bridgeport Village, Boones Ferry and then Lake Grove. He added that one idea is to take that line and have it come through Kruse Way, through Bonita Road and continue on to Tigard's Transit Center. That would connect Lake Oswego's Transit Center with Tigard's Transit Center.
- There is also a suggestion for a bus line extension from Beaverton to Progress Ridge along Walnut into downtown Tigard.

- An extension to Line 56 which travels along Scholls Ferry would continue to Progress Ridge and one day to River Terrace and South Cooper Mountain.
- A line serving Gaarde/McDonald would help with east/west travel and would be a commuter bus primarily as it goes through a residential area.
- A new line would go from Tigard Transit Center, down Pacific Highway but peeling off at 124th to serve Tualatin's industrial area and the future Basalt Creek community.
- They are taking a line off of Boones Ferry to serve Bonita. The replacement line would go from Tualatin, through Lake Grove, Mt. Park and PCC and then into downtown Portland.
- There is a new product for the Bull Mountain area, a commuter connector bus. An example is the Grove Link in Forest Grove. TriMet partnered with Forest Grove to find a private firm to run a private shuttle bus five days a week. Mayor Cook asked if the funding was running out and Mr. Mills said it does and TriMet is actively working to keep that and expand the product.

Councilor Snider said many in the Tigard community feel like they have been paying their fair share of TriMet taxes yet are not reaping the same level of benefits. He asked Mr. Mills if he had a sense of how much the southwest service enhancements represent. Mr. Mills said he did not have that information at this time but is working on a draft. Councilor Snider said he would like to know how this compares to services in other communities that at least some believe are better served. He asked it costs $100 an hour to run a bus. Mr. Mills said the figure is now $78.00 per hour. TriMet prevailed during labor union negotiations and brought the hourly cost down. He said the cost per passenger is less and cost per hour is more and uses fewer operators. Mr. Mills said to bear in mind that one great thing about transit is that it takes you to other communities. However, that makes it tough to know how much service a community gets because the service goes beyond.

Councilor Buehner asked about park and ride facilities access. She said the Bull Mountain/99W park and ride is always full but there is no place where anyone at the top of the hill could park to get to a bus on Walnut. She asked if TriMet is considering new park and ride locations. Mr. Mills said new park and ride locations are not really part of the vision as the cost benefit is not realized. He said those built along Max lines have partners to help financially, including the federal government. He said this is addressed with community shuttles and increased buses.

Councilor Buehner suggested using church parking lots that are not busy during the week. Mr. Mills said they do this with shared park and rides with churches and movie theaters, for example.

Councilor Woodard mentioned the issues of lighting and safety at bus shelters. He asked about solar lighting at shelters. Mr. Mills replied that some shelters currently use solar lighting which works fine to light the shelter but they don't have the facilities to light the sidewalks. Councilor Woodard commented that safety would increase ridership.

4. UPDATE ON ECONOM IC DEVELOPMENT ACTIVITY

Economic Development Manager Purdy introduced a presentation on Tigard's economy. He said one of council's goals was to better understand the local economy. He showed graphics on Tigard

businesses by sector. Each sector was further broken down into smaller categories with size of bubble indicating scale. He said the percentage of employment by business sector shows a well-balanced workforce. The average wage paid by Tigard businesses is $53,400.

Councilor Woodard asked where the wage figures came from. Economic Development Manager Purdy said the figures are what are reported to the state. In response to a question from Councilor Snider he said he would double check the numbers but the percentage listed was correct. Census data shows the 81 percent of residents over the age of 25 have attended college or received an advanced degree.

Economic Development Manager Purdy said he will return in a few months with more trend analysis. Councilor Buehner asked about the number of commuters going into downtown Portland and said it must be lower than 20 years ago. Mr. Purdy said he will try to obtain that data.

Councilor Buehner said she heard a story today on OPB radio and a Business Journal editor was talking about startups moving out of the Pearl. There was a disparaging remark made, "who would want to have their business in Tigard?" Economic Development Manager Purdy said this comment bothered him. He said he has heard of startup companies beginning in Tigard but there are not appropriate facilities so they leave when they grow. He said there is a shortage of space. He said he will follow up on that comment. He said he hears that Tigard is a bedroom community or just has retail businesses but noted that Western Family Food Headquarters is located here.

Mayor Cook said Economic Development Manager Purdy uses these graphics, partnered with Greater Portland Inc. with to attract new businesses. This info is helpful to attract new businesses. He commended Mr. Purdy on his quarterly executive round tables and networking. Sometimes competing executives sit across the table from each other and work together to solve problems.

Councilor Woodard asked if there is a way to find out where people are working and is there an opportunity in Tigard to draw some of the tech workforce. Community Development Director Asher said the city may not be able to attract them if there is not the required built environment here. He said there is a need to map what is available in terms of business districts and buildings. He mentioned that TriMet has software to track employers and we may be able to get that information from them. Councilor Buehner suggested looking to the urban reserves to get more industrial land. Community Development Director said that can be done in the downtown corridor.

Council President Henderson said he heard at the Main Street Conference that this type of data should be on the website.

5 BRIEFING ON CAPITAL IMPROVEMENT PLAN (CIP) PROJECTS

Engineering Manager McMillan introduced Interim City Engineer Carrie Pak, on loan from Clean Water Services to assist with projects until the city engineer position is filled. Ms. McMillan gave a report on 2013-14 Capital Improvement Projects.

- Water projects include Barrows Road (to serve River Terrace) and Main Street

- Storm Projects: Highway 99W median water quality feature will clean runoff water before it goes into the Tualatin River. When done, people will see vegetation but won't see the water quality treatment. Mayor Cook said he has heard a lot of questions about this project so people need to be educated. He asked what will take the place of the grass that was growing there before. Interim City Engineer Pak said you will see soil with sedges, rushes and shrubs. Grass does some filtering but is not so good for petroleum based fluids from the highway. She said there won't be a lot of trees due to safety issues. Engineering Manager McMillan said the plantings will be similar to those along Burnham Street.
- Slides were shown of some bank stabilization projects. Staff will return to council to talk about these in the future.
- The City of Tigard and Clean Water Services are partnering on the Derry Dell project which started out as a creek and sewer realignment. The city bought the Skelton property on the east side of the area and this will hold a boardwalk. Council President Henderson asked about the log placement. Ms. Pak said the log sizing and placement is specific to stream flows. Water resource engineers are specialists in water fluvial geomorphology and hydrology. Rather than use a concrete lining, natural materials are being used to dissipate energy. Council President Henderson asked when ferns would start growing in the area and Ms. Pak said people will soon see willows and other vegetation emerging in January. In response to a question from Councilor Buehner, Ms. Pak said the heavy equipment operators will be finished with their work before the end of the month. Council President Henderson said he received more questions from citizens about this project than any other.
- Main Street Sewer Elimination Project: Engineering Manager McMillan showed a slide with the old sewer line. She said what this project consists of is re-meandering Fanno Creek to slow it down, bridge replacement, removal of the sewer line and bank restoration along Main Street. This will be part of the public park. Councilor Buehner asked about the timing of the re-meandering and Ms. McMillan said funding is set aside in 2017-18.
- Fanno Creek House: This parks project was part of the land use approval. Surface Water Quality Coordinator did an excellent job to encourage native plantings to demonstrate how to landscape backyards with native plantings. She said Ms. Staedter teaches homeowners associations and various groups how to landscape using native plants.
- East Butte Heritage Park now has a play structure and trails. Councilor Woodard mentioned that there needs to be some well-marked parking spots and there should be lighting in the park. Engineering Manager McMillan said she was unsure if the city lights parks at night but she will check on the parking space markings.
- The Jack Park Bridge was installed this year. Playground equipment will be Phase 2.
- The Fanno Creek Trail from Main Street to Grant Street was completed. The art on the wall contains street art painted by a street artist, an expert in tagging.
- Street projects include 72nd and Dartmouth and the sidewalk along 92nd Avenue to Cook Park. It filled a dangerous gap on a route used by many people year going into and out of Cook Park.

Councilor Buehner thanked staff for the 135th sidewalk connection Assistant City Engineer McMillan said this is part of the strategic plan and getting staff involved in LQC (lighter, quicker,

cheaper) projects. Councilor Buehner said it will make a huge difference for the hundreds of people who walk in that area. She asked that her appreciation be extended to Streets Supervisor Walker.

Assistant City Engineer McMillan discussed street projects: Main Street/Green Street, the pavement maintenance plan (PMP) including ADA ramps, and paving Main Street and Electric Street. Councilor Buehner asked for curbs to keep car wash vehicles from blocking Electric Street. Council President Henderson asked if the city was required to include ADA ramps in the summer paving. Ms. McMillan said the ramps must meet the latest compliance requirements. Council President Henderson said he noticed that some existing ramps appeared to be pulled out and then replaced.

Engineer Pak said it has been a pleasure to spend time with Tigard's talented and hard working. engineering staff.

6. ~~UPDATE ON PROGRESS TO DEVELOP AN AGREEMENT REGARDING WATER SYSTEM OWNERSHIP AND WATER SERVICE~~ - Item moved to October 14, 2014.

7. COUNCIL LIAISON REPORTS: None

8. NON-AGENDA ITEMS: None

9. EXCUTIVE SESSON: None held

10. ADJOURNMENT: At 9:00 p.m. Councilor Buehner moved for adjournment and Councilor Snider seconded the motion. Motion passed unanimously.

	Yes	No
Councilor Snider	x	
Councilor Woodard	x	
Mayor Cook	x	
Councilor Buehner	x	
Council President Henderson	x	

Carol A. Krager, City Recorder

ATTEST:

John L. Cook, Mayor

Date

City *of* Tigard
Tigard City Council Meeting Minutes
October 14, 2014

STUDY SESSION

EXECUTIVE SESSION: At 6:30 p.m. Mayor Cook announced that the Tigard City Council would enter into Executive Session to discuss real property transactions, under ORS 192.660(2) (e). The executive session ended at 6:51 p.m.

1. BRIEFING ON AN AGREEMENT WITH WASHINGTON COUNTY FOR A CDBG SIDEWALK PROJECT

Engineering Project Manager McCarthy briefed council on an upcoming agreement with Washington County for a Community Development Block Grant (CDBG). The project is a sidewalk along North Dakota Street and 95th Avenue near Greenburg Road. He said Tigard applied for $200,000 in federal funds for design and construction. He said it is a reimbursement program so the city will be going out for bid for a designer and a contractor, pay for their work and then submit documentation to Washington County for reimbursement. Council President Henderson asked if there is a requirement to stay within a certain budget. Mr. McCarthy said there is some flexibility. This intergovernmental agreement will be on a future consent agenda.

2. BRIEFING ON AN MOU REGARDING TIGARD'S PARTICIPATION IN THE MASTER PLANNING PROCESS FOR THE WILLAMETTE RIVER WATER TREATMENT PLANT

Interim Assistant Public Works Director Goodrich briefed council on a memorandum of understanding (MOU) with Tualatin Valley Water District regarding Tigard's participation in the master planning process for the Willamette River Water Treatment Plant. He said Tigard is investigating several Willamette river supply route options, all of which depend on the capacity at the Willamette River Treatment Plant. The treatment plant is key to supply capacity to Wilsonville, Sherwood, Beaverton and Hillsboro. TWVD needs to update their master plan for the lower treatment plant and develop a plant for a proposed upper plant. Tigard has 25 mgd of water rights and this MOU would cover the city's proportionate share of the master planning process. He said engineers estimate the total cost of the study is $500,000 and Tigard's allocation is five percent, or$25,000. Staff will not exceed $50,000 without further discussion with council. The draft MOU has been reviewed by the city attorney's office and their comments were included.

Council President Henderson asked if all of the jurisdictions have the same agreement. Mr. Goodrich said they all have the same agreement but different MOU's. He said there is an escape clause which would allow Tigard to stop participation if the identified costs are too high. Participating in the study does not guarantee capacity in the future water treatment plant or facilities even if Tigard voters approve use of Willamette River water. Councilor Snider commented that the City of Tualatin is not participating.

Interim Assistant Public Works Director Goodrich said the city council previously authorized up to $100,000 to share in the Hillsboro project. Mayor Cook noted that this $25,000 is not in the budget. There is enough money in the water fund to cover the expenditure.

Councilor Buehner and Councilor Woodard said the agreement seemed reasonable. The MOU will be placed on a future consent agenda for council consideration.

- ADMINISTRATIVE ITEMS:

  - Main Street paving schedule - City Manager Wine discussed paving options for Main Street, noting that the project manager polled each business and they determined the best day is Sunday, October 19. She said they want to get at least two inches on the road before the weather changes and the plan is to do this all in one day. Councilors Snider and Woodard expressed appreciation to staff or communicating with the businesses and considering their business needs.

  - Kadel's sign – City Manager Wine thanked Assistant City Manager Newton for working on this with staff. The city's current code prohibits such a sign but the planning department proposed a minor code change that would come forward next year. Kadel's has reviewed this and also a property zone change. Councilor Snider said the code change would apply to more businesses than just Kadel's. City Manager Wine agreed and said it may prompt other sign companies to lobby the city to change the code for larger signs.

  - Staff transitions – City Manager Wine gave updates on staff transitions. Brian Rager has been promoted to Public Works Director. Rudy Owens has been hired as the Communications Strategist. Current recruitments include: Assistant Public Works Director, City Engineer, and Senior Transportation Engineer.

  - Council on-line Benefits sign-up is at 6:00 p.m., Tuesday, Oct. 21, before the council meeting. HR Analyst Burbank and Assistant City Manager Newton will be present to help councilors go online and register.

- Council President Henderson asked about water billing issues. Finance and Information Services Director LaFrance gave an explanation about what is happening with monthly water bill amounts. He said since going to four ten-hour day shifts there is no perfect way to administer the water meter readings. The meters are not read on the same day each month. Meters are read every four to five weeks. There may actually be under billing or overbilling depending on the day the meter is read. There may be monthly bills where the additional days bump a customer into a costlier third tier of water use. The tiers are designed to promote conservation and a higher tier is more costly.

  He said staff is looking into alternatives so the same meter reading schedule is kept. Councilor Buehner said this caused a lot of questions at the IWB meeting. Councilor Snider commented that NW Natural or PGE do not guarantee that they will read the meter on the same day each month. Councilor Buehner agreed but said there is quite a difference between a 28- vs. a 35-day billing period. She said some options were explored at the IWB meeting but none were acceptable to the board members and there are people who feel they are being billed unfairly.

3. BUSINESS MEETING – October 14, 2014

A. At 7:31 p.m. Mayor Cook called to order the Tigard City Council and Local Contract Review Board meeting.

B. City Recorder Krager called the roll.

	Present	Absent
Councilor Buehner	x	
Council President Henderson	x	
Councilor Snider	x	
Councilor Woodard	x	
Mayor Cook	x	

C. Mayor Cook asked everyone to stand and join him in the Pledge of Allegiance.

D. Council Communications & Liaison Reports – Councilor Buehner, Council President Henderson and Councilor Woodard said they would give reports at the end of the meeting.

E. Call to Council and Staff for Non-Agenda Items – Councilor Snider discussed his role as liaison to the Tigard Youth Advisory Committee (TYAC). He said he is unable to keep up with all of their activities and requested some additional liaison assistance from council. He

said liaison roles will be discussed and new assignments identified in January. Mayor Cook said he will step forward and fill in for the next two months. Councilor Woodard will remain the alternate.

4. CITIZEN COMMUNICATION (Two Minutes or Less, Please)

A. Follow-up to Previous Citizen Communication – City Manager Wine referred to recent communication regarding a sign that Kadel's Auto Body wanted to install but was told it would not be allowed. She said Assistant City Manager Newton looked into this and learned that current sign code restricts this type of sign but staff is looking at a limited code amendment which would allow it.

B. Tigard High School Envoy Carter Kruse gave a report on Tigard High School activities. Homecoming was over the last weekend of September. Over 100 families watched the parade. The Homecoming dance was held outside with a capacity crowd of 510 attending. Tigard's football team won the homecoming game and remains undefeated. The speech and debate teams are travelling to a tournament.

Councilor Woodard commented on the great community support at the football game. Mayor Cook said he was unable to judge the homecoming parade due to a schedule conflict but said he hopes he is available next year.

C. Tigard Area Chamber of Commerce – CEO Debi Mollahan gave a report on Chamber activities. She announced that there will be a Tigard City Candidates Forum at Broadway Rose on October 15, moderated by Dan Murphy. The focus will be on business and economic development. Doors open at 6:30 p.m. The Tigard Farmers Market received a $73,000 USDA grant to market to low income patrons in the community. She thanked the City of Tigard and other supporters that helped with the grant. There are only two more Sundays for the Farmers Market this year. She advised that people wanting to drive to the market this Sunday use 99W to Hall and turn on Hall because of paving on Main Street. She said the Tigard Downtown Alliance got a $52,000 grant from the Washington County Visitors Association to put some visitor focused amenities in the downtown such as benches, bike racks, baskets and banners.

D. Citizen Communication – Sign Up Sheet.

Neal Brown started with disclosures that he is a realtor and he has no written agreement with Mike Stephenson. He said he is passionate about working to bring a community center into downtown Tigard. He wanted to test that idea with council and showed a board with a mockup of a YMCA that could be built in Tigard. He thanked everyone in the audience who was present to show support. He obtained that support by going door to door to discuss this idea with over 1,200 people and got 1,000 to sign a petition demonstrating that

citizens will support a recreation center in downtown Tigard. He said this would activate the downtown. The YMCA does feasibility studies for new locations for a cost of $24,000. He has raised $2,000. The YMCA will put in $10,000 and he requests that the city contribute $14,000. The advantage to having a YMCA is that they cover all operating losses. Tigard and the taxpayers do not. At the end of 20 years the City of Tigard is free and clear with no debt. He said this is the way to develop downtown. He encouraged Councilor Woodard as the leader on recreation, to study this and see if the city can come up with $12,000 for the study and he will raise the rest. Councilor Woodard thanked him for all the work he put into this and coming up with the signatures. Councilor Buehner asked if this study cost would be an appropriate application for a social service grant and City Manager Wine said that it could potentially be. The boards with the signatures and mockup of the building were not left by Mr. Brown.

Carter Kruse, 13290 SW Genesis Loop, Tigard, showed a petition with over 150 Tigard High School student signatures. He said he was able to raise this number of signatures in one day and this shows the level of support from teenagers for a YMCA. He said they are proposing the YMCA location be on Burnham Street because it fits the vision of the most walkable community and there is no better way to promote that than putting this business next to the Fanno Creek Trail system. He said the Fanno Creek Trail is near the heart of the city and the transit center is also nearby so neighboring teens could use it. He said teenagers have to leave Tigard to have fun. They need something to keep them here. He said the YMCA is free to teens for up to 30 times a month. The YMCA is affordable and offers a lot for low income families. He said he hoped the support from Tigard teenagers prompts the council to help fund the study Mr. Brown mentioned. He added that a YMCA would offer job opportunities and volunteer opportunities for high school Key Club and National Honor Society members.

Zack Dean, 78143 SW Cedarcrest Street, Tigard, said he is supportive of a YMCA because he is an entrepreneur and teens need a place to meet up and share connections. He said he moved to Tigard from Chicago and said teens here need a place to play basketball or hang out with friends. He mentioned that the YMCA is affordable and bringing in a YMCA would be inspiring to youth, connecting them and bringing forward opportunities.

Estelle May, 11737 SW Errol Street, Tigard, said she has belonged to the Sherwood YMCA for eight years. She said she is a senior who attends five days a week even though she has to pay an out-of-district fee and drive in heavy traffic. She supported a Tigard YMCA because she would not have to travel to Sherwood in inclement weather.

Loren & Jesse Reed, 13953 SW Aerie Drive, Tigard, said they are new residents and want to show support for a community center in Tigard where their future children could go. They mentioned they drive to a gym in Beaverton and offered support for a YMCA in Tigard.

Tom Kerrigan, 12945 SW Ridgefield Lane, Tigard, said he was present in support of this project. He said he is a twenty-year resident, with two children that went through the Tigard school system. He said he is a co-founder of Bull Mountain Park where the proposition was

that the city would acquire the property and neighbors would work to activate the park. He said he has educated himself in civic affairs by attending Mayor Cook's Fireside Chat. He wanted to make two points. He emphasized Neal Brown's generosity and public spirit. He said Tigard has reached a critical size and in order to keeps its identity as a community, it needs a community center. A community center would complement other institutions. He said, "We need public space. We need a place for the arts, and a place for recreation and fitness. The YMCA offers classes. Having such a place is essential."

Gary Romans, 13166 SW Broadmoor Place, said the Mask & Mirror Theater brings high quality community theater to Tigard and is now ready to expand. They are seeking a full time year around space in Tigard or Tualatin. They are currently using space at the Calvin Presbyterian Church. They have identified a building on Burnham and are proposing to turn it into a small theater. He said this would take very little effort and could be converted in three months. He said Mask & Mirror actors will be downtown in costume as participants in the Main Street Halloween event and will be singing at the Tigard Holiday Tree Lighting.

Chris Garstad, 11774 SW 125th Court, Tigard, represented the Tigard Dog Park and said their annual Halloween dog costume contest is at 11:00 a.m. on the 25th at Potso Dog Park. Judges this year include Mayor Cook, Mrs. Cook and Representative Doherty. Ms. Garstad noted that humans come dressed up as well as dogs and she invited Mask and Mirror Theater actors to attend in costumes. She said everyone is invited and there is more information on Tigard's website.

Councilor Buehner announced that there will be a Town Hall on Thursday, October 16 at 6:00 p.m. Citizens are welcome to attend. It will be held at Tigard's Town Hall and the main topics are marijuana issues and the street maintenance fee.

5. CONSENT AGENDA: (Tigard City Council)

A RECEIVE AND FILE:

1. Council Calendar
2. Council Tentative Agenda for Future Meeting Topics

Councilor Buehner moved for approval of the consent agenda and her motion was seconded by Councilor Woodard. Motion passed unanimously.

	Yes	No
Councilor Buehner	x	
Council President Henderson	x	
Councilor Snider	x	
Councilor Woodard	x	
Mayor Cook	x	

6. LOCAL CONTRACT REVIEW BOARD:

AWARD CONTRACT FOR AUTOMATED MATERIALS HANDLING SYSTEM

Contracts Manager Barrett said this contract was discussed previously with council and is for the automated materials handling system at the Tigard Public Library. An RFP was issued and four proposals were received. Upon evaluation, Lyngsoe was the company that rated the highest. There is $320,000 allocated for this item but staff recommends a contract award of $325,000 which includes the first year of maintenance. Staff would reduce spending in other areas to make up the difference.

LCRB Member Buehner moved to award a contract to Lyngsoe for the library automated materials handling system. Councilor Woodard seconded the motion and the motion passed unanimously.

	Yes	No
LCRB Member Buehner	x	
LCRB Member Henderson	x	
LCRB Member Snider	x	
LCRB Member Woodard	x	
LCRB Chair Cook	x	

7. CONSIDER AUTHORIZING THE MAYOR TO EXECUTE AN AMENDMENT TO AN AGREEMENT REGARDING THE PACIFIC HIGHWAY/GAARDE/MC DONALD INTERSECTION IMPROVEMENTS

Transportation Project Engineer McCarthy gave the staff report. He said the main purpose of the agreement is to accept $400,000 from Washington County. Their contribution to the project rose from $4,000,000 to $4,400,000. There is a tight timeline for this amendment and it needs to be signed and returned to the county within two weeks.

City Manager Wine noted that this is a transfer between two county projects; the city does not receive the money. Councilor Buehner asked about putting a road through to 105th so customers could get to the garden store on 99W. Transportation Project Engineer McCarthy said he will get back to her on that question.

LCRB Member Snider moved to authorize the Mayor to execute an amendment to an Intergovernmental Agreement regarding the Pacific Highway/Gaarde/ McDonald Intersection Improvements. LCRB Member Buehner seconded the motion. The motion passed unanimously.

	Yes	No
LCRB Member Buehner	x	
LCRB Member Henderson	x	
LCRB Member Snider	x	
LCRB Member Woodard	x	
LCRB Chair Cook	x	

8. ADOPT RESOLUTION TO RATIFY COLLECTIVE BARGAINING AGREEMENT WITH TIGARD POLICE OFFICERS ASSOCIATION

Human Resources Director Bennett presented this item and said staff recommends adoption of the resolution ratifying the collective bargaining agreement with Tigard Police Officers Association (TPOA). She highlighted components of the agreement.

Councilor Buehner moved for approval of Resolution No. 14-44. Councilor Snider seconded the motion. City Recorder Krager read the number and title of the resolution.

RESOLUTION NO. 14-44 - A RESOLUTION ADOPTING A NEW COLLECTIVE BARGAINING AGREEMENT BETWEEN THE CITY OF TIGARD AND THE TIGARD POLICE OFFICER'S ASSOCIATION (TPOA) AND AUTHORIZING THE CITY MANAGER TO SIGN

A vote was taken and the motion passed unanimously.

	Yes	No
Councilor Buehner	x	
Council President Henderson	x	
Councilor Snider	x	
Councilor Woodard	x	
Mayor Cook	x	

9. RECEIVE UPDATE ON COMMUNITY DEVELOPMENT EFFICIENCIES INITIATIVES

Community Development Director Asher, Assistant Community Development Director McGuire and Building Official Van Domelen presented the staff report and a PowerPoint highlighting the Community Development Department efficiencies initiative project.

Community Development Director Asher said the department is engaged in a variety of small projects to improve how things are done in their department. Some projects are larger than others but all had room for improvement. The interface between Community Development and Engineering could be improved. Administrative operations needed upgrading and planning needed improved business processes. The Development Code was republished with the city recorders and planners got updated copies.

Assistant Community Development Director McGuire showed a slide of the planning caseload graph reflecting how over the counter activity dropped but had a big uptake in the spring. Building Official Van Domelen showed a building permit activity graph. An online permit system was implemented for non-review permits and for making payments. Over 446 contractors signed up for this service which is equal to 47 percent of permits. Community Development Director Asher said this has been very successful and although an analysis has not been done yet, there are savings in staff time and it is more efficient for contractors. Staff created their own process to accept payments which is a step above the rest of the state. There were over 1,200 inspections this year, which is an increase. He noted that the two large spikes on the graph for inspections were due to Wal-Mart and Clean Water Services.

Community Development Director Asher said Economic Development Manager Purdy is making 5-10 outside contacts per week and communicating with council about economic development measures and progress.

Examples of completed projects include:

- Creation of the Transportation Strategy Team (monthly meeting involving key decision makers, including council)
- Administrative Upgrades (CD and Finance share information on business licenses contacts. Economic Development Manager welcomes and promotes businesses)
- Streamlined Permit Intake Process (reduced wait times and new option for emailing site plans for preliminary review)
- Digitized Inspection Reports (Inspectors use iPad and can send reports immediately to owners and sub-contractors digitally.)

Phase 2 of the Efficiencies Initiative includes a Planning Department cost of service study and cost recovery analysis. The department is moving towards complete online plan submittal, enabling Planning and Engineering staff to review plans at the same time. Staff is looking into a few software programs and larger computer monitors will need to be purchased. Community Development Director Asher said they hope to go live in July, just in time for River Terrace activity.

Assistant Community Development Director McGuire added that they are considering automating planning land use applications and processing them online in the future.

Community Development Director Asher said a few of the efficiencies were not difficult, such as updating forms, but other projects take a lot time and these are added tasks that are not part of the

daily work plan. He said he was proud of what Mr. McGuire, Mr. Van Domelen and Building Services Supervisor Howse have brought to this initiative.

Councilor Buehner said about 20 percent of residents are not computer savvy and most do not have smart phones. She asked that staff be allowed to make paper copies if requested. Building Official Van Domelen said paper copies can still be printed for anyone requesting it. He said even if the city moves towards more online, a finished copy may still be printed. Paper will not go away completely. He noted that the City of Bend no longer accepts anything on paper. Community Development Director Asher added that their customer base is mostly contractors or consultants and they are generally set up with computers. Councilor Snider commended staff for doing these performance reviews and said he appreciated their doing this work while maintaining daily operational tasks. He asked about the methodology to be used when doing business analyses. Community Development Director Asher said they are doing this on their own. He said one project is a cost of service project that will tell staff what it costs to process certain land uses and this will be compared with the city's fee schedule. He said when deeper changes are required, this data tracking will be useful. Future projects may involve consultants.

10. RECEIVE LEGISLATIVE UPDATE

Assistant City Manager Newton will bring a staff report to council for adoption of the legislative agenda on November 25. She discussed the state priorities and suggested moving forward with brownfield mediation and the price comparison and procurement of architects and engineers. She said there is an opportunity on the Fields property. One thing staff is considering is going to the state to request funding for infrastructure improvements to bring private development. She will report to council after receiving feedback.

Depending on the vote on the marijuana legalization, there may be something added to the list. Councilor Buehner said she was pleased with the state agenda. Assistant City Manager Newton asked if council wanted to add brownfield mediation and price comparison to the list and council agreed. Mayor Cook said there was a proposal to lower the dollar amount of the QBS requirement and while he felt it would be best for it to go away completely, he said council definitely does not want the threshold to be lowered. Councilor Snider added that the intent is to get the most qualified people but the way it has been implemented removed any connection to price.

Ms. Newton said grants for the Tigard Area Farmers Market and EPA brownfields assessment were received. She said the city would again ask for brownfield cleanup grants. She said the city is still waiting to hear about the Superfresh grant. The other grant area is Safe Routes to Schools, which coordinates with our walkability vision. Policy items are wrapped around transportation bills such as the Bicycle and Pedestrian safety Act. Police funding has been used in the past to hire officers. She said staff would like to ask for technology grants for police. She said the city is pursuing a Tigard zip code and noted that Beaverton just received two new zip codes for a total of five.

Councilor Buehner asked if Assistant City Manager Newton could contact the city's lobbyists and whether it was appropriate to look at neighboring institutions that are less supportive of transportation. Ms. Newton said lobbying Joel Rubin will be in Tigard on Thursday and the city's congressional delegation is on board.

11. ADOPT BY-LAWS FOR THE TIGARD YOUTH ADVISORY COUNCIL

City Manager Wine said the first seven TYAC members set immediately upon working on bylaws for the city's protection and those of the members of the board. The TYAC considered these and came up with a draft before council for adoption of their bylaws for upcoming work. The bylaws set forth how their group is composed and how often they meet. She recommended that council approve these bylaws.

Councilor Buehner moved for adoption of Resolution No. 14-45. Councilor Snider seconded the motion. Councilor Snider noted that the previous bylaws may have been overly ambitious and asked if these were less complex in structure. City Manager Wine said the group discussed the balance of membership numbers and the structure they crafted to do what they wanted to accomplish. She said 14 more applications have been received and after interviews they hope to have 19-20 members. Committee assignments are for one year.

City Recorder Krager read the number and title of the resolution.

RESOLUTION NO. 14-45 A RESOLUTION ADOPTING THE BY-LAWS OF THE TIGARD YOUTH ADVISORY COUNCIL

A vote was taken and the motion passed unanimously.

	Yes	No
Councilor Buehner	x	
Council President Henderson	x	
Councilor Snider	x	
Councilor Woodard	x	
Mayor Cook	x	

12. COUNCIL LIAISON REPORTS - Councilor Buehner reported on the Intergovernmental Water Board (IWB) and said the primary issue raised was a perceived inequality in billing practices. Four ten-hour day work weeks have made a difference with meter reading staff. Staff brought suggestions which were not seen as helpful so staff will do more work. She also reported on the Metropolitan Policy Advisory Commission (MPAC) meeting. A long discussion was held on a growth management survey which showed 80 percent of survey takers want to live in single-family residences. The conversation is continuing. City Manager Wine said that in looking at the urban

growth report and estimates, Metro came out to each city and explained their methodology. Tigard believes they are realistic as the city is considered an inner-suburb. Councilor Buehner said Tigard's issues with growth are likely to be congestion and transportation

Council President Henderson said the Community Partners for Affordable Housing (CPAH) Community Development Block Grant (CDBG) grant program started again and he has assisted by reading 30 grant applications for not as much money. He said the gap in affordable housing is growing. The middle class is coming in and taking more of the affordable housing and the cost of living keeps rising. He noted there are not many vacancies for housing locally. A request was made by CPAH for the cities to give up land for affordable housing.

He said he attended the Gordon Smith New Freedom Award dinner and noted that there are a lot of people who want to help raise awareness of the mental health crisis. He said he visited the Jubilee transition house and added that there will be more of these in the future. These homes are for prisoners who leave the prison system and have had drug and alcohol problems but are doing well. He said this is one of the few ways society can show redemption.

Council President Henderson and Councilor Woodard went on the Lake Oswego/Tigard Water Partnership tour and were impressed with the outreach. Progress is being made and they found it very informative. Council President Henderson also attended the Main Street Program held in McMinnville and Dayton. Michele Reeves was a presenter and discussed how creative marketing and interior touches can improve businesses.

Councilor Woodard said he will provide a summary on a future agenda about the presentation by Dr. Sallis. He discussed the Metropolitan Area Communications Commission (MACC) meeting and extended franchise contract negotiations. He attended the Lake Oswego Tigard Water Partnership tour and was pleased to see the innovation and technology. He said there was good turnout for his Town Hall meeting on Saturday, October 11 which covered three topics, marijuana, vehicle registration fee and recreation outreach.

13. NON AGENDA ITEMS

14. At 9:39 p.m. Mayor Cook announced that the Tigard City Council would enter into an Executive Session called under ORS 192.660 (2) (h) to discuss pending litigation. He said the Tigard City Council would adjourn from Red Rock Creek Conference Room at the conclusion of the Executive Session.

15. ADJOURNMENT

At 10:05 p.m. Councilor Buehner motioned to adjourn. Her motion was seconded by Councilor Woodard. The motion passed unanimously.

	Yes	No
Councilor Buehner	x	
Council President Henderson	x	
Councilor Snider	x	
Councilor Woodard	x	
Mayor Cook	x	

_____
Carol A. Krager, City Recorder

Attest:

_____
John L. Cook, Mayor

_____
Date

City *of* Tigard
Tigard City Council Meeting Minutes
October 21, 2014

1. WORKSHOP MEETING

   A. Mayor Cook called the City Council meeting to order at 6:34 p.m.
   B. Deputy City Recorder Alley called the roll:

Name	Present	Absent
Mayor Cook	✓	
Council President Henderson	✓	
Councilor Buehner		✓
Councilor Snider	✓	
Councilor Woodard	✓	

   C. Mayor Cook led the Pledge of Allegiance.
   D. Mayor Cook asked Council for Communications & Liaison Reports to be heard as Agenda Item 2. Councilor Woodard noted he had a presentation.
   E. Mayor Cook asked Council and Staff for any Non-Agenda Items to be heard as Agenda Item 7. City Manager Wine advised the Council she had two items.

2. COUNCIL LIAISON REPORTS

   Mayor Cook moved this item to be heard as Agenda Item 7.

3. REPORTS BUDGET COMMITTEE FIRST QUARTER REPORT

   Finance and Information Services Director Toby LaFrance presented the First Quarter Finance Report and provided handouts; a copy of which has been added to the meeting packet.

   Assistant Finance Director Debbie Smith-Wagar reported the auditors were out one week in August, the last week in September and the first week in October. They did a thorough review of the city's financials making sure numbers were adding up. There were no deficiencies and things look good. A draft of the annual report is almost done with expectations of receiving it by Thanksgiving.

   Mayor Cook asked if it was correct that $77,000.00 of property taxes were paid late. Ms. Smith-Wagar replied that is correct. We do get a tax turnover every month.

   Mayor Cook asked if the city receives the interest on the late payment. Ms. Smith-Wagar answered yes, that is correct.

   Council President Henderson asked how the interest is accounted for in the budget. Ms. Smith-Wagar answered the interest is split with the same percentages as the principal.

Mr. LaFrance presented potential changes to the adopted budget noting next week the council will get the First Quarter Supplemental. There will be $1.7 million in appropriations with no impact on reserves as the expenses come with resources to offset them. Use of contingencies, grants, or beginning fund balances were above what was budgeted. It may be needed to add one FTE in Planning in anticipation of processing the River Terrace development applications staff is expecting to receive and there may be additional need for an engineering position. There were some capital improvement projects we thought were going to get done last fiscal year, but will be completed this fiscal year. Details are on the website.

Budget Committee Chair Don Fisher asked if the River Terrace Project was moving faster than normal. City Manager Wine said the project is not moving faster, but we are trying to accommodate the project milestones to help things go smoothly.

Mr. LaFrance stated staff is currently working on the Capital Improvement Plan (CIP) pulling together master plans to come up with a prioritization plan and process. In November the city has a number of dates where staff will test those priorities with the public. Based on the comments, revisions will be made the end of November helping Council direct staff on where to put resources. Staff is also looking into a Biennial budget process. The proposed budget will be released in April with hearings held prior to the budget adoption in June; staff will be working between now and then on the revenue forecast.

Councilor Woodard asked if the budget Committee will see all funding sources, such as grant matches, for projects going from one budget year to the next. Mr. LaFrance answered yes, that is what staff is working on.

Mayor Cook asked if staff was suggesting a Biennial budget for the CIP budget only or the city's overall budget. Mr. LaFrance replied the end goal would be for the overall budget. The city would do a full CIP prioritization every other year with adjustments during the in between year. He said he used to work in a community that did biennial budgets and it has pluses and minuses. One of the key things an organization needs is due diligence when going through two year budgets to check on assumptions because if there are economic changes in the beginning you will find yourself in a worse situation than anticipated, but we already have measures in place to help with that.

Budget Committee Member Timothy Esau asked why change, besides giving better stability to the CIP. Mr. LaFrance said it forces a long-term planning horizon and all the budget preparation is accomplished in less time for non-finance staff. Departments work on the budget for five months for a two year period instead of five months every year.

Councilor Snider asked are we required to be on a July to June fiscal cycle. He said his objection to that is the construction cycle and season. Mr. LaFrance answered yes, that is Oregon budget law in the ORSs, but in a Biennial budget you miss one of two of those.

4. RECEIVE UPDATE FROM METRO COUNCILOR DIRKSEN

Metro Councilor Dirksen presented the information for this agenda item and provided handouts to the council, which are retained in the meeting packet. He began by reviewing the

Executive Summary regarding how much multi-family housing growth is going to happen in certain metropolitan areas.

Councilor Snider said he had heard for years that what actually happens is different from the estimates provided by Metro staff and we repeat this time and time again. Metro Councilor Dirksen responded this is from predictions of population and job growth; not done by Metro staff, but by a group of consultants. Councilor Snider asked why the assumptions are not more in line with reality. The issue is the where not the how much. Metro Councilor Dirksen answered predictions for UGB expansion are not by economic indicators, but by the state's mandate of where growth can be allowed. The criterion has changed based on arbitrary things. This report is based on those predictions for buildable acre and zoning laws. Metro Council took into consideration sub-regional needs, such as residential growth, where there is job growth and that decision was challenged. The courts concluded Metro was not allowed to consider capacity on sub-regional matters and must consider total regional capacity.

Mayor Cook stated that is where the problem lies; why not be able to make the decision to move things around. Portland numbers alone can take that capacity and allow zero capacity. There is a big disconnect because the reports say live where you work and one says drive to your work; we want clean air but we also do not want to drive forty-five miles to our job.

City Manager Wine said having seen some of the population growth; we are seeing shifts that have not been seen before in the last generation. Based on past experience we may be faced with what has not happened before.

Metro Councilor Dirksen stated another discovery was a significant number of people working for large corporations in Washington County and living downtown, so they are choosing to reverse commute. People are choosing their housing based on living style and environment of home. People are willing to drive to work to have those amenities, as well as, considering in a dual income household, whose job to live closest to.

Councilor Woodard commented he liked parts of this but not all. He said he is all for clean air and sustainable cities; it makes sense. One thing concerning him is pushing these on a metro scale in a way that does not harm the business and industry. He asked are there going to be mandates to try to achieve some of these astronomical requirements. Metro Councilor Dirksen answered the toolbox has several different policy areas and each one identifies what each jurisdictions can do. Jurisdictions can pick and choose the tools that fit the community best. He suspects the different cities are already doing two-thirds of them.

Metro Councilor Dirksen reviewed the Metro Charter which will go to vote in November. He explained Metro is not allowed to dictate a zone change to a jurisdiction; and there is a sunset clause to end next year. On the ballot is to renew that restriction to extend it fifteen years as Metro has no intention of changing its policies concerning this.

5. RECEIVE UPDATE ON PHOTO RADAR

Chief Orr and Lieutenant Frisendahl presented the information for this agenda item. They stated there are only fifteen states currently using photo radar and of those there are only 140

communities. State of Oregon has been on the books for 18 years; with ten jurisdictions in our state using it. Of those, only four are operating active programs. Photo radar has to be operated by a police officer and can only be in one restricted location for four hours a day. This is not something the city can purchase and operate; it has to be done through a private company. There are only two companies operating photo radar vehicles. The officer in the van uploads the picture to the company and then the company issues the citation. We would also have to conduct a survey every three years. Chief Orr said in order to have a sworn officer in the van, we would need a part-time or full-time person, which would be a cost.

City Manager Wine said some months ago there was a pressing issue of speeding and discussion came up with ideas on how to address this issue. One approach was photo radar. There are other methods such as red light cameras or speed bumps.

Councilor Snider stated he requested this information, but thought the conversation was going to include both red light and photo radar. He asked if the Council was going to talk about red light at some point and he requested photo red light be explored as well. He asked if the officer in the van could be a reserve officer; what is the total cost per citation; what is the cost of the officer issuing the citation; and is the cost more, less, or the same. Chief Orr answered that administration of the citation can be done by anyone who is a sworn officer with police authority. The city of Milwaukie estimates 55 hours a month is spent in the van to enforce the law. Councilor Snider said if they are able to issue ten times the citations, while in the van, it may be reasonable to enact the program. We need to know that cost to compare the traffic citation now versus someone in the van.

Council President Henderson said he was interested in cutting down on traffic accidents and addressing safety concerns. It is very expensive and it is concerning that the equipment belongs to someone else. Chief Orr responded that the state made it clear the city is not in a profit business and cost should be neutral.

Mayor Cook said if we want to be the most walkable community then what can we do to change the driving habits on the street to make it safe to cross the street. We should still consider it if it is cost neutral and addresses safety issues.

Councilor Snider asked if there was research into a system that is less advanced and sends only warning letters to people; to potentially get to the safety issues.

Councilor Woodard studied the cities of Milwaukie's and Portland's program and found significantly different statistics. He requested more details on the traffic crashes, DUII, and distracted driving showing the cause of these accidents and wondered if it makes that much of a difference in the city of Tigard with our population numbers. He said he was having a hard time figuring out costs. Lieutenant Frisendahl responded that a lot of the data in the report is from ODOT and it is not on speeding incidents. Councilor Woodard said it would be nice to have crash data in order to know what areas are worse. Lieutenant Frisendahl said our jurisdiction has the highest traffic volume in the metro area. There is not a lot of speeding, but we have a lot of rear end crashes. Chief Orr stated we are unable to get precise accident information. Lieutenant Frisendahl said the photo radar van looks for one thing; speed. An officer on the road is looking at speed and all other violations and are able to educate the community.

Councilor Snider suggested adapting the little trailer to record information and issue warning letters. Chief Orr said the city uses the trailer to help people become aware of how fast they are going. He said he was going to a trade show this week and will look at equipment options.

Mr. Bob McGuire, Tigard citizen, 8470 SW Pfaffle Street, testified the detrimental impact on Pfaffle Street has gotten bothersome. He said the street is in a residential neighborhood and he has safety concern with it becoming Tigard's favorite shortcut to Costco, Winco, and Walmart. His biggest concern is how fast people go down that street. There are a couple different apartment buildings on this street with kids walking toward the traffic on the south end; those are accidents waiting to happen. People are dodging cars all the time. The speed limit down Pfaffle Street is 35 miles an hour and he cannot believe that was set in a residential neighborhood. He said he did not know if it is a matter of advocating for reduced speed. The photo radar technology is good and he thought the discussion tonight would be about photo red light too. You would make your money by placing photo radar at the Dartmouth intersection. As a resident down there, it is getting progressively worse and there needs to be more safety down Pfaffle Street. Someone cannot sit down a side street and expect a strong impact, because it is a continuous problem all hours of the day.

6. REPORT ON THE PROGRESS OF THE RIVER TERRACE FUNDING STRATEGY PLAN

Finance and Information Services Director Toby LaFrance, Assistant Finance Director Debbie Smith-Wagar, Senior Planner/River Terrace Project Manager Susan Shanks, Community Development Director Kenny Asher, and FCS Group Consultant Todd Chase presented the information for this agenda item. Staff and Mr. Chase went through the PowerPoint presentation provided in the meeting packet.

Ms. Shanks handed out meeting summaries from the October 1 and September 15 public outreach meetings, which provided quick overview of key comments and concerns, a copy of which has been added to the meeting packet. In general, people were concerned with:

- Adopting both the citywide Transportation System Development Charge (TSDC) and a River Terrace specific TSDC at the same time.
- The perception it is all for River Terrace.
- Administration management of two SDCs on top of the current tax.
- Cost burden distributions specifically for transportation. They appreciated a Street Utility Fee, because it means future residents would contribute to street improvements, which is mostly coming from the development community.
- General unhappiness with collector streets not being creditable by SDCs or TSDCs. This is burdensome to properties with collector streets.
- Washington County is concerned with cost assumptions on Roy Rogers Road. Staff now understands the need to assume some kind of cost funding strategy for Roy Rogers Road and need to use Transportation Development Tax (TDT) dollars for Roy Rogers Road and not elsewhere.
- The Tigard-Tualatin School District is concerned about the project timing. Infrastructure improvements outside of the UGB and if the school district needs those improvements in the near term and we have pushed the funding of those projects way out.
- Lastly, a general concern for the total cost of the project.

Mr. Todd Chase presented on the funding scenarios as shown in the PowerPoint presentation. He stated FCS Group focused most of our energy on transportation. We created a new transportation fee shown in Scenario E, which we recommend as the draft scenario. Some of the figures have been updated since sending the PowerPoint. There were lots of issues with prior Scenario D; specifically, where we tried to bite off more than the city can chew, more projects than we could fund and need, some projects were outside the UGB, and some were far away from River Terrace on 99W. We honed our list a bit and moved some of these projects out to 2020 and brought our capital funding requirement down significantly. We will hone down Roy Rogers projects to only include what is within city limits, as the developers will be making the road improvements and paying for those improvements. Referring to Scenario E, we have fund transfers of $150,000 a year and then two types of city SDCs and implementing a citywide $5,000 per dwelling SDC to accomplish the long list of citywide projects outside of River Terrace. The city could have a policy where a percentage of monies collected by River Terrace would be allocated to River Terrace. We have a 75% assumption where every dollar collected, $0.75 would stay there and 25% go outside of River Terrace and the city can decide where to spend that money. In addition, you have the TDT averaging $6,300 per dwelling unit. You could have a citywide policy similar to the SDCs for these that a percentage would stay there; in this scenario we assume 75%. You could have a sub-district SDC just pertaining to River Terrace calculated at $3,000 and 100% stay at River Terrace. There are other sub-districts the city can have like downtown and Tigard Triangle, which would be on top of the Transportation Impact Fee. There are a lot of options still available. You could go with this approach or a one uniform citywide SDC. We will have those for you to decide in February.

Mr. Chase continued by presenting on grants and a developer credit policy regarding the street dedications. For dedications with new streets, the core street to serve that development would be required to be built by the developer. Anything beyond that would be subject to development credits, which would be a new credit policy. You do not have to make it exactly like that. If you allow 100% developer streets credit eligible you would look at a substantially higher SDC by as much as $4,000 per dwelling unit in addition to the $8,000.

Councilor Woodard requested to see comparisons of other city's SDC charges to see at what point Tigard would no longer be competitive. Mr. Chase responded that North Bethany's charges are fairly consistent and within 10%.

Council President Henderson asked what is Beaverton's cost estimates for development across Scholls Ferry Road. Mr. Chase said North Bethany, South Cooper Mountain and South Hillsboro are considering SDCs in the order of around $8,000 for new development in addition to their other SDCs. They have not been adopted, but will probably be adopted next year. Ms. Shanks said she attended a meeting today regarding South Cooper Mountain and they discussed $6,000. South Hillsboro is considering $8,500 on top of their existing TDT. Mr. Chase commented tonight's recommended scenario can be fine-tuned moving forward; it is important to achieve a River Terrace Community Plan and do periodic reviews over time.

Councilor Woodard asked when looking at Exhibit 18, can you define improvement where new and existing streets meet. Mr. Chase answered improvements may be traffic calming devices, like adding speed bumps, in order to preserve the character of the existing neighborhoods.

Councilor Woodard asked has there been any discussion about bypassing connections and going to Barrows Road and Scholls Ferry Road. Ms. Shanks answered there is no right-of-way there to make

that connection and some roads would require demolishing houses. The project is about making all those sub-street connections. Ms. Shanks suggested she sit down with any of the Council to go over details for the roads and why things are planned as they are; it has to do with the right-of-way.

Councilor Snider asked in Exhibit 19, are the figures in addition to the current charge. Mr. Chase replied yes, it is in addition to the current charge. It does not generate much revenue until about year eight because no one is paying it. You can start it low at $9-$10 a month and increase it a dollar a year for ten years to ramp it up to that level. Mr. LaFrance said the Transportation Utility Fee is different than the Street Maintenance Fee. This is going to be an ongoing fee residents will have on their utility bill compared to a one-time charge developers will see. Mr. Chase said it is comparable to what North Bethany did and is similar to a Special District Utility Fee; we wanted to try to get away from Local Improvement Districts.

Discussion commenced on the timing of the application review process and adoption of funding. The attorneys are looking at options and staff will report back with a recommendation.

7. COUNCIL LIAISON REPORTS

Councilor Woodard presented the information for this agenda item and showed a PowerPoint presentation. He stated he attended the presentation by Dr. Salis at town hall. Tigard has accomplished great things for the community such as:

- Walkability is fast becoming a powerful movement in planning circles across the US and worldwide. A walkable community is a healthy community. Conversely, an unwalkable environment is a detriment to all the things that make communities work – neighborliness, nature, pleasure, recreation, and mobility options.
- The city is beginning a long journey to understand how a 20th century suburb can retrofit itself to support walkable and interconnected options for all its inhabitants. In this, Tigard is thrilled to have teachers and partners from a myriad of disciplines, including the field of medicine and human health.
- Since settling on a strategic vision with walkability as a centerpiece, the city has started working with the local school district on a Safe Routes to School program, opened a long abandoned pedestrian path in one of our neighborhoods, and identified hundreds of opportunities for establishing a new focus and culture in Tigard that promotes healthy and interconnected lives for people of all ages and abilities.
- There is a natural partnership emerging between the city and public health organizations due to the city's newfound commitment to supporting active and healthy lifestyles. The Oregon Healthy Authority has asked the city to present some of its early accomplishments at an upcoming conference in November.

Tigard challenges:

- Urban trails are not historically viewed as transportation assets as much as recreation assets. Funding their expansion is difficult. We have the start of a great trail system here, but need to ask how we can shift the mindset from trails to recreation on trails to transportation.
- The city's strategic vision imagines a future where everyone in Tigard enjoys healthy and interconnected lives. We should ask how much responsibility should cities bear for the health of its citizens.

8. NON AGENDA ITEMS

City Manager Wine noted the swag received tonight are small parts of the many things staff has been working on for months to collect input and do outreach with what is happening with our Strategic Plan. Council will see a report in November of what we have learned from that outreach. Our goal is to test the plan and how it resonates with the community.

City Manager Wine said Council currently does liaison reports at the end of meetings when you are tired and there is a short amount of time. She proposed setting aside 15 minutes during Study Session to give the Liaison Reports. This will put time upfront on the agenda and it will provide for a regular practice in a regular meeting.

Councilor Snider said some of these things are important to report out to the public. The public is not going to hear important matters like the water project unless they attend the study session or they listen online. City Manager Wine said she had heard both concerns. The other concern is the public learning about how things are being heard too. The purpose is to hear from one another on what is happening.

Councilor Woodard stated he would report out more if he knew he had the time. Some effect is lost when having to wait so long to report on what happened because you do not have the time to do it. There are certain things missed in tonight's report because of being tired and trying to remember back that far is hard.

Mayor Cook said this discussion could be brought up during the groundrules meeting. I'm concerned matters are not brought up due to the time of night.

9. EXECUTIVE SESSION: None held.

10. ADJOURNMENT

Motion by Councilor Snider seconded by Councilor Woodard to adjourn the meeting at 9:44 p.m.

The motion was approved by a unanimous vote of City Council present.

Mayor Cook	Yes
Council President Henderson	Yes
Councilor Buehner	Absent
Councilor Snider	Yes
Councilor Woodard	Yes

_____
Norma I. Alley, Deputy City Recorder

Attest:

_____
Mayor, City of Tigard

Date: _____

AIS-2004 **3. B.**

Business Meeting

Meeting Date:	12/16/2014		
Length (in minutes):	Consent Item		
Agenda Title:	Consent Agenda-Resolution Waiving Temporary Sign Permit Fees for Southwest Metro Babe Ruth Baseball		
Prepared For:	Toby LaFrance, Financial and Information Services		
Submitted By:	Liz Lutz, Financial and Information Services		
Item Type:	Resolution	**Meeting Type:**	Consent Agenda
Public Hearing:	No	**Publication Date:**	

Information

ISSUE

Does the Tigard City Council find the benefit to the community of waiving the temporary sign permit fees for the Southwest Metro Babe Ruth Baseball (formerly Tigard-Tualatin Babe Ruth) to hang four banners outweigh the $244 financial hardship to the city?

STAFF RECOMMENDATION / ACTION REQUEST

Consider Resolution waiving $244 of permit fees for the Southwest Metro Babe Ruth Baseball.

KEY FACTS AND INFORMATION SUMMARY

On December 2, 2014, Dawn Haskett and John Aiello from Southwest Metro Babe Ruth Baseball emailed the city to request a waiver of permit fees charged to hang four banners (text of email attached). According to the Master Fees and Charges Schedule, Temporary Sign Permits are $61 per sign. They are requesting the city waive fees for four signs, totaling a fee waiver of $244. The Tigard Municipal Code Section 3.32.070 authorizes council to waive fees for non-profits. The text of the TMC is as follows:

3.32.070 Exemptions. The City Council is authorized to waive or exempt the fee or charge imposed upon an application or for the use of city facilities and services, if a nonprofit organization requests such a waiver in writing and the council determines that community benefit for the proposed activity outweighs the financial burden on the city. The waiver or exemption shall not excuse the nonprofit organization from compliance with other requirements of this code.

Southwest Metro Babe Ruth Baseball is a qualifying non-profit. They have made their request to waive fees in writing. If council determines that the benefit to the community outweighs the loss of $244 in permit fees, then council is authorized to waive the fees.

OTHER ALTERNATIVES

City Council could deny the request.

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

Tigard citizens are involved in the community and participate effectively. Programs and activities are available in the community to meet the needs of a diverse population.

DATES OF PREVIOUS COUNCIL CONSIDERATION

The Tigard City Council approved the waiver of three banners for the Tigard Tualatin Babe Ruth Baseball on November 27, 2012.

Fiscal Impact

Fiscal Information:

Waiving the fees will reduce the City of Tigard General Fund revenues by $244.

Attachments

Resolution

Babe Ruth letter

CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 14-

A RESOLUTION WAIVING $244 IN TEMPORARY SIGN PERMIT FEES FOR SOUTHWEST METRO BABE RUTH BASEBALL.

WHEREAS, Tigard Municipal Code 3.32.070 authorized City Council to waive fees for nonprofits when the request is made in writing and council determines that the community benefit outweighs the financial burden to the city; and

WHEREAS, Southwest Metro Babe Ruth Baseball has requested in writing the waiver of fees for four temporary sign permits; and

WHEREAS, the Master Fees and Charges Schedule states that the fee for temporary sign permits is $61 per sign for 30 days and

WHEREAS, council determines that the community benefit outweighs the $244 financial burden to the city.

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

SECTION 1: Southwest Metro Babe Ruth Baseball receives a waiver of $244 in temporary sign permit fees .

SECTION 2 : This resolution is effective immediately upon passage.

PASSED: This _____ day of _____ 2014.

_____
Mayor - City of Tigard

ATTEST:

_____
City Recorder - City of Tigard

Southwest Metro Babe Ruth Baseball

December 2, 2014

To Whom It May Concern,

I am the President for Southwest Metro Babe Ruth, previously known as Tigard-Tualatin Babe Ruth. We are a local non-profit and 501c (3). We are respectfully requesting a waiver for our four advertising banners. Three of the banners are 5'X3' and one banner is 6'X3'. We will be placing one banner at Tigard High School on the Durham St. fence, one at Fowler Middle School field on the Walnut St. fence, one on the Twality Middle School fence with their permission and the fourth banners placement will be determined by January 1, 2015. The waiver would be for 4 permits at $61 each for a total of $244. We will most likely prefer to hang our banners on a date to be determined at a later time, but for no more than 30 days.

Babe Ruth has been an active partner in the Tigard community and has partnered with many local companies to continue to offer a safe, healthy and fun venue for boys and young men. We are committed to our community, neighbors, local businesses, partners and our boys and young men. We provide scholarships for registration and uniforms each year to many families that would not be able to participate otherwise.

We hope that you will grant our request for the $244 waiver. Thank you for your consideration.

John Aiello
Southwest Metro Babe Ruth President/Senior Babe Ruth District Commissioner
971-295-9092

AIS-1972			**4.**
Business Meeting			
Meeting Date:	12/16/2014		
Length (in minutes):	5 Minutes		
Agenda Title:	APPROVE RESOLUTION OF APPRECIATION FOR GRETCHEN BUEHNER		
Prepared For:	Marty Wine, City Management	**Submitted By:**	Carol Krager, City Management
Item Type:	Resolution	**Meeting Type:**	Council Business Meeting - Main
Public Hearing:	No	**Publication Date:**	

Information

ISSUE

Shall the City Council recognize City Councilor Gretchen Buehner for two terms (eight years) of Council service?

STAFF RECOMMENDATION / ACTION REQUEST

n/a

KEY FACTS AND INFORMATION SUMMARY

Councilor Gretchen Buehner was elected by citizens to serve two consecutive terms on City Council, from January 1, 2007 to December 31, 2014. Councilor Buehner is term-limited per the City Charter, and therefore leaving Council service. She served as the City Council President from 2010 to 2012. Prior to her election to City Council she served on the Bull Mountain Planning Subcommittee, Vision Task Force, Planned Development Code Review Committee, City Center Advisory Committee, Financial Strategies Task Force, Tigard Planning Commission and Transportation Financial Strategies Task Force.

Councilor Buehner will be honored for her service by Tigard residents, city staff and her fellow council members at a reception on December 16 at 5 p.m. in the Town Hall at City Hall.

OTHER ALTERNATIVES

n/a

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

DATES OF PREVIOUS COUNCIL CONSIDERATION

N/A

Attachments

Gretchen Buehner Retirement Resolution

CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 14-

A RESOLUTION THANKING GRETCHEN BUEHNER FOR HER OUTSTANDING SERVICE TO THE CITY OF TIGARD AS A CITY COUNCILOR

WHEREAS, Gretchen E. Buehner served as a Tigard City Councilor from January 1, 2007 through December 31, 2014; and

WHEREAS, over the course of Councilor Buehner's service, the city faced unprecedented challenges caused by a nationwide recession with corresponding city budget concerns, the need for regional decisions on transportation planning, and complex negotiations for long-term water rights; and

WHEREAS, Councilor Buehner ably served on a number of local and regional boards and committees to ensure the best future for Tigard. Her talents contributed to Tigard's Budget Committee, Audit Committee, Planning Commission, City Center Development Agency, the League of Oregon Cities' Transportation Policy Committee and Finance & Taxation Policy Committee and Metro's Policy Advisory Committee which focused on transportation, growth management and land use issues; and

WHEREAS, the National League of Cities bestowed Councilor Buehner with a Gold Certificate for Achievement in Leadership and named her a Leadership Ambassador and;

WHEREAS, Councilor Buehner's greatest achievements were garnered through her support for a long-term water source for the city. She served residents as a representative to the Lake Oswego*Tigard Water Partnership Oversight Committee, the Intergovernmental Water Board, the Willamette River Water Coalition and the Regional Water Providers Consortium and;

WHEREAS, during her terms in office, Councilor Buehner also contributed to progress on Urban Renewal District activities (*a Community Partners for Affordable Housing Project, a new Burnham Street and Main Street/Green Street remodel*), community planning for River Terrace, support for the city's success in securing $1.1 million in Federal Stimulus funds for city street overlays and the passage of a $17 million bond measure for new parks and greenspace as well as an adopted Parks and Recreation Master Plan.

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

SECTION 1: The City of Tigard Council and staff members hereby commend Councilor Buehner for her meritorious and dedicated service to the city.

SECTION 2: This resolution is effective immediately upon passage.

PASSED: This _____ day of _____ 2014.

_____
John L. Cook, Mayor

City of Tigard

ATTEST:

_____

Carol A. Krager, City Recorder

AIS-1891 **5.**

Business Meeting

Meeting Date: 12/16/2014

Length (in minutes): 5 Minutes

Agenda Title: Planning Commission Appointments

Prepared For: Tom McGuire, Community Development

Submitted By: Doreen Laughlin, Community Development

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

Public Hearing: No **Publication Date:**

Information

ISSUE

Shall Council reappoint Jason Rogers and appoint Bret Lieuallen, Chris Middaugh, and John William Smith as voting members of the Tigard Planning Commission; and appoint MIchael Enloe as a non-voting alternate member?

STAFF RECOMMENDATION / ACTION REQUEST

Approve a resolution reappointing Jason Rogers and appointing Bret Lieuallen, Chris Middaugh, and John William Smith - whose terms will expire December 31, 2018; and Michael Enloe as a non-voting, alternate member, whose term will expire December 31, 2016.

KEY FACTS AND INFORMATION SUMMARY

There are four voting positions to be filled on the Tigard Planning Commission. The Planning Commission currently has one alternate member whose term is due to expire December 31, 2015.

Jason Rogers, Bret Lieuallen, Chris Middaugh, and John William Smith were interviewed on November 24th by the Mayor's Appointment Advisory Committee. The Committee recommended that Jason Rogers be reappointed and that Bret Lieuallen, Chris Middaugh, and John William Smith be appointed.

Michael Enloe was recommended by the Mayor to be appointed as a non-voting member whose term will expire December 31, 2016.

Attachment 1 is a Resolution implementing these recommended appointees.

Attachment 2 has biographical information on all five recommended appointees.

OTHER ALTERNATIVES

Council could decide to deny commissioner(s) appointments.

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

Tigard City Council Long Range Objectives:
Tigard citizens are involved in the community and participate effectively.

DATES OF PREVIOUS COUNCIL CONSIDERATION

None

Attachments

Resolution
Bios

CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 14-

A RESOLUTION REAPPOINTING JASON ROGERS, AND APPOINTING BRET LIEUALLEN, CHRIS MIDDAUGH, AND JOHN WILLIAM SMITH AS VOTING MEMBERS OF THE TIGARD PLANNING COMMISSION AND APPOINTING MICHAEL ENLOE AS AN ALTERNATE, NON-VOTING MEMBER.

WHEREAS, there are four vacancies for voting members and one vacancy for an alternate non-voting member on the Planning Commission; and

WHEREAS, Jason Rogers was appointed as a Planning Commissioner in January, 2011 to serve his first full term that expires December 31, 2014 and has applied, and is eligible, for reappointment to the Planning Commission; and

WHEREAS, Bret Lieuallen, Chris Middaugh, and John William Smith applied for appointments to the Planning Commission; and

WHEREAS Michael Enloe was asked by the Mayor, and agreed to join the Planning Commission as a non-voting alternate member; and

WHEREAS, the Mayor's Appointment Advisory Committee recommends that Council reappoint Jason Rogers and appoint Bret Lieuallen, Chris Middaugh, and John William Smith as voting members for terms that expire December 31, 2018; and

WHEREAS, the Mayor recommends that Council appoint Michael Enloe as a non-voting alternate member for a term that expires December 31, 2016.

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

SECTION 1: Jason Rogers, Bret Lieuallen, Chris Middaugh, and John William Smith are appointed to the Planning Commission as voting members to fill terms which expire December 31, 2018.

SECTION 2: Michael Enloe is appointed to the Planning Commission as an alternate member to fill a term which will expire December 31, 2016.

SECTION 3: This resolution is effective immediately upon passage.

PASSED: This _____ day of _____ 2014.

_____
Mayor - City of Tigard

ATTEST:

_____
City Recorder - City of Tigard

PLANNING COMMISSION
RECOMMENDED APPOINTEES
BIOGRAPHICAL INFORMATION

On December 16, 2014, Tigard City Council will consider a Resolution to reappoint Jason Rogers and appoint Bret Lieuallen, Chris Middaugh, and John William Smith as voting members of the Tigard Planning Commission and Michael Enloe as a non-voting alternate member.

Jason Rogers has been a resident of Tigard for ten years and is applying for a second term. He was vice president of the Planning Commission for one year and president for the past year. He was a paramedic from 4/1999-4/2007 and is currently employed as an Ambulance Operations Manager at Metro West Ambulance. He holds a Bachelor's Degree from George Fox University. Besides the Planning Commission, Jason has been president of his Home Owners Association; a City of Tigard Park Board member; active as a trail volunteer; and a volunteer for the Boy Scouts of America.

Bret Lieuallen has been a resident of Tigard for forty-four years having lived previously in Dundee, OR and Denver, CO. He's been a self-employed contractor for the past 15 years. He attended Tigard High School and Portland Community College. Some of his previous community activities include being president of his Home Owners Association, a VFW Legion Commander, a member of the Dundee Police Commission, a member of the Civil Air Patrol, and a City of Tigard Tree Board member.

Chris Middaugh has been a Tigard resident for sixteen years. Chris holds an Associate's Degree in Computer Information Systems from Portland Community College. He is a software engineer at IHS in Lake Oswego.

John William Smith has lived in Tigard for fifteen years, having lived previously in Scappoose, OR; Rio Rancho, NM; Phoenix, AZ; Seattle, WA; and Knox, Indiana. John is a self-employed contractor. His interest in the Planning Commission is to help Tigard to grow smartly, equitably, and sustainably while attracting good businesses, neighbors and citizens.

Michael Enloe has resided in Unincorporated Washington County for four years. He is currently employed by Washington County Land Use and Transportation where he serves as an Engineering Associate doing development review. Previously, he was employed with TriMet in an Engineering/Planning role. Prior to that, he worked for approximately 5 years as a Transportation Engineer for Washington State Department of Transportation (WSDOT) and holds a Bachelor of Science Degree in Civil Engineering. He's volunteered as a member of the Tigard Pedestrian & Bicyclist Advisory Committee for the past three years and is a very active runner and cyclist.

AIS-1850			**6.**
Business Meeting			
Meeting Date:	12/16/2014		
Length (in minutes):	75 Minutes		
Agenda Title:	Public Hearing - Ordinances Adopting the River Terrace Community Plan, Comprehensive Plan Map Updates, and Transportation System Plan		
Prepared For:	Susan Shanks		
Submitted By:	Debbie Smith-Wagar Financial and Information Services		
Item Type:	Motion Requested Ordinance Public Hearing - Legislative	**Meeting Type:**	Council Business Meeting - Main
Public Hearing Newspaper Legal Ad Required?:	Yes		
Public Hearing Publication Date in Newspaper:	**10/30/2014**		

Information

ISSUE

Shall the City Council approve a package of comprehensive plan amendments (CPA2014-00001) to adopt the River Terrace Community Plan, updates to the city's Comprehensive Plan Designations Map and Natural Resource Maps, and a River Terrace Addendum to the city's Transportation System Plan?

STAFF RECOMMENDATION / ACTION REQUEST

Staff recommends approval of two ordinances that together adopt the amendments proposed in CPA2014-00001.

KEY FACTS AND INFORMATION SUMMARY

Council is being asked to consider a combined package of Comprehensive Plan Amendments necessary to complete the River Terrace planning process. Attachment 3 includes an Ordinance for the adoption of the River Terrace Community Plan and updates to four existing Comprehensive Plan maps pertaining to land use and natural resource designations. Attachment 4 includes an Ordinance for the adoption of the River Terrace Transportation System Plan Addendum.

These documents are being presented as a single package, rather than as separate elements, because all of these documents may only be changed through the Comprehensive Plan

Amendment process, which requires specific actions by the Planning Commission and Council. A description of each document is provided below.

The River Terrace Community Plan is a long range planning document designed to supplement the Tigard Comprehensive Plan. This means that development in River Terrace will be subject to all the goals and policies of the Comprehensive Plan just like any other neighborhood in the city. Development will also be guided by the specific vision contained in the Community Plan as the area transitions from rural to urban land use to accommodate needed housing in the region. The River Terrace Community Plan is the result of many years of analysis and visioning by the community, City of Tigard leadership and staff, Washington County leadership and staff, and numerous partner agencies.

In order to implement various aspects of the River Terrace Community Plan, updates to several existing city maps are needed. Updating the Comprehensive Plan Designations Map will apply new land use designations to properties within River Terrace that meet Metro's residential density requirements and support the community's land use vision for this area. Updating the city's existing maps that pertain to significant tree groves, habitat conservation areas, and wetland and riparian areas will apply new resource designations to properties within River Terrace, thereby extending the city's existing protections and incentives to these areas.

The River Terrace Transportation System Plan (TSP) Addendum is the fifth and final infrastructure master plan to be adopted as part of the River Terrace community planning process. It appends the existing City of Tigard TSP, which was last updated in 2010. The city's TSP, and by extension the proposed Addendum, serves as a long-range guide for transportation investments by incorporating the vision of the community into an equitable and efficient transportation system that balances the needs of pedestrians, cyclists, drivers, transit users and freight carriers. To that end, the River Terrace TSP Addendum envisions a network of multi-modal streets that connects residents to trails, schools, parks and services. One that conforms to the rolling topography, builds upon and connects to existing streets in the area, and effectively balances safety, comfort and mobility.

This entire Comprehensive Plan Amendment package was presented to the Planning Commission at a public hearing on November 17, 2014. Public testimony was received and considered by the Planning Commission as part of their deliberations. (See Attachment 5 for all written comments submitted to the Planning Commission for their consideration.) At the conclusion of their deliberations, the Planning Commission made a unanimous recommendation to the City Council that the entire package of amendments be approved and adopted without any changes. (See Attachment 1 for the Planning Commission's full recommendation to Council.)

See Attachment 2 for a memorandum that summarizes clarifying changes to be made to these documents that are being proposed by the project team subsequent to the Planning Commission's recommendation and based on verbal and written testimony received before and during the November 17 hearing. The majority of these changes involve minor additions, rather than deletions or revisions, in an effort to make these documents as clear and complete

as possible. The most substantive change involves revisions to the River Terrace Boulevard cost estimate as provided in the River Terrace TSP Addendum (Project ID 5, 6 and 7 in Table 5). After reviewing detailed design and cost estimate information from three engineering firms, namely Otak Inc., SFA Design Group LLC, and Pacific Community Design, the project team reduced the costs estimates for River Terrace Boulevard by $16 Million.

In summary, the city signed an intergovernmental agreement (IGA) with Washington County in 2012 whereby it agreed to complete the public facility and land use planning process for this area. The city was awarded Construction Excise Tax (CET) grant money for the same purpose. Adoption of this Comprehensive Plan Amendment package will satisfy the city's IGA and grant obligations and further the city's goal of facilitating development in River Terrace.

OTHER ALTERNATIVES

Council could choose to not approve the ordinances and not adopt the River Terrace Community Plan, updates to the city's Comprehensive Plan Designations Map and Natural Resource Maps, and a River Terrace Addendum to the city's Transportation System Plan. In the alternative, Council could choose to direct staff to make modifications to any or all of these documents.

COUNCIL OR CCDA GOALS, POLICIES, MASTER PLANS

River Terrace Community Plan
River Terrace Transportation System Plan Addendum

DATES OF PREVIOUS CONSIDERATION

Council approved the contract for the River Terrace Community Plan on June 25, 2013. The project team presented the River Terrace Transportation System Plan Addendum to Council on June 17, 2014.

Fiscal Impact

Cost:	$121 Million
Budgeted (yes or no):	No
Where Budgeted (department/program):	N/A

Additional Fiscal Notes:

The River Terrace Funding Strategy, which Council will consider in a separate action, contains a strategy for funding River Terrace transportation projects over the next 20 years.

Attachments

Planning Commission Transmittal Memo
Summary of Plan Changes Memo
RTCP & Maps Ordinance and Exhibits
TSP Ordinance and Exhibits

Written Comments

PowerPoint

City *of* Tigard
Memorandum

To: Mayor John Cook and Members of Council

From: Calista Fitzgerald, Vice President, Tigard Planning Commission

Re: Planning Commission Recommendation - River Terrace Community Plan

Date: November 26, 2014

On November 17, 2014, the Tigard Planning Commission held a public hearing on the River Terrace Community Plan (CPA2014-00001). After considering public testimony, the Planning Commission made a unanimous recommendation that the Tigard City Council approve the River Terrace Community Plan and the supporting Comprehensive Plan Designations, Natural Resources Maps, and the River Terrace Addendum to the City of Tigard Transportation System Plan (TSP).

The public hearing was well attended and the public comments were very positive and supportive overall. A few concerns were raised specifically regarding the River Terrace Boulevard, access to the school district property, and the designation of the River Terrace Trail across several properties in the south of River Terrace. Commissioners deliberated the points raised during the public hearing. Several commenters requested the River Terrace Boulevard rendering be removed from the Community Plan and TSP. Commissioners supported keeping the rendering. In response to the Tigard-Tualatin School District's points, the Commission preferred to leave the 161st Avenue Extension off the TSP near-term project list, as it is atypical for a neighborhood route to be publicly funded. The Commission also discussed the trail location issue and decided it would not be appropriate to depart from the original trail location provided in the West Bull Mountain Concept Plan and Metro's Westside Trail Master Plan. In addition, they stated the River Terrace Trail was designed to provide a flatter, more accessible route around Bull Mountain.

The Planning Commission is very pleased to forward our recommendation on this land use plan and feels strongly that this comprehensive package achieves the goals council initially set out for this effort. Our review process has included careful attention to the public input and careful deliberation of the issues brought before us. We look forward to your adoption process and the development of an exciting new community within Tigard. I hope to have an opportunity to share the Planning Commission's thoughts in more detail at the council hearing.

City *of* Tigard
Memorandum

To: Mayor John Cook and Members of Council

From: Susan P Shanks, River Terrace Project Manager

Re: Summary of Plan Changes

Date: December 2, 2014

The Planning Commission reviewed and made a motion to recommend approval of the following River Terrace documents on November 17, 2014:

- River Terrace Community Plan
- River Terrace Transportation System Plan (TSP) Addendum

This memo summarizes the changes that the project team made to these documents subsequent to the Planning Commission's recommendation based on verbal and written testimony received before and during the November 17 hearing. The majority of these changes involve additions, rather than deletions or revisions, in an effort to make these documents as clear and complete as possible.

RIVER TERRACE COMMUNITY PLAN

I. PARKS, RECREATION, AND OPEN SPACE CHAPTER
Goal 8 | Pages 5-1 through 5-4

- Added language about working with the Tigard-Tualatin School District to explore the possibility of allowing public use of recreational facilities on the site of the future school.
- Added more detailed information about the River Terrace Trail and the Southern Access Trail, including their similarities and differences.
- Added language that explained why trails are not conceptually located in the same way that parks are conceptually located.
- Added language to Map 14 Transportation Improvements to clarify that final trail alignments may change at the time of development. See full text under Community Plan Maps below.

II. TRANSPORTATION CHAPTER

Goal 12 | Pages 8-1 through 8-5

- Added footnotes to clarify that recommended road or intersection improvements that are not under the city's jurisdiction require approval from the applicable road authority.
- Added a footnote to clarify that specific road and intersection improvements are recommended in order to establish the community's vision and the city's intention to work toward implementing that vision. Future and more detailed analysis will determine whether specific signal or intersection improvements will be warranted or technically feasible.
- Added more detail regarding the recommended bicycle facilities along Roy Rogers Road consistent with language in the River Terrace TSP.
- Added more detail regarding the design flexibility that will be needed to implement the River Terrace Blvd design concept consistent with language in the River Terrace TSP.

III. COMMUNITY PLAN MAPS

Map 14: Transportation Improvements

- Added the following language to clarify that specific road alignments and intersection improvements may change pending additional analysis and approvals: *Final street/trail alignments and intersection improvements may change and are subject to final design, engineering, permitting and approval by the applicable road authority.*
- Straightened the 161st Avenue extension to be consistent with the maps in the River Terrace TSP.

RIVER TERRACE TRANSPORTATION SYSTEM PLAN (TSP)

I. RECOMMENDED TRANSPORTATION SYSTEM IMPROVEMENTS

Table 5 | Pages 29 - 31

- Revised the transportation cost estimates for River Terrace Blvd (Project ID 5, 6 and 7 in Table 5 of the TSP) after reviewing detailed design and cost estimate information from three engineering firms, namely Otak Inc., SFA Design Group LLC, and Pacific Community Design.

CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
ORDINANCE NO. 14-_____

AN ORDINANCE ADOPTING COMPREHENSIVE PLAN AMENDMENT CPA 2014-00001 TO AMEND THE TIGARD COMPREHENSIVE PLAN TO INCLUDE THE RIVER TERRACE COMMUNITY PLAN AND RELATED AMENDMENTS TO THE COMPREHENSIVE PLAN DESIGNATIONS MAP AND SEVERAL NATURAL RESOURCE MAPS WITHIN THE RIVER TERRACE COMMUNITY PLAN AREA.

WHEREAS, in 2002 and 2011, Metro brought the area previously known as West Bull Mountain and currently known as River Terrace into the Urban Growth Boundary; and

WHEREAS, in 2010, the Washington County Board of Commissioners adopted by Resolution and Order the West Bull Mountain Concept Plan; and

WHEREAS, in 2012, the City of Tigard signed an intergovernmental agreement (IGA) with Washington County to refine the concept plan and complete the public facility and land use planning process by developing the River Terrace Community Plan; and

WHEREAS, in 2011 and 2013, property owners in River Terrace annexed to the City of Tigard with the understanding that the River Terrace Community Plan would facilitate urban development in the area through the eventual adoption of zoning, development code regulations and other implementing measures; and

WHEREAS, the City of Tigard was awarded Construction Excise Tax (CET) grant money as part of the IGA with Washington County and subsequently received additional CET grant money from Metro to complete the River Terrace Community Plan, and the proposed amendment will allow access to those monies; and

WHEREAS, the city has proposed an amendment to the Tigard Comprehensive Plan to include the River Terrace Community Plan; and

WHEREAS, the city has proposed an amendment to the Tigard Comprehensive Plan Designations Map that applies new land use designations to properties within River Terrace that meet Metro's residential density requirements and support the community's land use vision as outlined in the River Terrace Community Plan; and

WHEREAS, the city has proposed an amendment to the Tigard Significant Habitat Areas Map, Wetlands and Riparian Areas Map, and Significant Tree Groves Map that applies new resource designations to properties within River Terrace based on technical reports contained in the project file including the "West Bull Mountain Natural Resources Inventory" prepared by Pacific Habitat Services and dated June 2013; the "West Bull Mountain Wetlands Inventory" prepared by Pacific Habitat Services and approved by the Department of State Lands on October 16, 2013; and the "City of Tigard – River Terrace Tree Grove Assessment Report" prepared by Winterbrook Planning as updated in June 2013.

WHEREAS, on November 17, 2014, the Tigard Planning Commission held a public hearing, which was noticed in accordance with city standards, and recommended unanimous approval of the proposed amendment (Land Use File: CPA 2014-00001) by motion and with vote in support; and

WHEREAS, on December 16, 2014, the Tigard City Council held a public hearing, which was noticed in accordance with city standards, to consider the Planning Commission's recommendation on CPA 2014-00001, hear public testimony, and apply applicable decision-making criteria; and

WHEREAS, the Tigard City Council's decision to adopt CPA 2014-00001 is based on the findings and conclusions found in Exhibit D and the associated land use record, which is incorporated herein by reference and contained in land use file CPA 2014-00001.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: Tigard City Council amends the Tigard Comprehensive Plan to include the River Terrace Community Plan as shown in Exhibit A.

SECTION 2: Tigard City Council amends the Tigard Comprehensive Plan Designations Map as shown in Exhibit B.

SECTION 3: Tigard City Council amends the Tigard Significant Habitat Areas Map, Wetlands and Riparian Areas Map, and Significant Tree Groves Map as shown in Exhibit C.

SECTION 4: Tigard City Council adopts the findings and conclusions contained in Exhibit D in support of this action and as the legislative basis for this ordinance.

SECTION 5: 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 _____, 2014.

_____
Carol Krager, City Recorder

APPROVED: By Tigard City Council this _____ day of _____, 2014.

_____
John Cook, Mayor

Approved as to form:

_____

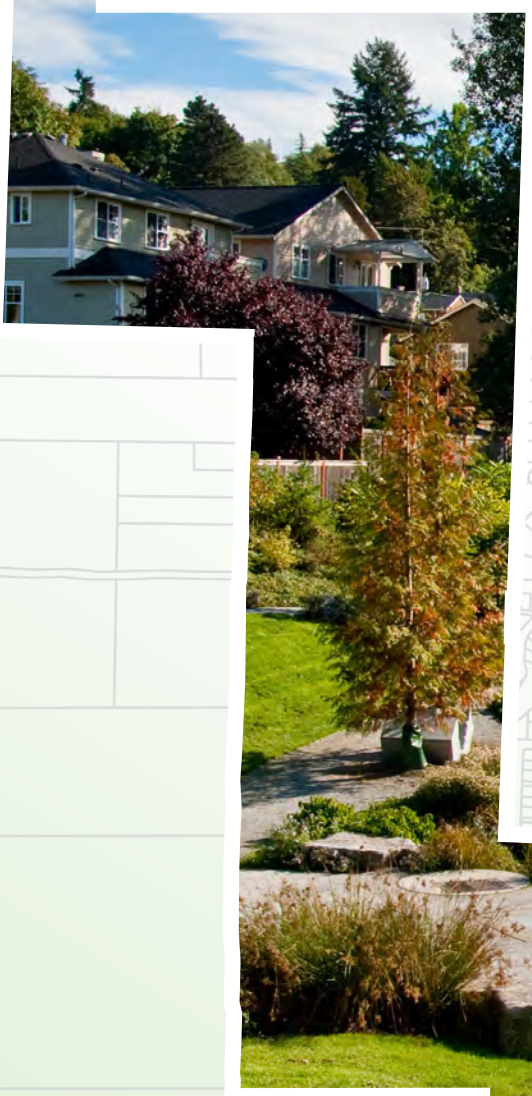
City Attorney

EXHIBIT A

City of Tigard

River Terrace

community plan



December 2014

This project was made possible through funding provided by the City of Tigard,
a Metro Construction Excise Tax grant, and Washington County.

ACKNOWLEDGEMENTS

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Introduction and Background

River Terrace is located within the City of Tigard and inside the Portland Metropolitan Urban Growth Boundary (UGB) on its westernmost edge. See Figures 1-1 and 1-2 for reference. It consists of approximately 490 acres that is currently in agricultural use with some single family residences. It is bounded by unincorporated Washington County residential development to the east and rural agricultural land to the north, west and south. Most of the agricultural land to the west and south of River Terrace is designated Urban Reserve Area on the Metro 2040 Growth Concept Map. The agricultural land to the north of River Terrace, known as South Cooper Mountain, is inside the UGB within the City of Beaverton. Similar to River Terrace, long range planning efforts are underway in South Cooper Mountain to facilitate its transition from rural to urban land use.

The River Terrace Community Plan, hereafter referred to as the Community Plan, is a long range planning document that supplements the Tigard Comprehensive Plan.

Figure 1-1: River Terrace Location

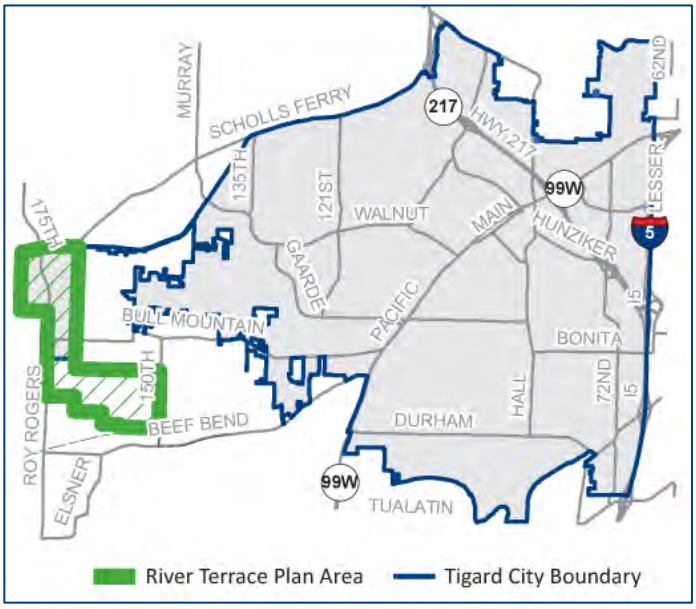
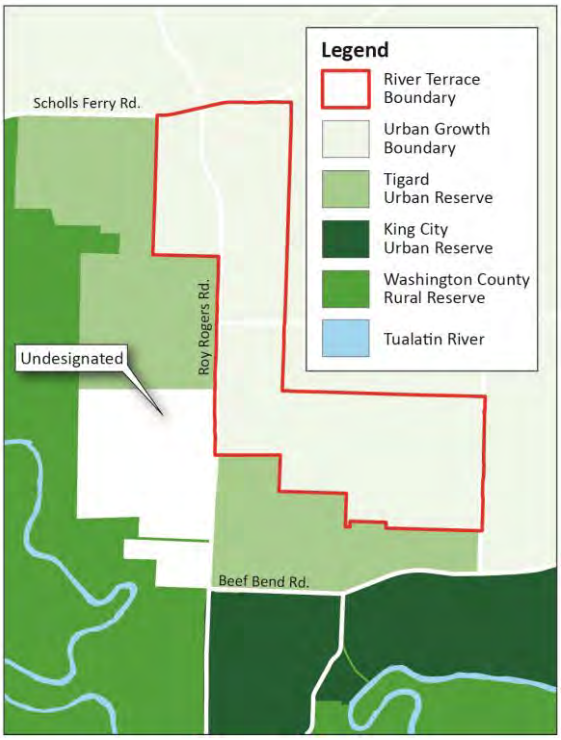


Figure 1-2: Urban Growth Boundary



It is designed to guide development and investment in River Terrace over the next several decades as it transitions from rural to urban land use to accommodate needed housing in the region. It is the result of many years of analysis and visioning by the community, City of Tigard leadership and staff, Washington County leadership and staff, and numerous partner agencies.

The Community Plan's organization mimics the chapter structure and format of the Tigard Comprehensive Plan, which includes a chapter with goals, policies, key findings and recommended action measures for 14 of the 19 Statewide Planning Goals. Only those goals that are applicable to River Terrace are included in the Community Plan. They are as follows:

- Goal 1 Citizen Involvement
- Goal 2 Land Use Planning
- Goal 5 Natural Resources
- Goal 8 Recreational Needs
- Goal 10 Housing

- Goal 11 Public Facilities and Services
- Goal 12 Transportation
- Goal 14 Urbanization

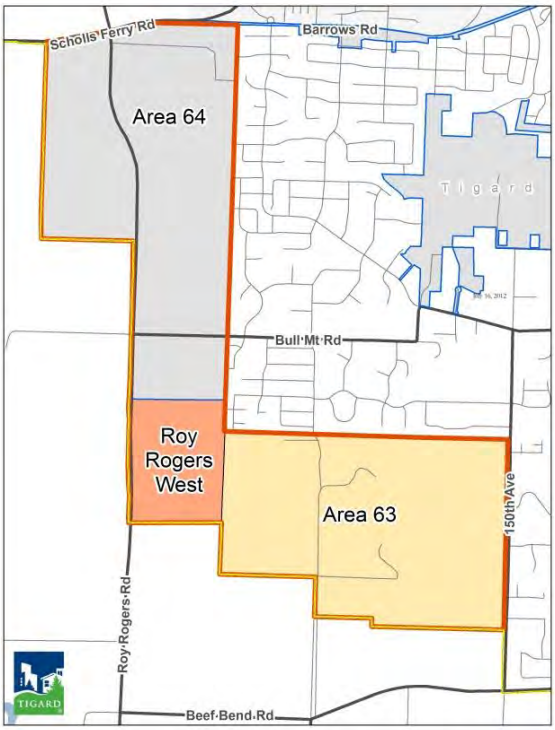
In addition to the Community Plan, five infrastructure master plans were created during the community planning process to provide for the timely, orderly and efficient provision of public facilities and services in River Terrace. All five master plans are independent of the Community Plan but collectively serve as its foundation. They were developed to support the proposed land uses and zoning district designations, which are described in more detail in the section on Land Use. They identify the major facilities and capacity improvements that will be needed to support full build-out of the area and include planning level cost estimates for all identified public facility projects. A summary of each of these master plans can be found in the sections on Parks, Public Facilities and Transportation.

A funding strategy was also developed concurrently with the Community Plan pursuant to state and regional requirements. It utilized the project lists and cost estimates identified in the five master plans described above. The purpose of the River Terrace Funding Strategy is to provide a viable near- and long-term funding strategy for all infrastructure improvements identified in the River Terrace master plans.

The following topics are addressed in this section.

- Community Plan Development
- Community Plan Adoption
- Community Plan Implementation
- Existing Conditions

Figure 1-3: River Terrace UGB Areas



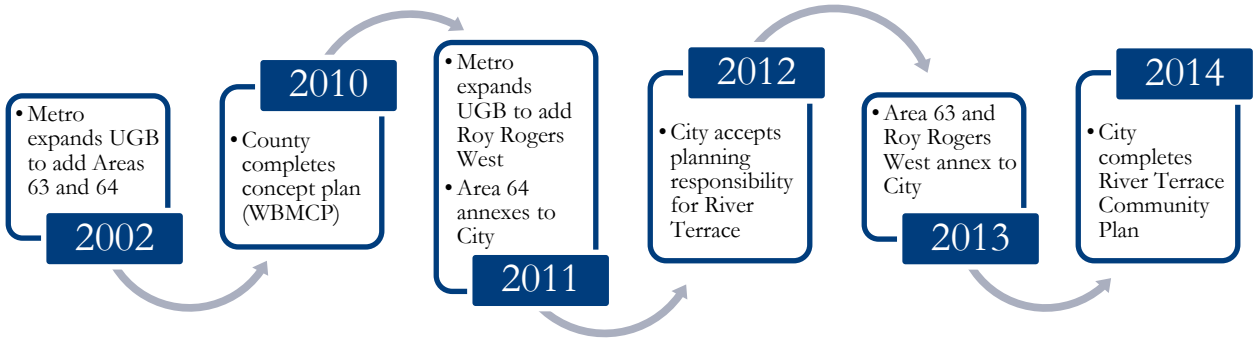
Community Plan Development

Community Plan Area History

Most of the land in River Terrace, approximately 440 acres, was added to the UGB in 2002, at which time it was identified as Areas 63 and 64. Washington County completed the concept plan for Areas 63 and 64 in 2010. This plan, entitled the West Bull Mountain Concept Plan (WBMCP), included Areas 63 and 64 and a rural subarea to the south of both areas that extended to Beef Bend Road. This rural subarea was included in the concept planning process to facilitate logical street connections and urban service extensions since Areas 63 and 64 were not contiguous to one another.

Approximately 50 acres of this rural subarea was added to the UGB in 2011, at which time it was identified as Roy Rogers West. Collectively these three areas, i.e. Area 63, Area 64 and Roy Rogers West, comprise the River Terrace planning area. Unlike the WBMCP, the River Terrace Community Plan does not include the remainder of the rural subarea (which is now an Urban Reserve Area) to the south of River Terrace. The entire 490-acre area that makes up River Terrace was annexed to the city in two batches. The first annexation petition was approved in 2011. The second was approved in 2013.

Figure 1-4: River Terrace Community Plan Timeline



In 2012, Washington County and the City of Tigard entered into an intergovernmental agreement (IGA) whereby the county assigned and the city agreed to accept responsibility for preparing a community plan based on the concept planning efforts completed by the county in 2010 for the area now known as River Terrace (and formerly known as West Bull Mountain). Pursuant to the IGA and in furtherance of Metro Functional Plan Titles 11 and 14, the city agreed to "refine the County's West Bull Mountain Concept Plan and provide a detailed land use, public infrastructure, governance, and financial planning framework for urban development of the concept planned area." In turn, the county agreed to support the city's efforts to complete the River Terrace Community Plan.

Community Plan Refinements

Below is a summary of key plan refinements that were made during the River Terrace community planning process. This summary documents the major differences between the WBMCP and the River Terrace Community Plan.

Land Use

- The recommended land use and zoning district designations are based upon the adopted WBMCP land uses. Minor refinements were made during the community planning process to support a better range and mix of zoning districts and, by extension, housing types.
- The commercial area was shifted to the west to improve its visibility from Roy Rogers Road. Its overall size was not increased.

Parks

- Specific park sites were not identified in the River Terrace Park System Master Plan Addendum consistent with city land acquisition policies.
- The park and trail demand in River Terrace was calculated using the city's current level of service (LOS) standard instead of the hybrid LOS standard developed during the WBMCP process.

Stormwater

- The southern stormwater management strategy was adjusted to reflect the current UGB. Instead of utilizing the flat area along the northern edge of Beef Bend Road for detention, which is not inside the UGB at this time, the River Terrace Stormwater Master Plan recommends conveying

this runoff all the way to the Tualatin River via a single off-site improvement in the form of a high-flow bypass pipe or a combination of pipe and stream restoration.

- The sizes of the stormwater detention facilities were adjusted to reflect the city's intention to utilize a continuous simulation hydrologic model. This model is being developed in partnership with Clean Water Services.

Transportation

- The southern road network was adjusted to reflect the current UGB. Instead of two north-south Neighborhood Routes, the River Terrace Transportation System Plan (TSP) Addendum only envisions one north-south connection to Beef Bend Road along an existing private road alignment. This alignment is also the location of the recommended high-flow stormwater conveyance improvements described above.
- The main north-south street parallel and to the east of Roy Rogers Road was changed from a Neighborhood Route to a Collector Street to reflect anticipated traffic volumes and to be consistent with other collector streets in the city. This street is identified as River Terrace Boulevard in the River Terrace TSP Addendum.
- No additional intersections were added to existing Washington County facilities, i.e. Roy Rogers Road or Scholls Ferry Road, but a traffic signal was added at the future Scholls Ferry Road/River Terrace Blvd intersection to safely accommodate all modes of travel and to minimize traffic impacts on existing adjacent neighborhoods.
- All local street connections to existing Bull Mountain neighborhoods were kept in the Community Plan, with the exception of the one at Leeding Lane. This connection was downgraded from a vehicle connection to a pedestrian and bicycle connection to lessen the transportation impacts on an existing wetland.
- The greenway trail along Roy Rogers Road and Scholls Ferry Road was eliminated for a number of reasons. The main one being that most stakeholders preferred the location of the River Terrace Trail and felt that the inclusion of both was neither feasible nor necessary given the proximity of both trails to each other.

Regulatory Framework

Metro Functional Plan Titles 11 and 14 figure prominently in the community planning process and are heavily referenced throughout the Community Plan. Title 11 (and corresponding Statewide Planning Goal 11) calls for long-range planning to ensure that areas brought into the UGB are urbanized efficiently and become or contribute to mixed-use, walkable, transit-friendly communities. Statewide Planning Goal 11 also has specific requirements related to the development of a Public Facilities Plan to ensure the timely, orderly and efficient provision of public facilities and services in urbanizing areas. Title 14 (and corresponding Statewide Planning Goal 14) calls for a clear transition from rural to urban development, an adequate supply of urban land to accommodate long-term population and employment, and a compact urban form.

The city is required to prepare and adopt comprehensive plan provisions, public facility plans and land use regulations to meet the requirements of the specific Metro ordinances that added River Terrace to the UGB, namely Ordinances 02-969B and 11-1264B, as well as Metro Functional Plan Titles 11 and 14 and Statewide Planning Goals 11 and 14. The city is also required to maintain and periodically update its Comprehensive Plan. It recently completed a major plan update in 2008, but this update preceded the city's agreement with Washington County to accept land use planning responsibility for River Terrace. The city made minor amendments to Chapter 14 in 2012 upon acceptance of land use planning responsibility for River Terrace, but these amendments did not address all the state and Metro requirements for River Terrace.

> **Regulatory Compliance**
>
> The River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively meet all city, regional, and state requirements for land use and public facility planning.

The completion and adoption of the River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively meet all city, state and Metro requirements for land use and public facility planning. In combination, these documents provide for the orderly and efficient transition of River Terrace from rural to urban land use and contribute to meeting the city's Public Facilities Plan requirement under Statewide Planning Goal 11.

Community Plan Adoption

The River Terrace community planning process has resulted in the creation of a number of documents that fall into one of three categories: Infrastructure Master Plans, River Terrace Community Plan and Maps, and Implementation Documents.

Infrastructure Master Plans

Of the five infrastructure master plans that were developed for River Terrace, the master plans for water, sewer and stormwater have already been adopted. The master plans for parks and transportation are expected to be adopted with the Community Plan.

River Terrace Community Plan and Maps

The River Terrace Community Plan includes 14 maps. They are provided for informational purposes only. The majority of them, Maps 6 – 14, exist in a more technical form in one of the five infrastructure master plans described above. These maps are adopted when their respective master plans are adopted. Maps 1 – 5 are standalone maps. Three show inventoried natural resources in River Terrace. The other two show Comprehensive Plan and Zoning District designations. A separate action is required to adopt these maps, as adoption of the Community Plan does not result in their adoption. Once zoning districts have been adopted and are effective, land use applications for development may be submitted to the city for review.

Implementation Documents

The River Terrace Funding Strategy is a critical implementation document. As previously stated, the funding strategy was developed concurrently with the Community Plan pursuant to state and regional requirements and is expected to be adopted with the Community Plan. Additional implementation projects are described below.

Community Plan Implementation

The city identified a number of implementation projects in the course of the River Terrace community planning process. All are necessary for Community Plan implementation, but some have broader citywide implications. A summary of these implementation projects is provided below.

River Terrace Code Amendments

This effort includes only those amendments that were identified through the community planning process and that are critical to the initial implementation of the Community Plan. They include targeted changes to the city's Planned Development regulations related to open space requirements, new text and graphics to implement the River Terrace Boulevard design concept, and updates to the city's adequate facility requirements. Other code amendments will likely follow later, such as site and building design standards for the Community Commercial area.

River Terrace Public Improvement Design Standards

This effort includes only those additions and updates that were identified through the community planning process and that are critical to the initial implementation of the Community Plan, such as the development of River Terrace Boulevard planting standards. Once completed and publicly reviewed, these updates will be adopted into the city's existing Public Improvement Design Standards. Other additions and updates will likely follow later.

Citywide Stormwater Model and Standards

A new flow duration based model and new stormwater standards and design guidelines are being developed in coordination with Clean Water Services. Once completed and publicly reviewed, they will be adopted into the city's existing Public Improvement Design Standards. The new stormwater model will apply to stormwater management citywide. The new stormwater standards and design guidelines will initially only apply to River Terrace due to the unique conditions and stormwater management strategies identified in the River Terrace Stormwater Master Plan. They may eventually apply on a citywide basis in the future.

Citywide Infrastructure Financing Project

This project includes an evaluation of the city's existing utility fees and System Development Charges (SDC) and associated SDC credit policies. It will make recommendations about the need for new and/or increased fees and SDCs and associated SDC credit policies. Each infrastructure system will be analyzed separately. All fees and SDCs will likely apply on a citywide basis, although some may be specific to River Terrace.

In addition to these projects, the recommended action measures at the end of each Community Plan section and the various River Terrace infrastructure master plans also identify implementation tasks and/or needs. While every effort has been made to identify all relevant near- and long-term tasks that are necessary for the successful implementation of this Community Plan, it is anticipated that additional tasks and/or needs will be identified during the development of River Terrace, which is expected to occur incrementally over the course of the next two or more decades.

Existing Conditions

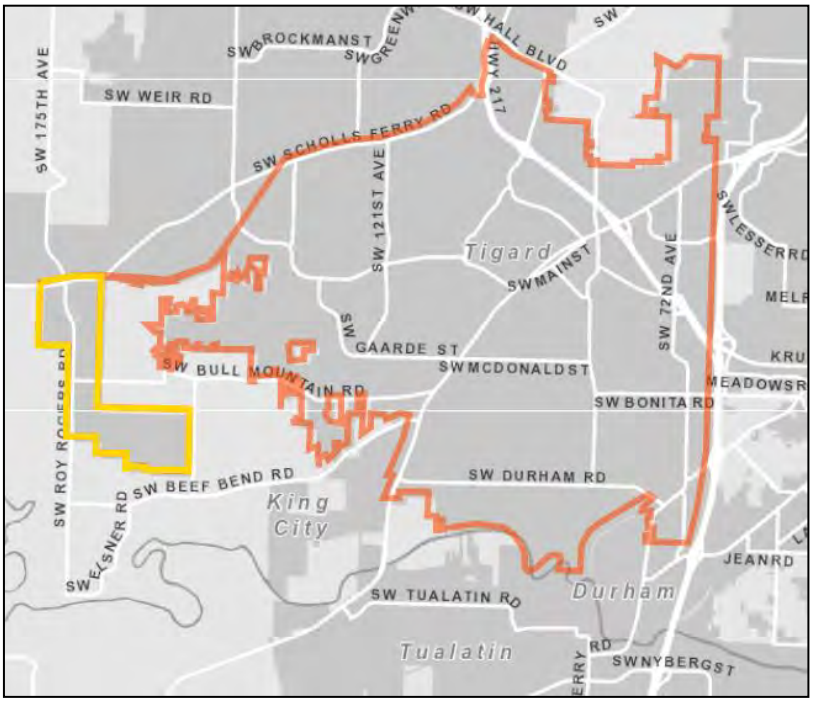
Existing conditions provide the physical basis for land use planning in River Terrace. Topographical and geological conditions and existing infrastructure influence the location, size, and type of future development, public facilities, parks and streets. A summary of these conditions are included below. More detailed information can be found in the various studies that were conducted during the course of the concept and community planning processes, including but not limited to the West Bull Mountain

Natural Resources Inventory (Pacific Habitat Services, 2008), Regional Landslide Hazard Mapping, West Bull Mountain Planning Area (DOGAMI, 2008), and the River Terrace Tree Grove Assessment Report (Winterbrook, 2013).

Transportation Context

River Terrace is located at the cross roads of Roy Rogers Road and Scholls Ferry Road, two regionally significant roads that connect River Terrace to Tigard, Beaverton, Sherwood and beyond. River Terrace is also served by Beef Bend Road to the south and 150th Avenue along its eastern edge. Bull Mountain Road provides east-west circulation through the center of River Terrace. Roy Rogers Road, Bull Mountain Road and 150th Ave are proposed to be improved to urban standards to accommodate River Terrace and regional transportation needs. A road widening project along Scholls Ferry Road is already underway on River Terrace's northern edge. The section on Transportation provides more detailed information on the transportation improvements recommended for River Terrace.

Figure 1-5: Transportation Context (River Terrace outlined in yellow)



Landform Context

River Terrace borders the agricultural lands of the Tualatin Valley. Unlike the broad and relatively flat lands of the valley, River Terrace is situated on the western and southern slopes of Bull Mountain and is characterized by rolling topography interspersed with steeply sloped lands that were created over time by erosion. The steepest slopes generally occur along existing tributaries that drain to the Tualatin River, which is to the south and west of River Terrace. The northern part of River Terrace contains the largest concentrations of relatively flat land. The southern area contains more steeply sloped land. Flat land is generally more conducive to higher density development than steeply sloped land. Additionally, water, sewer and stormwater facilities rely on and/or utilize topography for efficient delivery of services. The sections on Land Use and Public Facilities provide more detailed information on the types and locations of land uses and public facilities that are recommended in River Terrace, which are, in part, based on existing topography.

Natural Resource Context

River Terrace contains a number of protected natural resources, including wetlands, streams, riparian corridors and significant tree groves. River Terrace contains a total of ten natural drainageways and one significant wetland. These natural resources provide wildlife habitat, help prevent erosion and contribute to water quality. The section on Natural Resources provides more detailed information on the types and locations of natural resources that are protected in River Terrace.

Geological Context

River Terrace is characterized by shallow bedrock and clayey soils, which are highly erodable. As a result, the potential for stormwater infiltration is poor and also potentially problematic for slope stability given the steep terrain and proximity to shallow bedrock. The Public Facilities section on stormwater provides more detailed information about how the Community Plan responds to these conditions.

Goal 1: Citizen Involvement

Hearing from community members is a key component of building a livable community. The River Terrace Community Plan public involvement effort sought to engage a wide range of community members and project stakeholders in planning for River Terrace. Following from Tigard's public involvement goals, multiple opportunities were provided for participation, communication and information throughout the planning process. In addition, several new outreach tools were used to engage the public.

Continuing Involvement

Public involvement in the River Terrace Community Plan built upon the West Bull Mountain Concept Plan public involvement efforts.

The River Terrace community planning process built upon Washington County's public involvement efforts during the West Bull Mountain concept planning process, giving stakeholders the opportunity to stay involved as planning responsibilities shifted from Washington County to the City of Tigard. Public involvement led to several key River Terrace Community Plan and infrastructure master plan refinements, which are as follows:

- Transportation impacts on existing adjacent Bull Mountain neighborhoods were mitigated in a number of ways to address traffic concerns. The main north-south street parallel and to the east of Roy Rogers Road was changed from a Neighborhood Route to a Collector Street (aka River Terrace Boulevard), a signal was proposed at the Scholls Ferry Road/River Terrace Boulevard intersection, and the Luke Lane connection was modified to only connect via a circuitous route.
- A design concept for River Terrace Boulevard was advanced that effectively addressed concerns about balancing mobility with safety and comfort for all modes of travel. Key design elements include the River Terrace Trail, a wide landscaped median and sidewalk bulbouts to support large trees, on-street parking to calm traffic, and design standards for street-facing facades and yards to ensure a high-quality and safe public realm.
- The greenway trail along Roy Rogers Road and Scholls Ferry Road was eliminated for a number of reasons. The main one being that most stakeholders preferred the location of the River Terrace Trail and felt that the inclusion of both was neither feasible nor necessary given the proximity of both trails to each other.
- Land acquisition for a northern community park east of Roy Rogers Road was prioritized in anticipation of near-term development needs and in response to community feedback. The latter involved locating a community park near existing adjacent neighborhoods to help offset the transportation impacts that they will likely experience when street connections are made.
- The location of the commercial area was stretched towards Roy Rogers Road to address concerns about its visibility and future viability.
- Lower density residential zones were strategically located along the area's eastern and northern edges to provide a buffer between existing lower density neighborhoods in Bull Mountain and future higher density neighborhoods in River Terrace.
- Various implementation strategies were identified to address the challenges associated with regional stormwater facility implementation that provided needed flexibility for developers. All identified strategies maintained the benefits of a regional facility approach to stormwater management.

- The Leeding Lane connection was downgraded from a vehicle connection to a pedestrian/bicycle connection to address concerns about impacts to an existing wetland.

Participation

Advisory Committees

A Stakeholder Working Group (SWG) and Technical Advisory Committee (TAC) were formed to provide advice and guidance during the community planning process.

An eighteen-member SWG, made up of property owners, developers, neighborhood representatives, affected agencies and community organizations, was appointed by Tigard City Council to provide on-going advice and feedback to the project team. This was the primary advisory group to the project team during the development of the Community Plan. The group convened in spring of 2013 and met thirteen times between March 2013 and November 2014. All members on the county's West Bull Mountain Concept Plan SWG were invited to participate on the city's River Terrace Community Plan SWG. In addition to the SWG, an Implementation Subcommittee of the SWG, comprised of developers on the SWG, met on an ad hoc basis for the purpose of discussing specific development plans and implementation issues.

The TAC, made up of technical staff from the City of Tigard, City of Beaverton, Clean Water Services, Washington County, Metro, Department of Land Conservation and Development, Oregon Department of Transportation and other affected agencies and jurisdictions provided subject matter expert advice and review throughout the process. They met a total of nine times between September 2012 and April 2014.

Community Meetings

From October 2012 to April 2014, the River Terrace project team hosted five public meetings that focused on the Community Plan and the five related infrastructure master plans. In total, attendance was over 150 people. Input was sought on issues ranging from land use to the River Terrace Boulevard design concept. Outcomes from each meeting were presented to the SWG in advance of their decision on the matter. In addition, public comment opportunities were provided at each SWG meeting.

In October 2014, the project team hosted a series of three meetings that focused on discussing and refining the River Terrace Funding Strategy.

Consider.It Online Deliberation

The project team piloted a new online engagement tool called Consider.It. This emerging social technology allows hundreds of people to deliberate together online on a single issue. Five questions were posed for deliberation, and 166 different comments were collected. The questions are as follows:

- Should Tigard redirect existing funding instead of raising new taxes/fees to fund River Terrace infrastructure in the short term?
- Should the proposed River Terrace Transportation System be forwarded to City Council for adoption?
- Should Tigard work to provide more pedestrian amenities in River Terrace than normally required by city code?
- The question of whether to install a new traffic signal on Scholls Ferry Road east of Roy Rogers Road has many trade-offs and is not clearly answered with technical analysis. Do you support or oppose a traffic signal in this location?
- Should Council adopt the recommended funding scenarios for infrastructure in River Terrace?

Public Comment Periods

A public comment period was held and results shared with Tigard City Council prior to each River Terrace infrastructure master plan discussion or decision. This included a two-week public comment period for each of the following master plans:

- River Terrace Water System Master Plan Addendum
- River Terrace Sanitary Sewer Master Plan Addendum
- River Terrace Stormwater Master Plan
- River Terrace Park System Master Plan Addendum
- River Terrace Transportation System Plan Addendum

Communication

Community Organizations

The project team presented to a variety of special interest groups as needed for feedback, or as requested by various groups. Project team members met with neighborhood groups, city advisory boards, and Citizen Participation Organizations (CPO).

- Bull Mountain Neighborhood: Transportation Concerns (Oct 2013, Jun 2013, Jul 2013)
- CPO 4B: General Project Update (Oct 2013)
- Tualatin River Watershed Council: Natural Resource & Stormwater Briefing (Jan 2014)
- CPO 4K: General Project Update (Mar 2014)
- Tigard Parks and Recreation Advisory Board: Parks & Trails Briefing (Apr 2014)
- Tigard Transportation Advisory Committee: Transportation Briefing (May 2014, Jun 2014)

www.riverterracetigard.com

A River Terrace website and blog allowed the project team to provide continuous near real-time information about project milestones, upcoming meetings and topics of interest. The blog also provided a venue for public comments and a transparent two-way conversation between the project team and community members. A total of 88 blog posts generated more than 75 website comments as of July 21, 2014.

Information

River Terrace Listserv

Information was created and distributed periodically to interested parties and other subscribers through email. Frequency and content of messages was adapted to project activities. Over 25 messages were sent as of July 21, 2014.

www.riverterracetigard.com

In addition to the blog and public comments, information about the River Terrace project was available online. The SWG and TAC meeting materials and agendas, project schedule, meeting announcements and project maps and documents were posted on a regular basis and in a timely manner.

Informational Material

Project information was made available in multiple formats, e.g. maps, flyers, factsheets, posters, customer counter handouts, project displays and door hangers. The project team received 61 public inquiries as of July 21, 2014.

News Outreach

The project team prepared stories about the River Terrace Community Plan for The Times, Oregonian, Cityscape Newsletter and other local media to announce the project, extend event invitations, provide timely information and highlight project milestones and accomplishments.

City Council/Planning Commission Briefings

Tigard City Council and Planning Commission were briefed on project progress in work sessions at key intervals. Members were also invited to participate in events and received project materials.

KEY FINDINGS

- The River Terrace Community Plan supports the city's adopted goals and policies for citizen involvement. No new goals or policies are needed to implement the citizen involvement recommendations for River Terrace.
- Public involvement led to several key River Terrace Community Plan and infrastructure master plan refinements.

RECOMMENDED ACTION MEASURES

1. Establish a City of Tigard Neighborhood Network Program Area covering River Terrace.
2. Continue to engage with unincorporated Bull Mountain residents, in partnership with Washington County, as the Community Plan is implemented and development occurs.
3. Continue to use the River Terrace website to update project stakeholders and community members as the Community Plan is implemented and development occurs.

Goal 2: Land Use Planning

Land use planning influences the type and character of development in the city and contributes to the community's quality of life, sense of place and economic vitality. Land use planning also enables the city to provide and sustain essential urban services and lays the groundwork for coordinating and partnering with other local governments and agencies that have a stake in the overall well-being of the Portland Metro Region.

The goals and policies contained in the Tigard Comprehensive Plan provide the basis for the city's land use planning program. The River Terrace Community Plan is a product of this program and an ancillary Comprehensive Plan document. It also provides the specific development vision for this area, one that was both prescribed by Metro when River Terrace was added to the Urban Growth Boundary (UGB) and envisioned by the community through the community planning process.

Metro Requirements

Metro set targets for residential development in River Terrace in order to accommodate the long-range growth in population anticipated in the Portland Metro Region.[1] The portion of River Terrace that was added to the UGB in 2002, i.e. Areas 63 and 64, is required to have an average residential density of at least ten units per net residential acre.[2] The portion of River Terrace that was added to the UGB in 2011, i.e. Roy Rogers West (also referred to as Area 4), is required to provide zoned capacity for a minimum of 479 dwelling units.[3] Pursuant to Metro policy, some of the required units in Roy Rogers West can be added to Areas 63 and 64 as long as the average residential density requirement for Areas 63 and 64 is met without these additional units.

River Terrace Vision

A community of great neighborhoods that includes housing, neighborhood-scale businesses, schools, parks and recreational opportunities.

The city initially adopted Comprehensive Plan designations for River Terrace in 2012 based on the land use recommendations contained in the West Bull Mountain Concept Plan (WBMCP). This action signified the city's intent to honor the investment and involvement that occurred during the WBMCP process and to utilize the concept plan's vision as the starting point for land use planning in River Terrace.

During the River Terrace community planning process, refinements were made to the recommended WBMCP land uses in order to support a better range and mix of zoning districts and, by extension, housing types. These refinements were vetted by stakeholders, are consistent with the density assumptions and guidelines in the concept plan, and meet Metro's required residential densities for each area. Comprehensive Plan designations for River Terrace are shown on Map 1 at the end of this document. They include Low-Density Residential, Medium-Density Residential, Medium High-Density Residential, Community Commercial, Public Institution and Open Space. Adoption of the Community Plan does not result in the adoption of these designations. Adoption of Comprehensive Plan designations requires a separate action.

River Terrace zoning districts are consistent with the Comprehensive Plan designations described above and are provided on Map 2 at the end of this document. They include R-4.5, R-7, R-12, R-25 and

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[1] *Pursuant to Metro Functional Plan Title 14, River Terrace was given the 2040 Growth Concept designation of Neighborhood when it was brought into the UGB in 2002 and 2011.*
[2] *Metro Ordinance No. 02-969B.*
[3] *Metro Ordinance No. 11-1264B.*

Community Commercial. The city's Parks and Recreation zoning district will be applied to properties once they have been acquired by the city and/or dedicated to the public for public park purposes. Adoption of the Community Plan does not result in the adoption of these designations. Adoption of zoning district designations requires a separate action.

Other Metro requirements for providing natural resource protection, recreational opportunities, needed housing, urban services, multi-modal transportation facilities, and an infrastructure funding strategy are addressed in subsequent sections of the Community Plan.

The table below demonstrates how the residential zoning districts collectively serve to meet Metro's required residential densities for River Terrace.

Table 3-1: River Terrace Residential Density Calculations

COMPREHENSIVE PLAN DESIGNATIONS AND ZONING DISTRICTS	AREAS 63 & 64		ROY ROGERS WEST	
	TOTAL UNITS[4]	NET ACRES[5]	TOTAL UNITS	NET ACRES
Low Density Residential				
R-4.5	296	51.03		
Medium Density Residential				
R-7	1521	174.74	133	15.28
R-12	648	45.40	266	18.64
Medium-High Density Residential				
R-25	880	29.93		
Total Units w/o Density Transfer[6]	3345		399	
Density Transfer	-80		+80	
Total Units w/ Density Transfer	3265		479	
Total Net Acres		301.10		33.92
Total Units/Net Acre	**10.84**		**11.76**	

[4] *Total units were calculated by dividing the net acres in each zone by the minimum square footage required for each lot in that zone.*

[5] *Net acres were calculated by eliminating constrained lands (i.e. slopes exceeding 25% and Metro Title 3 protected water features and vegetated corridors) and an estimated amount of acreage for rights-of-way (i.e. 20%).*

[6] *The River Terrace infrastructure master plans assume a total of 2,587 dwelling units for infrastructure planning purposes. In addition to eliminating constrained lands and estimated rights-of-way, the dwelling unit calculation utilized by these master plans also eliminates committed lands. Removal of such lands, e.g. future park and school sites, is appropriate for infrastructure planning purposes. It is not, however, consistent with the city or Metro's approach for performing a zoning capacity analysis.*

Community Vision

Much of the land use vision for River Terrace came from the WBMCP, which is incorporated by reference here. Aspects of this vision were more fully developed during the community planning process and can be found in the River Terrace Park System Master Plan Addendum, River Terrace Transportation System Plan Addendum and River Terrace Stormwater Master Plan. In general, the River Terrace Community Plan provides for a variety of land uses and residential densities consistent with the community's desire to create a community of great neighborhoods that includes housing, neighborhood-scale commercial businesses, schools, parks and recreational opportunities. Key elements of this vision are summarized below.

- River Terrace is primarily a residential community that includes a mix of residential densities. This allows for a variety of housing types that meet a wide range of housing needs.
- Higher residential densities are planned near commercial and institutional uses and along major corridors. Lower residential densities are planned in areas with steep slopes and along the area's eastern and northern edges to provide a buffer between existing lower density neighborhoods and future higher density neighborhoods.
- The commercial area is sized and zoned to provide neighborhood-scale commercial goods and services. It is located at the intersection of two Collector Streets, one of which is River Terrace Boulevard,[7] and along Roy Rogers Road to facilitate its success and vitality. The commercial area is envisioned as a vibrant mixed-use center that is pedestrian-oriented and utilizes high-quality design elements and materials.
- The multi-modal transportation system is designed to connect River Terrace to existing and future neighborhoods, services, parks, schools and regional destinations through a hierarchy of streets and trails that provide residents and visitors with convenient, safe and comfortable travel options.
- Parks and trails are distributed throughout the area to provide a variety of convenient recreational opportunities for residents and visitors. In combination with the neighborhood commercial area in the north and the school site in the south, these uses provide important public spaces for residents and visitors to meet, recreate and shop together.
- The co-location of land uses (e.g. parks and trails), public facilities (e.g. stormwater facilities and pump stations), and natural resource areas is strongly encouraged to maximize the efficient use of land and to create opportunities for community amenities.

KEY FINDINGS

- The River Terrace Community Plan supports the city's adopted land use goals and policies. No new goals or policies are needed to implement the land use recommendations for River Terrace.
- The River Terrace Community Plan utilizes the city's existing Comprehensive Plan and zoning district designations.
- Comprehensive Plan and zoning district designations are provided in the Community Plan for informational purposes only. Adoption of the Community Plan does not result in the adoption of these designations. Adoption of these designations requires a separate action.

[7] *River Terrace Boulevard is discussed in more detail in the section on Transportation.*

- The River Terrace Community Plan meets Metro's required residential densities for River Terrace pursuant to Metro Ordinance Nos. 02-969B and 11-1264B.
- The land use vision for River Terrace was developed over many years with assistance and input from many jurisdictions, agencies, subject matter experts, service providers, developers, community members, property owners and stakeholders.
- Comprehensive Plan and zoning district designations determine the type, number and location of residential dwelling units in River Terrace. This information was used to help determine the size and location of needed public facilities and services, which are more fully described in the sections on Parks, Public Facilities and Transportation and in the five infrastructure master plans developed for River Terrace.
- Implementation of the commercial area vision, including the design concept for River Terrace Boulevard, will require amendments to the Community Development Code and the Public Improvement Design Standards.

RECOMMENDED ACTION MEASURES

1. Adopt the Comprehensive Plan and zoning district designations shown on Maps 1 and 2 respectively.
2. Amend the Community Development Code and the Public Improvement Design Standards to implement the commercial area vision and design concept for River Terrace Boulevard.

Goal 5: Natural Resources

The Tigard Comprehensive Plan recognizes that as the city's population continues to grow, so does the potential for conflict between the desire to preserve valuable natural resources and the need to provide adequate land for development. As development patterns in River Terrace change from rural to urban uses to accommodate growth, more pressure will be placed on the area's abundant natural resources. This tension between the built and natural environments underscores the need to effectively balance development in River Terrace with natural resource protections.

Protection of natural resources preserves their aesthetic and environmental benefits. It also contributes to the health, safety and welfare of existing and future residents. The city's natural resource protection goals, policies and regulations must meet Statewide Planning Goal 5 requirements for resource protection and Metro Functional Plan Titles 3 and 13 requirements for water quality and habitat protection. In addition, they must comply with applicable federal, state and regional laws that protect sensitive, threatened and endangered species and their habitats.

Protecting natural resources in River Terrace requires the extension of several existing city resource protection programs out to River Terrace. Implementation of these programs will occur through the adoption of several inventories and maps that provide various levels of natural resource assessment and protection as well as development flexibility. Natural resource protection will also be achieved through the development of effective stormwater management facilities that protect the community's water supply and the health and function of stream corridors for habitat and recreation. The River Terrace Stormwater Master Plan, for example, contains strategies for utilizing existing wetlands and stream corridors that enhances and protects them while also providing a stormwater management function.

There is a strong relationship between natural resource protection and stormwater management. Generally, they share some similar goals, such as preserving existing hydrology and mature native vegetation. Specifically, they both provide for the preservation of large tree groves and riparian corridors to help mitigate the negative impacts of stormwater runoff from development.

Why Protect Natural Resources?

Protection of natural resources preserves their aesthetic and environmental benefits. It also contributes to the health, safety and welfare of existing and future residents.

While River Terrace will be able to utilize the same natural resource protection programs as the rest of the city, the Community Plan recognizes that River Terrace has some unique and challenging existing conditions in and around its natural resource areas, such as steep slopes and erodable stream corridors. The River Terrace Stormwater Master Plan responds to these conditions by recommending specific strategies that are tailored to the needs and characteristics of each drainage basin in the area. Additionally, the city intends to adopt a new continuous simulation hydrologic model in partnership with CWS to provide better stream protection in River Terrace than exists under the current model. More information about the River Terrace Stormwater Master Plan can be found in the section on Public Facilities.

The following natural resources are addressed in this section:

- Fish and Wildlife Habitat
- Wetlands
- Streams
- Tree Groves.

Fish and Wildlife Habitat

A number of agencies are involved in the effort to address the management and protection of fish and wildlife habitat. The City of Tigard partners with other local jurisdictions as part of the Tualatin Basin Partners for Natural Places, an alliance between Washington County and local cities (including Tigard) working with Metro, Tualatin Hills Parks and Recreation District, and Clean Water Services, to meet relevant federal, state, and regional requirements.

As a result of this partnership, the city has an adopted Significant Habitat Areas Map and voluntary habitat friendly development provisions that seek to protect wildlife habitat in the community. The provisions include an opportunity for low impact development practices to reduce impacts to identified resources.

As part of this community planning effort, the city will update its Significant Habitat Areas Map to include River Terrace. The technical work to inventory the habitat areas in River Terrace took place during the Tualatin Basin Partnership process, and will be adopted by the City of Tigard. This will allow development in River Terrace to take advantage of the voluntary habitat friendly development provisions in exchange for protection of significant areas. Map 3 at the end of this document shows the location of significant habitat areas in River Terrace.

Habitat Areas

Regulations: Voluntary

Requirements: None. All habitat areas are eligible for voluntary practices, but no restrictive development regulations are required. Additional flexibility and incentives may be allowed to ensure impacts on habitat areas are minimized. Incentives include adjustment to dimensional standards, reduced minimum density, and low impact development options. For details see the Sensitive Lands Chapter of the Tigard Development Code (18.775.100).

The habitat inventory for River Terrace shows that it has 13.3 acres of habitat designated as "highest" value (i.e. Metro inventoried Class I and II riparian resources within the Clean Water Services Vegetated Corridor). An estimated 40.3 acres of Class I and II riparian habitat situated outside the Clean Water Services' vegetated corridor are designated as "moderate" value. In addition, 132.16 acres of non-Class I and II riparian resources within River Terrace are designated as "lowest" value, including both upland and lower-value riparian habitat areas.

Wetlands

Wetlands are defined by the state as an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions (Oregon Administrative Rule (OAR) 660-023-0100).

The City of Tigard maintains a Local Wetlands Inventory (LWI) consistent with the criteria and procedures for identification of significant wetlands adopted by the state. The city's existing LWI was approved by the Oregon Department of State Lands (DSL), which means that it is a part of the State Wetlands Inventory.

Wetlands

Regulations: Mandatory

Requirements: All wetlands classified as significant are protected. No development is allowed within or partially within a significant wetland. See details in the Sensitive Lands Chapter of the Development Code.

Note: The LWI provides approximate wetland boundaries. A detailed delineation of wetland boundaries is required of applicants during development.

As part of this community planning effort, the city will update its LWI Map to include River Terrace. The technical work to inventory and assess wetlands in River Terrace was completed by Washington

County during the West Bull Mountain Concept Plan process, and approved by the Oregon DSL in October 2013.

Inventoried wetlands are deemed significant if they received the highest rating on at least two of the four primary wetland functions, namely wildlife habitat, fish habitat, water quality and hydrological control. Of the wetlands identified in River Terrace and the adjacent Urban Reserve Area to the south, two of the 14 wetlands were determined to be significant. However, only one is located in River Terrace. Map 4 at the end of this document shows the location of significant wetlands in River Terrace.

Streams

The city collaborates with Clean Water Services (CWS), the surface water management and sanitary sewer system utility for urban Washington County, to protect local water resources. Through CWS Design and Construction Standards, local governments in the Tualatin Basin (including Tigard) developed a unified program to address water quality and flood management requirements.

The city's adopted regulations restrict development within, and adjacent to, sensitive water resource areas through standards in the CWS Design and Construction Standards. Land use applicants proposing development near streams and wetlands are required to prepare a site assessment and obtain approval from CWS prior to submitting a land use application to the city. Additionally, the Tigard Community Development Code (18.775) contains a chapter devoted to the protection of sensitive lands, including natural drainageways, wetlands and the 100-year floodplain. Applicants proposing development within a sensitive area are required to obtain a permit for certain activities depending on their nature and intensity.

Streams

Regulations: Mandatory

Requirements: Development must comply with the Clean Water Services (CWS) "Design and Construction Standards" to prevent or reduce negative impacts to the Tualatin River Basin, in addition to meeting Tigard's regulations.

Note: The Wetlands and Riparian Areas Map provides only approximate vegetated corridor boundaries. Field confirmation is required of applicants during development.

As part of this community planning effort, the city will update its Wetlands and Riparian Areas Map to include River Terrace. The technical work to inventory and asses the stream corridors in River Terrace took place during the West Bull Mountain Concept Plan process, and will be adopted by the City of Tigard. Map 4 at the end of this document shows the location of the sensitive water resource areas in River Terrace. These areas, which are collectively identified as CWS vegetated corridors, include streams, local wetlands (i.e. non-significant wetlands), and their associated riparian areas that serve as buffers. They total approximately 65 acres.

Tree Groves

The City of Tigard protects upland tree groves through a Tree Grove Preservation Program adopted in 2013. The city's Urban Forestry Master Plan

Tree Groves

Regulations: Voluntary

Requirements: None. All tree groves are eligible for voluntary practices, but no restrictive development regulations are required. Property owners with significant tree groves may choose to use incentives and flexible standards to preserve all or a portion of a grove. The flexibility and incentives vary depending on the percentage of the significant tree grove preserved. Incentives include transfer of minimum density from the tree grove to the non-tree grove portion of the site, reduction in minimum residential density, or increased building heights and setback reductions for commercial and industrial development.

brought to light that while residents prioritize tree grove preservation, the city's large groves were disappearing. The Tree Grove Preservation Program provides flexible standards and incentives to facilitate the preservation of the city's remaining groves.

As part of this community planning effort, the city will update its Significant Tree Groves Map to include River Terrace. This technical work was completed in early 2013 by the City of Tigard. This will allow development in River Terrace to take advantage of the Tree Grove Preservation Program incentives. Map 5 at the end of this document shows the location of the significant tree groves in River Terrace.

A tree grove is defined as a stand of trees that are predominantly 25 feet or more in height with contiguous canopy cover of one acre or more in area. Tree groves generally do not include linear plantings that are one or two trees wide (e.g. street trees or rows of trees along a property line) or fragmented (e.g. treed areas with a high proportion of canopy broken by houses, roads or other development). Technical work identified nine significant tree grove sites totaling 61 acres within River Terrace. The sites cover 12% of the planning area and range from two to 18 acres in size.

KEY FINDINGS

- The River Terrace Community Plan supports the city's adopted natural resource goals and policies. No new goals or policies are needed to implement the natural resource recommendations for River Terrace.
- The city's existing natural resource protection programs will be applied in River Terrace.
- River Terrace has 186 acres of identified significant habitat area.
- River Terrace has one significant wetland and several local wetlands.
- River Terrace has several stream corridors with associated wetlands and riparian areas totaling approximately 65 acres.
- River Terrace has nine significant tree grove sites totaling 61 acres.
- The city intends to adopt a new continuous simulation hydrologic model in partnership with CWS to provide better stream protection in River Terrace than exists under the current model.
- River Terrace has some unique and challenging existing conditions in and around its natural resource areas, such as steep slopes and erodable stream corridors. The River Terrace Stormwater Master Plan responds to these conditions by recommending specific strategies that are tailored to the needs and characteristics of each drainage basin in the area.

RECOMMENDED ACTION MEASURES

1. Update the city's natural resource maps to include inventoried resources in the River Terrace area. This includes updating the city's:
    a. Significant Habitat Areas Map
    b. Local Wetlands Inventory and Map
    c. Wetlands and Riparian Areas Map
    d. Significant Tree Groves Map

2. Work with CWS to develop a continuous simulation hydrologic modeling tool for use in River Terrace consistent with advancements in stormwater management practices.

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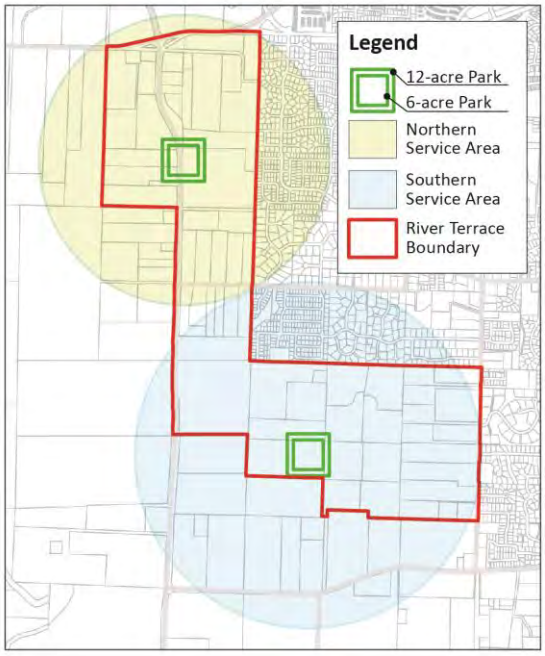
Goal 8: Parks, Recreation, Trails, and Open Space

Parks, trails and open spaces and access to recreational activities serve many different important community purposes as described in the Comprehensive Plan. Planning for the provision of these types of public facilities in River Terrace furthers the city's goal of providing a wide variety of recreational opportunities for new and existing residents through a diverse system of parks, trails and open spaces. It also meets Metro Functional Plan Title 11 and Statewide Planning Goal 8 requirements for ensuring that areas like River Terrace, which have been brought into the Urban Growth Boundary (UGB) for urban development purposes, are efficiently urbanized and developed as complete communities.

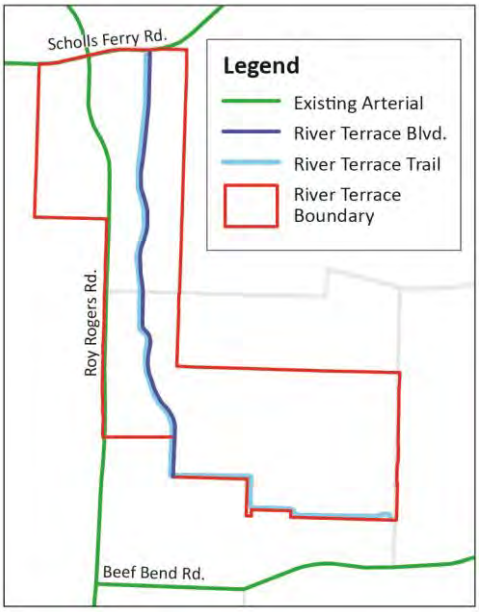
Figure 5-1: River Terrace Community Parks



A Park System Master Plan (PSMP) Addendum was created to address park and trail public facility needs in River Terrace. The River Terrace PSMP Addendum is a required component of the Community Plan under Metro Functional Plan Title 11. It is not, however, a required component of the city's Public Facility Plan (PFP) under Statewide Planning Goal 11. The River Terrace PSMP Addendum appends the existing City of Tigard PSMP, which was updated in 2009 and includes level of service (LOS) standards for each park type, expressed in terms of acres of land per 1,000 residents. With all park types combined, the city's adopted LOS is 10 acres/1,000 residents.

The River Terrace PSMP Addendum utilizes the city's adopted LOS standards. In lieu of identifying specific park locations, parks are conceptually located within service areas to show where community and neighborhood parks are envisioned to meet LOS standards and achieve the goal of having an equitable distribution of parks in the area. See Figure 5-1 for the conceptual location of the two recommended community parks in River Terrace.

Figure 5-2: River Terrace Trail



Trails are more specifically located because trails, unlike parks, need a continuous trail corridor across many properties in order to function as intended. Of note is the River Terrace Trail, whose design has been uniquely integrated with the main north-south Collector Street known as River Terrace Boulevard. See Figure 5-2 for details. Its alignment roughly follows the 300-foot elevation contour in order to provide a relatively flat travel experience for trail users. It also complements Metro's Westside Trail over Bull Mountain to the east, as it gives trail users the option of going around, rather than up and over, the mountain.

Table 5-1 below summarizes the city's park standards and

River Terrace's park needs and recommendations. Maps 6, 7 and 8 at the end of this document show the approximate locations and sizes of community parks, neighborhood parks and trails that are recommended in River Terrace.

Table 5-1: River Terrace Park Standards, Needs, and Recommendations

PARK TYPE	CITY STANDARD	PARK NEED	RECOMMENDATIONS & NOTES
Community	3.0 acres / 1,000 residents	19.25 acres	19.25 acres minimum: Two parks are envisioned, one in the north and one in the south. Locations and exact sizes TBD.
Neighborhood	1.5 acres / 1,000 residents	9.62 acres	9.62 acres minimum: A minimum of six parks are envisioned, distributed evenly throughout River Terrace. Locations and exact sizes TBD.
Pocket	No standard	NA	No specific recommendation: May be provided by development.
Linear	1.25 acres / 1,000 residents	8.02 acres	8.02 acres minimum: Locations and exact sizes TBD. Co-located with trails where practicable.
Trail	0.26 miles / 1,000 residents	1.67 miles	3 miles proposed: The River Terrace Trail is proposed to run from Scholls Ferry Rd to 150th Ave with connections to other regional trails.
Open Space	4.25 acres / 1,000 residents	27.26 acres	65 acres proposed: This acreage is already under natural resource protection, largely along stream corridors and wetlands.
Core Standard[1]	10 acres / 1,000 residents	64.2 acres	101.89 acres proposed: Due to the amount of natural resource area already under protection in River Terrace, the total proposed acreage is approximately 38 acres greater than the standard requires.

[1] *All park types, with the exception of trails, contribute toward meeting the core park standard of 10 acres per 1,000 residents regardless of whether they have their own standard or not.*

The city has a unique opportunity in River Terrace to provide parks, open spaces and trails consistent with its adopted LOS standards due to the fact that, unlike the rest of the city, River Terrace is largely undeveloped.[2] Additionally, it contains many existing natural resources, which provide the area with an abundance of protected open spaces, and it will eventually need several large stormwater facilities, which can be designed to serve recreational purposes as well as manage runoff.

Despite these opportunities, implementing the vision for public parks and trails in River Terrace will not be without its challenges. The city has no existing legal mechanism for exacting park land, with the exception of the Planned Development process in the Community Development Code. However, there are a variety of implementation strategies that could be utilized to meet the city's LOS standards in River Terrace. Examples include:

- prioritizing land acquisition to preserve land for future park and trail use
- leveraging active transportation grants for trails
- utilizing development agreements
- requiring co-location of public facilities wherever practicable
- working with the Tigard-Tualatin School District to allow public use of recreational facilities on school property

The innovative design concept for River Terrace Boulevard is an example of a co-location implementation strategy. The River Terrace Trail is co-located with the boulevard for approximately 1.5 miles of its 2.25-mile length.

As shown on Map 8 at the end of this document, two trails are recommended in River Terrace. The main trail, identified as the River Terrace Trail, traverses the entire planning area from Scholls Ferry Road in the north to 150th Avenue in the southeast and provides many important linkages to a number of internal and external destinations, including but not limited to other planned and proposed regional trails. Due to its length, location and connections, this trail is expected to have a high level of use and should be designed accordingly, such as with a sufficiently wide paved surface. The second and shorter trail in River Terrace, identified as the Southern Access Trail, is less than a mile long and is located in the southern part of River Terrace. It provides local access between existing adjacent neighborhoods to the east and River Terrace neighborhoods to the west. As such, it is expected to have a lower level of use than the River Terrace Trail. Both trails are envisioned as off-street facilities wherever possible and where not immediately adjacent to a Collector Street or Neighborhood Route.

KEY FINDINGS

- The River Terrace PSMP Addendum and, by extension, the River Terrace Community Plan support the city's adopted park goals and policies. No new goals or policies are needed to implement the park and trail recommendations for River Terrace.
- The city needs to develop and implement a multi-pronged approach to acquiring and developing land for public park and trail development in order to adequately provide for the recreational needs of future River Terrace residents, including but not limited to those discussed in the River Terrace PSMP Addendum. This will likely involve developing and/or leveraging a variety of

[2] *Since the adjacent unincorporated Bull Mountain area is deficient in parks and also largely developed like the city, the residents in these neighborhoods will benefit from park and trail development in River Terrace.*

funding sources and entering into site specific negotiations with developers and the school district before and during the land use and development review process.

- The city has no existing legal mechanism for exacting park land, with the exception of the Planned Development process in the Community Development Code. The city's Planned Development (PD) open space requirements are not aligned with the LOS standards contained in the City of Tigard PSMP or the River Terrace PSMP Addendum. The PD process could help implement the community's vision for parks and trails in River Terrace if its open space requirements were better aligned with the River Terrace PSMP Addendum.
- Park and trail development, open space preservation, natural resource protection and regional stormwater facility development are inextricably linked in River Terrace as envisioned by the community and described in the River Terrace PSMP Addendum and River Terrace Stormwater Master Plan. There are many existing natural resource areas and several future regional stormwater facilities that would benefit from co-location with parks, trails and/or open spaces.
- Implementation of the design concept for River Terrace Boulevard, which includes the River Terrace Trail, will require amendments to the Community Development Code and the Public Improvement Design Standards.
- Two distinct trails are proposed in River Terrace. The River Terrace Trail is designed and located to serve River Terrace and the broader region over relatively flat terrain. The Southern Access Trail is envisioned as a local trail that serves the southern part of River Terrace and existing adjacent neighborhoods to the east.
- Existing adjacent Bull Mountain neighborhoods are park deficient and will benefit from park and trail development in River Terrace.

RECOMMENDED ACTION MEASURES

1. Prioritize the acquisition of suitable land for future park and trail development in the River Terrace Funding Strategy. In the near term, actively pursue acquiring land for a northern community park on the east side of Roy Rogers Road while River Terrace is largely undeveloped.
2. Work with the Tigard-Tualatin School District to explore the possibility of allowing public use of recreational facilities on the site of the future school.
3. Amend the Community Development Code to better align the open space requirements for Planned Developments in River Terrace with the River Terrace PSMP Addendum.
4. Look for opportunities to create parks and open spaces within River Terrace alongside and/or within existing natural resource areas and future regional stormwater facilities consistent with the city's park and open space goals, the River Terrace Stormwater Master Plan, and the River Terrace PSMP Addendum.
5. Look for opportunities to create trail connections within River Terrace and between River Terrace and existing adjacent neighborhoods along existing stream corridors and within future regional stormwater facilities consistent with the city's natural resource protection goals, the River Terrace Stormwater Master Plan, and the city's Strategic Plan for walkability.
6. Amend the Community Development Code and the Public Improvement Design Standards to implement the design concept for River Terrace Boulevard, which includes the River Terrace Trail.

Goal 10: Housing

Almost 97% of the buildable land in River Terrace is proposed for new housing.

The city's role in planning for housing includes:

- Housing Capacity: Ensuring an adequate supply of residential land is available;
- Service Delivery: Providing public facilities and services (see Public Facilities section);
- Development Regulations: Regulating design and density;
- Affordable Housing: Supporting low and moderate income housing through funding, incentives and information sharing; and
- For River Terrace: Integrating River Terrace into the city's overall efforts to plan for needed housing.

Housing Capacity

In the Portland metropolitan region, only land included in the Urban Growth Boundary (UGB), an invisible line that separates rural and urban land, can be developed at residential densities requiring urban services. State and Metro requirements focus on increasing a local jurisdiction's housing capacity in order to make efficient use of land and urban services within the UGB.

At the local level, each county and city must inventory its buildable lands, which is defined as vacant and re-developable land suitable for residential use, to determine housing capacity. A citywide analysis of housing needs and capacity conducted in 2012 found that the city has capacity for approximately 7,000 new housing units on buildable lands zoned for residential development within the city's UGB, compared to an estimated need for just over 6,500 new units during the next 20 years.

Figure 6-1: Buildable Land in River Terrace

The table below summarizes the housing capacity planned for River Terrace. Over 50% of the city's overall estimated capacity (3,744 housing units[1]) could be absorbed by River Terrace development.

Table 6-1: Zoning Districts and Housing Capacity Estimates

ZONING DISTRICT	NET ACRES[2]	ESTIMATED HOUSING CAPACITY (UNITS)[3]
R-4.5	51.03	296
R-7	190.02	1654
R-12	64.04	914
R-25	29.93	880

Development Regulations

Initial planning for the River Terrace area envisioned "A Community of Great Neighborhoods," including a range of residential densities to provide diverse housing types, a variety of housing choices, and integration with existing adjacent Bull Mountain neighborhoods.

The Tigard Comprehensive Plan echoes the same sentiment for all neighborhoods in Tigard with policies that call for:

- "…Opportunities for a variety of housing types to meet the diverse housing needs of current and future city residents."
- "…Measures to mitigate the adverse impacts from differing, or more intense, land uses on residential living environments…"

[1] The River Terrace infrastructure master plans assume a total of 2,587 dwelling units for infrastructure planning purposes. In addition to eliminating constrained lands and estimated rights-of-way, the dwelling unit calculation utilized by these master plans also eliminates committed lands. Removal of such lands, e.g. future park and school sites, is appropriate for infrastructure planning purposes. It is not, however, consistent with the city or Metro's approach for performing a housing capacity analysis.

[2] Net acres were calculated by eliminating constrained lands (i.e. slopes exceeding 25% and Metro Title 3 protected water features and vegetated corridors) and an estimated amount of acreage for rights-of-way (i.e. 20%).

[3] Estimated housing capacity was calculated by dividing the net acres in each zone by the minimum square footage required for each lot in that zone.

The table below lists the housing types and supporting uses that are allowed within each of the proposed zoning districts in River Terrace.

Table 6-2: Allowed Uses and Housing Types

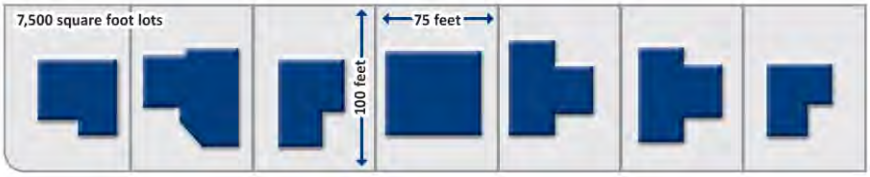
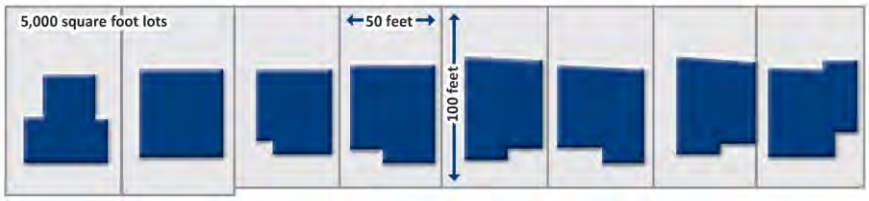
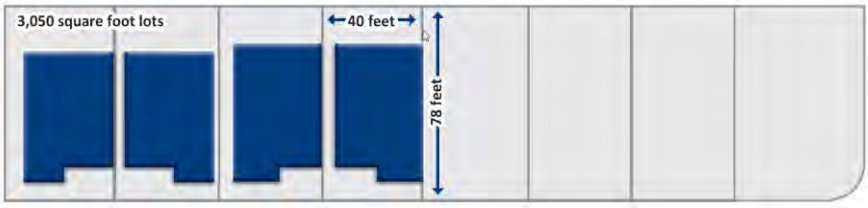
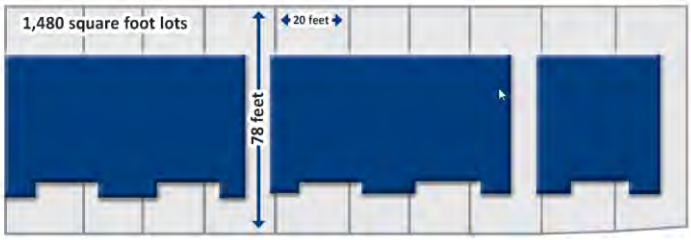
ZONING DISTRICT	USES AND HOUSING TYPES ALLOWED
R-4.5 Setbacks: Front 20 / Side 5 / Rear 15	The R-4.5 zoning district is designed to accommodate detached single-family homes with or without accessory residential units at a minimum lot size of 7,500 square feet. Duplexes and attached single-family units are permitted conditionally. Some civic and institutional uses are also permitted conditionally. 
R-7 Setbacks: Front 15 / Side 5 / Rear 15	The R-7 zoning district is designed to accommodate attached single-family homes, detached single-family homes with or without accessory residential units, at a minimum lot size of 5,000 square feet, and duplexes, at a minimum lot size of 10,000 square feet. Mobile home parks and subdivisions are also permitted outright. Some civic and institutional uses are also permitted conditionally. 
R-12 Setbacks: Front 15 / Side 5 / Rear 15	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. 

Table 6-2 (continued): Allowed Uses and Housing Types

ZONING DISTRICT	USES AND HOUSING TYPES ALLOWED
R-25 Setbacks: Front 15 / Side 5 / Rear 15	The R-25 zoning district is designed to accommodate existing housing of all types and new attached single-family and multifamily housing units at a minimum lot size of 1,480 square feet. A limited amount of neighborhood commercial uses are permitted outright and a wide range of civic and institutional uses are permitted conditionally. 

Affordable Housing

Providing housing options is a priority citywide, including in River Terrace. For this reason, the city will apply its existing affordable housing program to River Terrace, with updates to the citywide program expected in 2015.

In general, there is a need for less expensive ownership and rental units in Tigard, according to the city's 2012 housing study. This is not uncommon, as the lowest income households struggle to find housing of any type that keeps costs at 30% of gross income. This means that low to moderate income families are at risk of needing to spend a large portion of their income on housing, which may not leave enough for other essentials.

According to recent studies, when affordable housing is included in the range of housing choices it is good for everyone. A 2011 study by the Center for Housing Policy links the presence of affordable housing with job creation and local economic development.

Tigard's Affordable Housing Program addresses affordability citywide. In addition, the city has Housing Code Updates planned in the near future to further address the city's need for affordable housing. Both will apply to River Terrace and are described below.

AFFORDABLE HOUSING PROGRAM

Land Use Strategies Adopted

- Reduced parking requirements for affordable housing projects. This reduces the total cost of development.
- Allowance of accessory dwelling units (ADU). An ADU is an additional small housing unit that a single family homeowner may choose to build on their property. This is often used to provide rental income or an affordable option for elderly family members.

Meeting Housing Focus Group Objectives

The West Bull Mountain Community Plan Housing Focus Group developed several strategies to promote the development of affordable housing in River Terrace. These strategies focused on:

1. Locating housing in flatter portions of the planning area
2. Encouraging the inclusion of accessory dwelling units
3. Planning high density residential close to centers, institutional/civic uses, and parks
4. Encouraging partnerships between private and local nonprofit housing developers

Non-Land Use Strategies in Place

- A tax abatement program for owners or leaseholders of property used to provide affordable housing. This may allow reduced rents or reduced monthly homeowner housing costs.
- A budget set-aside to reduce fees and charges imposed on affordable housing development.
- Financial support for the operation of the Tigard-based Good Neighbor Center homeless shelter located on Greenburg Road.
- Identification and pursuit of available grants to fund public improvements serving low income neighborhoods and areas that include affordable housing.
- A Housing Inspection Program to maintain the quality of the city's existing housing stock.
- An Enhanced Safety Program, administered through the Tigard Police Department, to reduce crime and increase the livability of rental properties.
- Membership in the County-wide Housing Advocacy Group, which monitors affordable housing throughout Washington County.

Housing Code Updates

The Tigard Goal 10 Housing Strategies Report made several recommendations the city could undertake to prepare for future housing development in Tigard. A project to implement these code updates is scheduled to begin in 2015. These strategies include:

- Update the City's Development Code to include provisions for "cottage clusters" and "live-work" housing units;
    - Enhance provisions and standards related to accessory dwelling units and single family attached housing;
    - Refine parking requirements for senior and affordable housing developments in existing or future high capacity transit areas; and
    - Provide for density or height bonuses to promote affordable housing in selected areas.
- Implement a variety of zoning and market-based strategies to promote development of a range of housing types in newly developing or future mixed use areas, including River Terrace.
- As part of various planning, development and permitting processes, provide information to housing developers, home builders and landlords regarding fair housing goals and requirements, as well as design practices that help ensure accessibility for people with physical or mobility limitations, including older residents.

Metropolitan Housing Rule Compliance

The Metropolitan Housing Rule (OAR 660-007/Division 7) establishes regional residential density and housing mix standards for communities within the Metro UGB. Tigard must provide the opportunity to build new housing at an overall average density of 10 or more dwelling units per net buildable acre. Tigard must also designate sufficient buildable land that allows for at least 50% of new residential units to be attached housing (either single- or multi-family attached).

An analysis of housing needs and capacity conducted in 2012 found that the city's overall zoning is in compliance with both Metropolitan Housing Rule components. Table 3-1 shows the residential density calculations for River Terrace, where the overall density is 10.84 and 11.76 dwelling units per net buildable acre for Areas 63 & 64 and Roy Rogers West, respectively. Thus, the requirement to average

10 or more dwelling units per net buildable acre is met. Moreover, all of the zoning districts in River Terrace (R-4.5, R-7, R-12 and R-25) permit single-family detached as well as single-family attached and/or multi-family housing. Thus, the opportunity for attached housing exists throughout River Terrace.[4]

KEY FINDINGS

- The River Terrace Community Plan supports the city's adopted housing goals and policies. No new goals or policies are needed to implement the housing recommendations for River Terrace.
- Almost 97% of the buildable land in River Terrace is proposed for new housing.
- Over 50% of the city's overall estimated capacity could be absorbed by River Terrace development.
- River Terrace stakeholders prioritized a range of residential densities to provide diverse housing types, a variety of housing choices, and integration with existing adjacent Bull Mountain neighborhoods when designing the land use framework for River Terrace.
- The city will apply its existing affordable housing program to River Terrace, with updates to the citywide program expected in 2015.
- The River Terrace Community Plan complies with the Metropolitan Housing Rule (OAR 660-007/Division 7).

RECOMMENDED ACTION MEASURES

1. Adopt the Comprehensive Plan and zoning district designations described in the section on Land Use to facilitate a mix of residential densities that allows for a variety of housing types in order to comply with the Metropolitan Housing Rule and to meet a wide range of housing needs.
2. Update the city's affordable housing program.

[4] *Consistent with the city's 2012 Population and Housing Review, duplexes were considered multi-family housing for the purpose of analysis. Duplexes are permitted conditionally in the R-4.5 zone. Because they are a conditional use, the 2012 analysis considered it unreasonable to assume that all of the buildable R-4.5 zoned land would develop as duplexes. Instead, for this zone, it was assumed that half of the land would develop as single-family detached housing and half would develop as duplexes. If this same assumption were made in River Terrace, only 148 units would be assumed to not develop as attached housing.*

Goal 11: Public Facilities and Services

One of the principal goals of the River Terrace Community Plan, in conjunction with the River Terrace Funding Strategy, is to provide a framework for urban development through the timely, orderly and efficient provision of public facilities and services in River Terrace. Planning for the provision of public facilities and services in this manner furthers the city's goal of facilitating development in River Terrace and safeguards the health, safety and welfare of the city's newest residents. It also meets Metro Functional Plan Title 11 and Statewide Planning Goal 11 requirements for ensuring that areas like River Terrace, which have been brought into the Urban Growth Boundary (UGB) for urban development purposes, are efficiently urbanized and developed as complete communities.

For the purposes of this chapter, public facilities and services refers to stormwater management, water supply and distribution, sanitary sewer management, community facilities and solid waste disposal. Public facilities for recreation and transportation are discussed in the sections on Parks and Transportation respectively.

Three distinct infrastructure master plans were created as part of the community planning process to address public facility needs in River Terrace for stormwater management, water supply and distribution, and sanitary sewer management. They are as follows:

- River Terrace Stormwater Master Plan
- River Terrace Water System Master Plan Addendum
- River Terrace Sanitary Sewer Master Plan Addendum

The water and sanitary sewer master plans append existing citywide master plans. The stormwater master plan exists as a standalone document since the city does not have a citywide master plan for stormwater.

The following public facilities and services are addressed in this section.

- Stormwater Management
- Water Supply and Distribution
- Sanitary Sewer Management
- Community Facilities
- Solid Waste Disposal

Stormwater Management

Stormwater management facilities are needed to protect the quality of our community's water supply, the built environment from flood damage during large storm events, and the health and function of stream corridors for habitat and recreation. The following stormwater management goals were utilized in the development of the River Terrace Stormwater Master Plan.

- Restore/enhance vegetated corridors
- Protect water quality
- Preserve existing hydrology
- Promote safe and long-lasting stormwater facilities

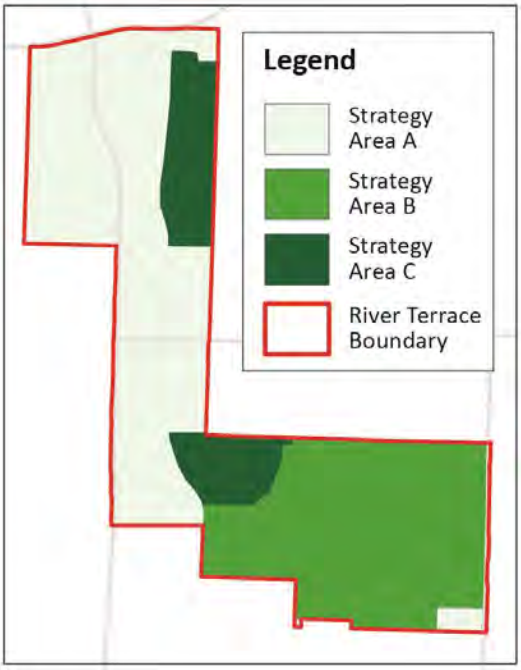
- Balance the use of regional and on-site stormwater facilities
- Preserve existing mature vegetation
- Maximize use of multi-functional facilities to create community amenities
- Promote partnerships with other public service providers and agencies

The recommended stormwater management strategies for River Terrace support these goals and have been incorporated into the master plan based upon the needs and characteristics of each drainage basin in the area. These strategies make use of existing topography, natural systems and facility design to effectively and efficiently ensure that: (1) all stormwater runoff from development is treated before it enters a stream, river or wetland, and (2) the amount of stormwater runoff anticipated from development is appropriately managed through either detention and/or conveyance to prevent stream erosion and property damage. The former objective is about protecting water quality, while the latter objective is about managing water quantity.

The strategies recommended in the River Terrace Stormwater Master Plan are based upon Clean Water Services (CWS) Design and Construction Standards and the CWS Low Impact Development Approaches (LIDA) Handbook. In addition, it reflects the city's intention to adopt new design standards for the River Terrace area in collaboration with CWS on or before the adoption of the Community Plan. The need for these new standards is based upon the following:

- The city's recent experiences dealing with channel stability problems elsewhere on Bull Mountain, and the presence of similar drainage channel conditions in River Terrace.
- The city's decision to develop a new continuous simulation model for this area.
- Anticipated changes to CWS's Design and Construction Standards to address pending requirements under their National Pollutant Discharge Elimination System (NPDES) permit.
- The community's desire to preserve and protect existing natural resources in the River Terrace and Bull Mountain area.

Figure 7-1: Stormwater Strategy Areas



The River Terrace Stormwater Master Plan divides River Terrace into three strategy areas based on existing conditions and anticipated development in each area. Within each strategy area a specific approach to water quality and quantity management is recommended.

There are two water quality strategies recommended in River Terrace: (1) Low Impact Development Approaches (LIDA) at a variety of scales, and (2) regional water quality facilities that offer community benefits in addition to stormwater management. LIDA facilities can be applied at the scale of an individual lot, street or subdivision. Examples of these types of facilities include infiltration planters, vegetated swales and eco-roofs. Unlike LIDA facilities, the recommended regional facilities sometimes include a water quantity function as well, as recommended in Strategy Area A below.

A stormwater water quantity management strategy is required everywhere in River Terrace to mitigate for

potential flooding and erosion impacts that would otherwise result from increases in stormwater runoff volume, rate and duration due to development in River Terrace. There are two water quantity strategies recommended in River Terrace: (1) regional detention facilities, and (2) high-flow conveyance improvements extending downstream to the Tualatin River.

Recommended strategies by area are provided below and shown in the figure on the previous page. More detailed information about the types and locations of the different recommended facilities by strategy area can be found on Maps 9, 10 and 11 at the end of this document.

Strategy Area A

- Regional Water Quality/Quantity Facilities

Strategy Area B

- Water Quality: LIDA
- Water Quantity: Regional Water Quantity Detention Facilities

Strategy Area C

- Water Quality: LIDA
- Water Quantity: Regional Downstream Conveyance Improvements

KEY FINDINGS

- The River Terrace Stormwater Master Plan and, by extension, the River Terrace Community Plan support the city's adopted stormwater management goals and policies. No new goals or policies are needed to implement the stormwater management recommendations for River Terrace.
- The River Terrace Stormwater Master Plan and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11. Collectively, these documents contain all required PFP elements, namely:
  - An inventory of existing infrastructure
  - A list of needed public facility projects
  - A list of planning level cost estimates for each project
  - Maps and/or written descriptions of each project
  - Public facility service provider information
  - An estimate of when each project will be needed
  - A funding strategy for each project
- Regional stormwater facilities have several benefits. Key benefits include lower operational costs and the ability to develop multi-functional facilities that restore and enhance natural resource areas and/or provide recreational and educational opportunities for the community.
- Regional stormwater facilities can be challenging to implement. Implementation challenges, and corresponding strategies to overcome these challenges, are described in detail in the River Terrace Stormwater Master Plan.

- Additional studies, tools and arrangements are needed to implement the River Terrace Stormwater Master Plan. Key action measures related to implementation are listed below. More detail is included in the River Terrace Stormwater Master Plan.
- Stormwater facilities are recommended outside River Terrace and the UGB due to soil, bedrock and slope conditions. Stormwater facilities located outside the UGB must address land use regulations from the Washington County Community Development Code Sections 340-4.1 and 430-105.3 through 430-105.7; Oregon Revised Statute 215.275; and Oregon Administrative Rule 660-33.
- Expansion of the UGB to include the Urban Reserve Area south of River Terrace and north of Beef Bend Road would provide more opportunities for stormwater management in River Terrace than currently exist.

RECOMMENDED ACTION MEASURES

1. Adopt the necessary elements of the River Terrace Stormwater Master Plan and the River Terrace Funding Strategy into the Comprehensive Plan to meet the city's PFP requirement under Statewide Planning Goal 11 when all elements of the citywide PFP have been developed.
2. Work with the development community to fund the regional stormwater facilities in an equitable, efficient and effective manner per the recommendations in the River Terrace Funding Strategy.
3. Work with CWS to develop a continuous simulation hydrologic modeling tool for use in River Terrace consistent with advancements in stormwater management practices.
4. Develop stormwater design standards and guidelines for regional stormwater facilities in River Terrace that minimize their operational costs, guide their development as community amenities and multi-functional facilities, and allow for needed flexibility in implementation.
5. Work with Metro to bring the Urban Reserve Area south of River Terrace and north of Beef Bend Road into the UGB and/or work with DLCD, Washington County and other affected agencies to obtain the necessary approvals to construct a high-flow conveyance system outside the UGB.
6. Conduct a conceptual design and alternatives analysis for the recommended high-flow conveyance system that evaluates the advantages, disadvantages and permitting challenges of restoring and enhancing the T8 drainage versus installing a bypass pipe.

Water Supply and Distribution

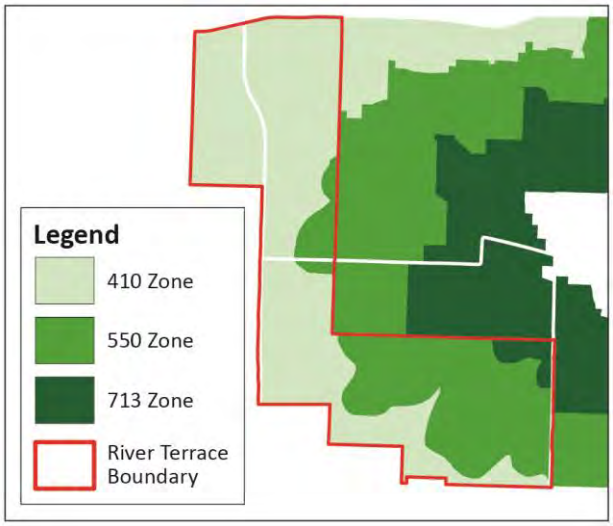
In 2010, the City of Tigard updated its Water System Master Plan (WSMP), which addresses water supply capacity needs and guides water system infrastructure improvements in the Tigard Water Service Area. Since the adoption of the WSMP and its update in 2010, the city undertook the community planning process for River Terrace and developed the River Terrace Water System Master Plan Addendum to address the supply and distribution of water to this area.

There are three water pressure zones in River Terrace: 410, 550, and 713. A water pressure zone is a geographic area that is determined by elevation. Pressure is maintained by gravity pulling water from storage facilities which are located at high elevations in each zone.

Two of the three pressure zones in the River Terrace area can be easily and effectively served by the extension of existing distribution and transmission lines. In order to serve the remaining pressure zone (River Terrace 550 Zone), the city will need to provide more water storage in addition to new transmission lines. The recommendation is to construct a three million gallon storage reservoir on the city-owned Cach property, which was purchased for this purpose to meet existing storage deficiencies in the area.

More detailed information about the types and locations of the different recommended water facilities can be found on Map 12 at the end of this document.

Figure 7-2: Water Pressure Zones



KEY FINDINGS

- The River Terrace Water System Master Plan Addendum and, by extension, the River Terrace Community Plan support the city's adopted water supply and distribution goals and policies. No new goals or policies are needed to implement the water supply and distribution recommendations for River Terrace.
- The River Terrace Water System Master Plan Addendum and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11. Collectively, these documents contain all required PFP elements, namely:
  - An inventory of existing infrastructure
  - A list of needed public facility projects
  - A list of planning level cost estimates for each project
  - Maps and/or written descriptions of each project
  - Public facility service provider information
  - An estimate of when each project will be needed
  - A funding strategy for each project
- Development in the River Terrace 550 Zone is constrained until the new water reservoir is online or existing 550 Zone development is re-routed to a higher water pressure zone service area.

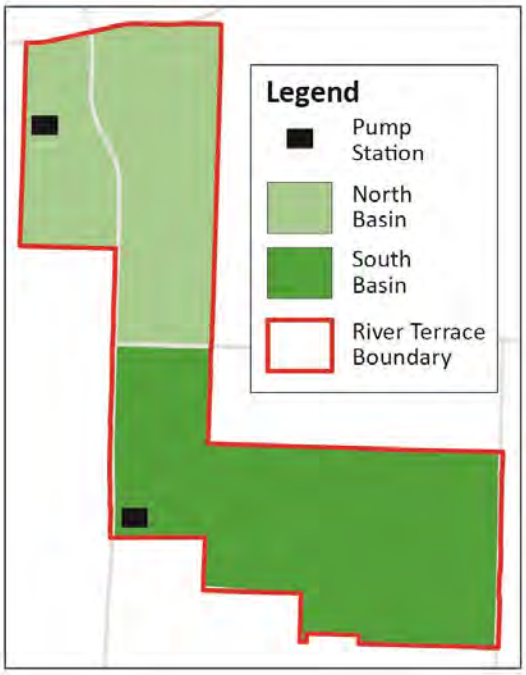
RECOMMENDED ACTION MEASURES

1. Adopt the necessary elements of the River Terrace Water System Master Plan Addendum and the River Terrace Funding Strategy into the Comprehensive Plan to meet the city's PFP requirement under Statewide Planning Goal 11 when all elements of the citywide PFP have been developed.
2. Explore options for providing water service to the River Terrace 550 Zone pending the completion of the new water reservoir.

Sanitary Sewer Management

In 2010, the City of Tigard updated its Sanitary Sewer Master Plan (SSMP), which evaluates wastewater flows based on land uses, establishes gravity sewer pipe sizes, and serves as a guide for all capital sewer projects within the city. Since the adoption of the SSMP and its update in 2010, the city undertook the community planning process for River Terrace and developed the River Terrace Sanitary Sewer Master Plan Addendum to address sanitary sewer management in this area.

Figure 7-3: Sewer Basins



There are two sewer service basins in River Terrace. These basins, which are based on topography, are identified as River Terrace North and River Terrace South. An area within each basin will be able to gravity flow to existing trunk lines. However, the majority of the area will need to utilize pump stations and force mains to gain access to existing trunk lines.

Recommendations for the River Terrace North basin include an 8.6 mgd (million gallons per day) pump station in the northwest corner, 7 mgd of which will serve South Cooper Mountain. Recommendations for the River Terrace South basin include revising the service area for the existing South Bull Mountain Pump Station to serve the southeastern portion of River Terrace as well as the construction of a 2.5 mgd pump station in the southwest corner.

More detailed information about the types and locations of the different recommended sewer facilities can be found on Map 13 at the end of this document.

KEY FINDINGS

- The River Terrace Sanitary Sewer Master Plan Addendum and, by extension, the River Terrace Community Plan support the city's adopted sanitary sewer management goals and policies. No new goals or policies are needed to implement the sanitary sewer management recommendations for River Terrace.
- The River Terrace Water System Master Plan Addendum and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11. Collectively, these documents contain all required PFP elements, namely:

- An inventory of existing infrastructure
- A list of needed public facility projects
- A list of planning level cost estimates for each project
- Maps and/or written descriptions of each project
- Public facility service provider information
- An estimate of when each project will be needed
- A funding strategy for each project

- Two sanitary sewer pump stations are needed in River Terrace before the majority of the area can develop.
- Coordination with CWS is necessary for the provision of sanitary sewer service in this area.

RECOMMENDED ACTION MEASURES

1. Adopt the necessary elements of the River Terrace Sanitary Sewer Master Plan Addendum and the River Terrace Funding Strategy into the Comprehensive Plan to meet the city's PFP requirement under Statewide Planning Goal 11 when all elements of the citywide PFP have been developed.
2. Continue to coordinate with CWS and the City of Beaverton on sanitary sewer projects that serve River Terrace.

Community Facilities

River Terrace, once fully developed, will result in the addition of approximately 6,400 new residents to the City of Tigard. These new residents will not arrive all at once. However, it is important for the city, and the various service providers in the area that serve city residents, to anticipate and plan for the social, educational and safety needs of these new residents in the same way that it does for existing residents.

To that end, various service providers were engaged during the River Terrace community planning process in order that they might help identify any community service provision issues, contribute to the overall vision for River Terrace as a community of great neighborhoods, and understand how and when development is likely to occur in River Terrace so that their agencies could plan accordingly. The following service providers participated in the River Terrace Community planning process:

- Tigard-Tualatin School District
- Beaverton School District
- Tualatin Valley Fire and Rescue (TVFR)
- Tigard Police Department

KEY FINDINGS

- In anticipation of River Terrace development, the Tigard-Tualatin School District acquired property in River Terrace to serve future River Terrace elementary and/or middle school students.

- In anticipation of River Terrace and South Cooper Mountain development, the Beaverton School District acquired property just north of River Terrace, in Beaverton's South Cooper Mountain area, to serve future River Terrace high school students.
- The design and construction of key elements of the River Terrace transportation system will require coordination with TVFR to ensure that fire access standards are met.

RECOMMENDED ACTION MEASURES

1. Continue to coordinate with both school districts to facilitate the development of safe routes to future school sites in the area consistent with the city's Strategic Plan for walkability.
2. Continue to coordinate with TVFR to ensure that fire access standards are met during the design and construction of key elements of the River Terrace transportation system, such as the River Terrace Boulevard and any roundabouts.

Solid Waste Disposal

River Terrace will be served by one of two solid waste haulers, namely Pride Disposal Company or Waste Management Incorporated. These two haulers serve the entire city, and the addition of River Terrace will not require a revision to the city's existing franchise agreement.

Additionally, River Terrace is within Metro's Regional Solid Waste Management Plan area, a 10-year framework plan that coordinates solid waste and recycling in the Portland metropolitan area. Metro's solid waste system is an organized network that includes solid waste collection, transportation, recycling and processing. The nearest solid waste disposal facility to River Terrace is the Hillsboro Landfill, located at 3205 SE Minter Bridge Road in Hillsboro. This solid waste disposal site serves the communities of Aloha, Beaverton, Cornelius, Forest Grove, Gaston, Hillsboro, North Plains, Portland, Sherwood, Tigard and unincorporated Washington County.

KEY FINDINGS

- River Terrace will be served by one of the city's existing solid waste haulers through an existing franchise agreement.
- River Terrace will be able to utilize the existing solid waste disposal site in Hillsboro due to its location within Metro's Regional Solid Waste Management Plan area.

Goal 12: Transportation

As discussed in the previous section on Public Facilities, one of the principal goals of the River Terrace Community Plan and the River Terrace Funding Strategy is to provide a framework for urban development through the timely, orderly and efficient provision of public facilities in River Terrace. Planning for the provision of transportation-related public facilities in this manner furthers the city's goal of facilitating development in River Terrace and developing an efficient and balanced multi-modal transportation system. It also meets Metro Functional Plan Title 11 and Statewide Planning Goal 12 requirements for ensuring that areas like River Terrace, which have been brought into the Urban Growth Boundary (UGB) for urban development purposes, are efficiently urbanized and developed as complete communities.

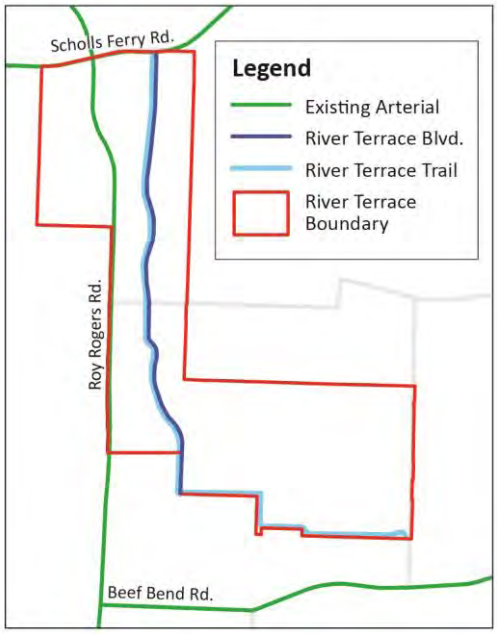
A Transportation System Plan (TSP) Addendum was created to address transportation-related public facility needs in River Terrace. The River Terrace TSP Addendum appends the existing City of Tigard TSP, which was updated in 2010. Since the city's adopted TSP already included household and vehicle trip projections for River Terrace, the River Terrace TSP Addendum is assumed to comply with the state's Transportation Planning Rule. Additionally, it was prepared to be consistent with the Portland Metro Regional Transportation Plan.

The city's adopted TSP links expected growth with transportation needs and sets the policy framework for the city's transportation system. It serves as a long-range guide for transportation investments by incorporating the vision of the community into an equitable and efficient transportation system that balances the needs of pedestrians, cyclists, drivers, transit users and freight carriers.

To that end, the River Terrace TSP Addendum envisions a network of multi-modal streets that connects residents to trails, schools, parks and services. One that conforms to the rolling topography, builds upon and connects to existing streets in the area, and effectively balances safety, comfort and mobility. More detailed information can be found on Map 14 at the end of this document. Key elements[1] of the addendum include:

- signalized intersections where new or existing Collector streets connect to Roy Rogers Road and Scholls Ferry Road to safely accommodate drivers, cyclists and pedestrians;
- connections to existing streets in adjacent Bull Mountain neighborhoods to the east to improve street connectivity in the area;
- street and intersection design guidance for key streets to control speeds, discourage cut-through traffic,

Figure 8-1: River Terrace Boulevard



[1] *Not all roads or intersections in the planning area are under the jurisdiction of the city. Any recommended improvement to a road or intersection not under the jurisdiction of the city must be coordinated with and approved by the applicable road authority. Specific recommendations are included here and in the River Terrace TSP Addendum to establish the community's vision and the city's intentions to work toward implementing that vision. Future and more detailed analysis will determine whether specific signal or intersection improvements will be warranted or technically feasible.*

increase travel options, enhance neighborhood livability and define and unify the area; and,

- an innovative design concept for a signature street dubbed the "River Terrace Boulevard" that incorporates the River Terrace Trail. See Figure 8-1 above for its location relative to other streets in the area.

Existing major streets in and around River Terrace include Scholls Ferry Road to the north, Roy Rogers Road to the west and Beef Bend Road to the south.[2] These streets serve an important regional through-travel function and will benefit new residents by connecting them to regional destinations. Since pedestrians and cyclists are often discouraged from using or crossing such streets due to high vehicle speeds, high vehicle volumes and wide and/or infrequent road crossings, the River Terrace TSP Addendum makes a number of recommendations that strive to balance the different and sometimes competing needs of drivers, pedestrians and cyclists.

The River Terrace TSP Addendum recommends safe and appropriate bicycle and pedestrian facilities along the whole length of Roy Rogers Road when it is widened to its full planned width, including a buffered bike lane or cycle track to ensure the highest level of protection for cyclists. It also recommends three traffic signals along Roy Rogers Road, equally spaced between Scholls Ferry Road and Beef Bend Road, and a single traffic signal on Scholls Ferry Road, between Roy Rogers Road and Barrows Road.[3] Traffic signals at intersections facilitate safe and comfortable pedestrian and bicycle crossings. They also raise concerns about impacts to peak hour traffic flow and driver safety. These concerns can be mitigated in a number of ways, such as with signal timing or through intersection design.

The recommended signals will help vehicles cross and turn safely onto Roy Rogers Road and Scholls Ferry Road. They will also provide pedestrians and cyclists with safe and convenient street crossings to access:

- the future River Terrace grade school to the south;
- the future South Cooper Mountain high school at the northwest corner of Scholls Ferry Road and Roy Rogers Road;
- several future trails to the north and south;
- future neighborhoods on both sides of Roy Rogers Road; and,
- the future neighborhood commercial center east of Roy Rogers Road.

In addition to connecting to existing major streets, the River Terrace TSP Addendum proposes connections to existing local streets located to the east of River Terrace in existing Bull Mountain neighborhoods. These connections are consistent with the city's existing transportation findings and policies on connectivity for reducing trip length,[4] providing an efficient transportation network,[5] and maximizing the investment in the existing transportation system.[6] In the context of River Terrace, these street connections are specifically meant to provide:

- local and emergency vehicle access within and between new and existing neighborhoods;

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[2] *All of these streets are under Washington County's jurisdiction. Any recommended improvements must be coordinated with and approved by Washington County.*
[3] *All traffic signals and intersection improvements must meet signal warrants and operational standards.*
[4] *Tigard Comprehensive Plan Policy 12.2.3*
[5] *Tigard Comprehensive Plan Policy 12.3.5*
[6] *Tigard Comprehensive Plan Goal 12 Key Finding*

- vehicle travel options that appropriately disperse traffic and preserve capacity on regional routes; and,
- safe, comfortable and convenient travel options for pedestrians and cyclists.

Local street connections will benefit both new and existing residents. They will also impact existing neighborhoods by introducing additional traffic onto existing streets. Existing Bull Mountain residents are particularly concerned that some street connections may also encourage cut-through traffic and/or speeding.

The River Terrace TSP Addendum addresses these concerns and mitigates for these traffic impacts in a variety of ways. Examples include recommendations to install a signal on Scholls Ferry Road and connect Luke Lane via a circuitous route. A signal would provide drivers with a direct and efficient route out of River Terrace, thereby reducing the need for out-of-direction travel through existing Bull Mountain neighborhoods. A circuitous connection to Luke Lane would preserve its function as a local street and minimize its attraction as a cut-through route. Traffic calming design treatments are also recommended for the 161st Avenue and Lorenzo Lane extensions. Additionally, the city is committed to working with existing Bull Mountain residents and Washington County staff to implement traffic calming measures along Roshak Road to mitigate the impacts of existing traffic and the addition of new traffic from River Terrace.

The River Terrace TSP Addendum also envisions a comprehensive trail system for pedestrians and cyclists that links the many existing natural resource areas, proposed parks, future schools and services, and other planned and proposed regional trails in the area. This trail system is consistent with the River Terrace Park System Master Plan Addendum, the city's Strategic Plan for walkability, and the Metro Regional Trail and Greenways Plan. The city has a unique opportunity in River Terrace to provide trails consistent with its adopted level of service standard due to the fact that, unlike the majority of the city, River Terrace is largely undeveloped. However, implementing the vision for trails in River Terrace will not be without its challenges, the main one being the preservation and acquisition of contiguous land for future trail development along the recommended trail alignments. A more detailed discussion of the ways in which the city could overcome these challenges is included in the section on Parks.

The innovative design concept for the River Terrace Boulevard, which is the main north-south Collector Street in River Terrace, utilizes trail co-location as a street design element and a trail implementation strategy. The River Terrace Trail travels from Scholls Ferry Road in the north to 150th Avenue in the southeast and is co-located with the boulevard for approximately 1.5 miles of its 2.25-mile length. This trail was planned, in part, to complement Metro's Westside Trail, as it provides a less steep travel option around Bull Mountain. The River Terrace Trail is a designated regional trail in the 2014 Metro Regional Transportation Plan and so is included in the River Terrace TSP Addendum as a transportation facility for funding purposes.

In addition to its seamless incorporation of the trail, River Terrace Boulevard is unique in other ways. Key design elements include a wide landscaped median and sidewalk bulbouts that are sizeable enough to support large trees, on-street parking to calm traffic, and design standards for street-facing facades and yards to ensure a high-quality and safe public realm. In combination, these elements are meant to define the boulevard as the area's signature street and to effectively balance mobility with safety and comfort for all modes of travel. See Figure 8-2 below for more detail.

In general, it is expected that both zoning and design flexibility will be needed to implement the River Terrace Boulevard design concept. Zoning flexibility, with respect to housing types, will be needed to support the vision of having homes front the street, and design flexibility will be needed along the boulevard's entire length to accommodate topography, stream crossings, intersection treatments and a wide range of land uses. On-street parking and the westernmost sidewalk, for example, may not always

be feasible or necessary in all locations. It may even be desirable to allow exceptions to the city's block length standards in order to reduce the number of trail-side street crossings, thereby creating a more continuous trail experience.

Figure 8-2: River Terrace Boulevard Design Concept

KEY FINDINGS

- The River Terrace TSP Addendum and, by extension, the River Terrace Community Plan support the city's adopted transportation goals and policies. No new goals or policies are needed to implement the transportation recommendations for River Terrace.
- The River Terrace TSP Addendum and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11. Collectively, these documents contain all required PFP elements, namely:
    - An inventory of existing infrastructure
    - A list of needed public facility projects
    - A list of planning level cost estimates for each project
    - Maps and/or written descriptions of each project
    - Public facility service provider information
    - An estimate of when each project will be needed
    - A funding strategy for each project

- The River Terrace TSP Addendum recommends several multi-modal street and intersection improvements in and around the River Terrace area. Key elements of the addendum include: signalized intersections where new or existing Collector streets connect to Roy Rogers Road and Scholls Ferry Road to accommodate drivers, cyclists and pedestrians; connections to existing streets in adjacent Bull Mountain neighborhoods to the east to improve street connectivity in the area; street and intersection design guidance for key streets to control speeds, discourage cut-through traffic, increase travel options, enhance neighborhood livability and define and unify the area; and, an innovative design concept for a signature street dubbed the "River Terrace Boulevard" that incorporates the River Terrace Trail.
- The River Terrace TSP Addendum envisions a street extension outside River Terrace and the UGB for street connectivity and stormwater conveyance purposes. Transportation facilities located outside the UGB must address land use regulations from the Washington County Community Development Code Sections 340-4.1 and 430-105.3 through 430-105.7; Oregon Revised Statute 215.275; and Oregon Administrative Rule 660-012-0070.
- Expansion of the UGB to include the Urban Reserve Area south of River Terrace and north of Beef Bend Road would provide more opportunities for connectivity and stormwater management in River Terrace than currently exist.
- Implementation of the design concept for River Terrace Boulevard will require zoning and design flexibility and corresponding amendments to the Community Development Code and the Public Improvement Design Standards.
- Funding and construction of River Terrace Boulevard will require a concerted and coordinated effort between the city, the development community, and other partner agencies.
- River Terrace will connect to and utilize existing Washington County and Oregon Department of Transportation (ODOT) facilities. The River Terrace TSP Addendum recommends improvements to these facilities to serve River Terrace and the region.
- River Terrace will impact existing Bull Mountain neighborhoods by connecting to and utilizing existing streets. The River Terrace TSP Addendum mitigates these impacts in several ways.

RECOMMENDED ACTION MEASURES

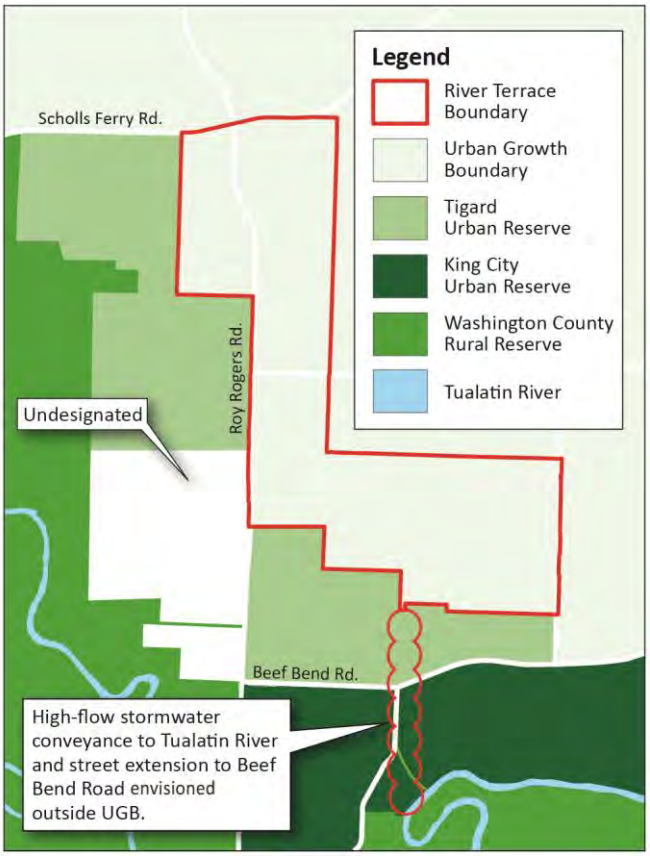
1. Adopt the necessary elements of the River Terrace TSP Addendum and the River Terrace Funding Strategy into the Comprehensive Plan to meet the city's PFP requirement under Statewide Planning Goal 11 when all elements of the citywide PFP have been developed.
2. Work with Metro to add the recommended system improvements in the River Terrace TSP Addendum that are on the regional network to the list of Financially Constrained Regional Transportation Plan projects.
3. Work with Metro to bring the Urban Reserve Area south of River Terrace and north of Beef Bend Road into the UGB and/or work with DLCD, Washington County, and other affected agencies to discuss the possibility of obtaining the necessary approvals to extend 161st Ave outside the UGB to facilitate street connectivity and stormwater conveyance.
4. Amend the Community Development Code and the Public Improvement Design Standards to allow for needed zoning and design flexibility along the entire length of River Terrace Boulevard while staying true to the design concept.

5. Work with the development community and other potential partners to fund River Terrace Boulevard per the recommendations in the River Terrace Funding Strategy.
6. Continue to work with Washington County and ODOT on a cost sharing and implementation strategy for the recommended county and state highway facility improvements identified in the River Terrace TSP Addendum, particularly with regard to the widening of Roy Rogers Road, the installation of signals on Roy Rogers Road and Scholls Ferry Road, and intersection improvements along Highway 99W.
7. Continue to work with Bull Mountain residents and Washington County staff to implement traffic calming measures along Roshak Road to mitigate the impacts of existing traffic and the addition of new traffic from River Terrace.
8. Look for opportunities to create pedestrian and bicycle connections within River Terrace and between River Terrace and existing adjacent neighborhoods along existing stream corridors and within future regional stormwater facilities consistent with the city's natural resource protection goals, the River Terrace Stormwater Master Plan, and the city's Strategic Plan for walkability.

Goal 14: Urbanization

The River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively provide for the orderly and efficient transition of River Terrace from rural to urban land use. These plans are consistent with Metro Functional Plan Titles 11 and 14 and Statewide Planning Goal 14 for accommodating future population growth, ensuring the efficient use of land and creating livable communities. They also further the city's goal of facilitating development in River Terrace in a way that results in high-quality development, natural resource protection and the provision of essential public facilities and services in a coordinated, logical and fiscally sound manner.

Figure 9-1: Urban Growth Boundary



One of the primary tools used in Oregon to control sprawl, preserve valuable resource lands, and promote the coordinated and logical provision of public facilities and services is the urban growth boundary. Tigard is located within the Portland Metropolitan Urban Growth Boundary (UGB), where Metro has the responsibility for establishing and managing the UGB in order to accommodate urban growth in the region for the next 20 years. Metro expanded the UGB in 2002 and 2011 to include River Terrace in anticipation of the region's future population growth. Land to the west and south of the UGB directly adjacent to River Terrace is primarily designated as an Urban Reserve Area, but includes some undesignated areas. Figure 9-1 shows River Terrace in relation to the UGB and the surrounding area.

When the city initially adopted land use designations for River Terrace in 2012 based on the land use recommendations contained in the West Bull Mountain Concept Plan (WBMCP), the city also amended the policies in the Tigard Comprehensive Plan under Goal 14.3. These amendments describe the UGB expansion related to River Terrace; designate the city as the urban service provider for River Terrace; and, state the city's responsibility to prepare and adopt a River Terrace Community Plan and associated urban zoning designations, five infrastructure master plans and an infrastructure funding strategy to facilitate urban development.

The urban zoning district designations that will apply in River Terrace are described in the section on Land Use. The five infrastructure master plans are described more fully in the Parks, Public Facilities and Transportation sections and are listed below for reference:

- River Terrace Water System Master Plan Addendum
- River Terrace Sanitary Sewer Master Plan Addendum

- River Terrace Stormwater Master Plan
- River Terrace Park System Master Plan Addendum
- River Terrace Transportation System Plan Addendum

Pursuant to Metro Functional Plan Title 11 for Urban Reserve Areas, the River Terrace master plans for water and sewer take the future public facility needs in the Urban Reserve Areas adjacent to River Terrace into consideration. This level of planning and coordination is intended to prevent costly and disruptive upsizing and/or relocation of public facilities in the future.

Consistent with the intent and purpose of the UGB, the River Terrace master plans recommend urban-level public facility improvements within the UGB wherever possible. However, there are two instances where public facilities are envisioned outside the UGB. The River Terrace Stormwater Master Plan recommends stormwater conveyance facilities outside the UGB due to soil, bedrock and slope conditions, and the River Terrace Transportation System Plan Addendum envisions a street extension outside the UGB for connectivity purposes. Expansion of the UGB to include the Urban Reserve Area south of River Terrace and north of Beef Bend Road would provide more opportunities for connectivity and stormwater management in River Terrace than currently exist. Figure 9-1 on the previous page shows the location of these facilities in relation to River Terrace and the UGB.

Consistent with city policies regarding annexation and the provision of urban level services to properties within the Tigard city limits, properties in River Terrace must annex to the city in order to receive the urban zoning district designations described in the Land Use section of the Community Plan. All properties in River Terrace voluntarily annexed to the city in 2011 and 2013. Consequently, all properties in River Terrace will receive the zoning district designations described herein upon adoption of the River Terrace Zoning Districts Map.

KEY FINDINGS

- The River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively implement the goals and policies of the Tigard Comprehensive Plan and the requirements of Metro Functional Plan Titles 11 and 14 regarding urbanization.
- The Introduction and Key Findings of Chapter 14 of the Tigard Comprehensive Plan do not reflect the River Terrace policy amendments that were adopted in 2012 under Goal 14.3.
- Urban development in River Terrace cannot occur until the Comprehensive Plan and urban zoning district designations described in the Land Use section of the Community Plan are adopted.
- Urban development in River Terrace cannot occur until adequate public facilities and services are in place. These facilities and services are more fully described in the Parks, Public Facilities and Transportation sections of the Community Plan and in the five infrastructure master plans developed for River Terrace.
- Public facilities are envisioned outside the UGB for street connectivity and stormwater conveyance purposes to support development in River Terrace.
- Expansion of the UGB to include the Urban Reserve Area south of River Terrace and north of Beef Bend Road would provide more opportunities for connectivity and stormwater management in River Terrace than currently exist.

RECOMMENDED ACTION MEASURES

1. Amend the Introduction and Key Findings of Chapter 14 of the Tigard Comprehensive Plan to reflect the River Terrace policy amendments that were adopted in 2012 under Goal 14.3.
2. Adopt the Comprehensive Plan and zoning district designations shown on Maps 1 and 2 respectively.
3. Work with the development community and affected service providers to fund and construct the public facilities needed in River Terrace in accordance with the recommendations in the various River Terrace infrastructure master plans and the River Terrace Funding Strategy.
4. Work with Metro to bring the Urban Reserve Area south of River Terrace and north of Beef Bend Road into the UGB and/or work with DLCD, Washington County and other affected agencies to discuss the possibility of obtaining the necessary approvals to extend 161st Ave outside the UGB to facilitate street connectivity and stormwater conveyance.

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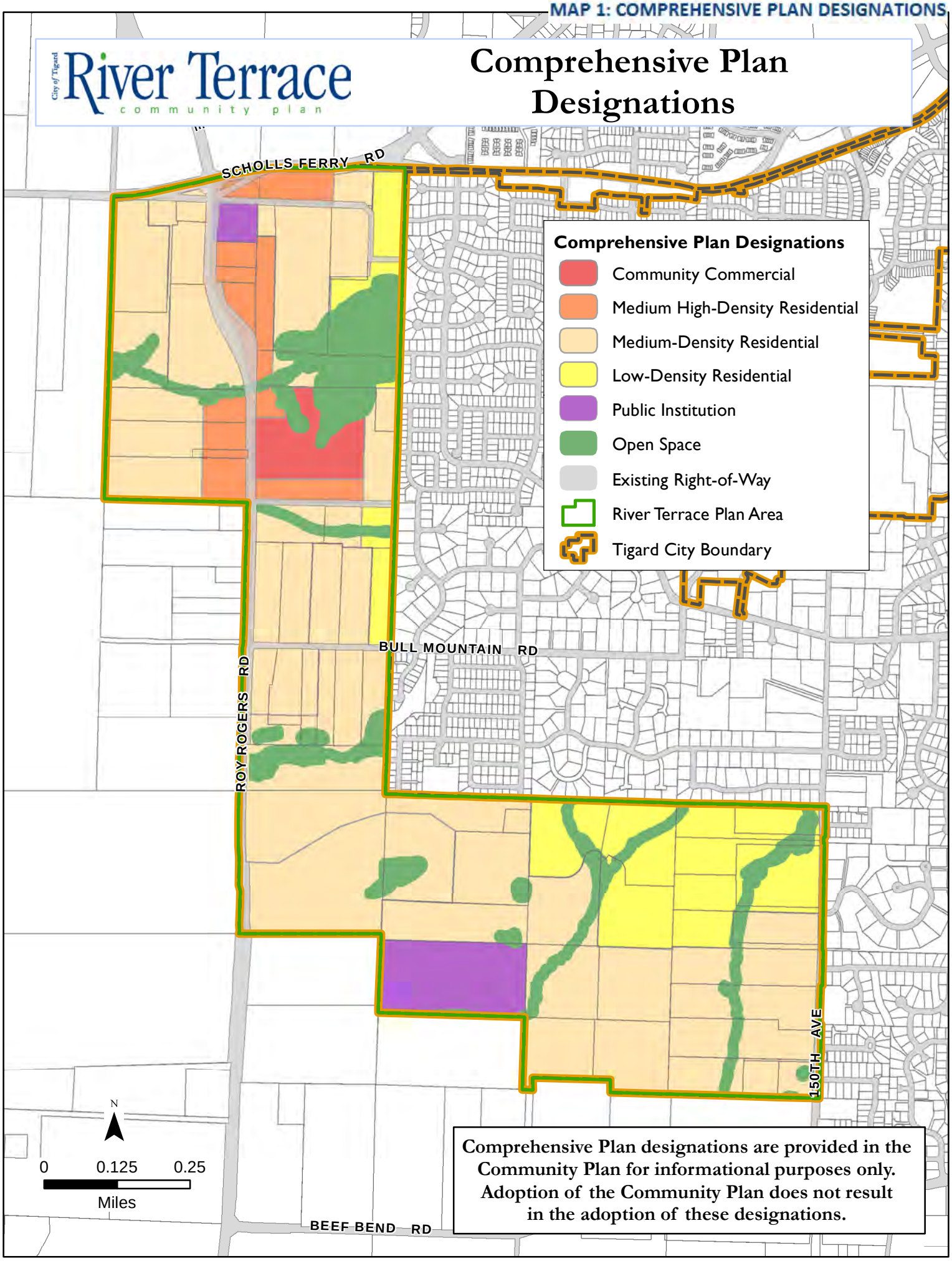
City of Tigard River Terrace community plan

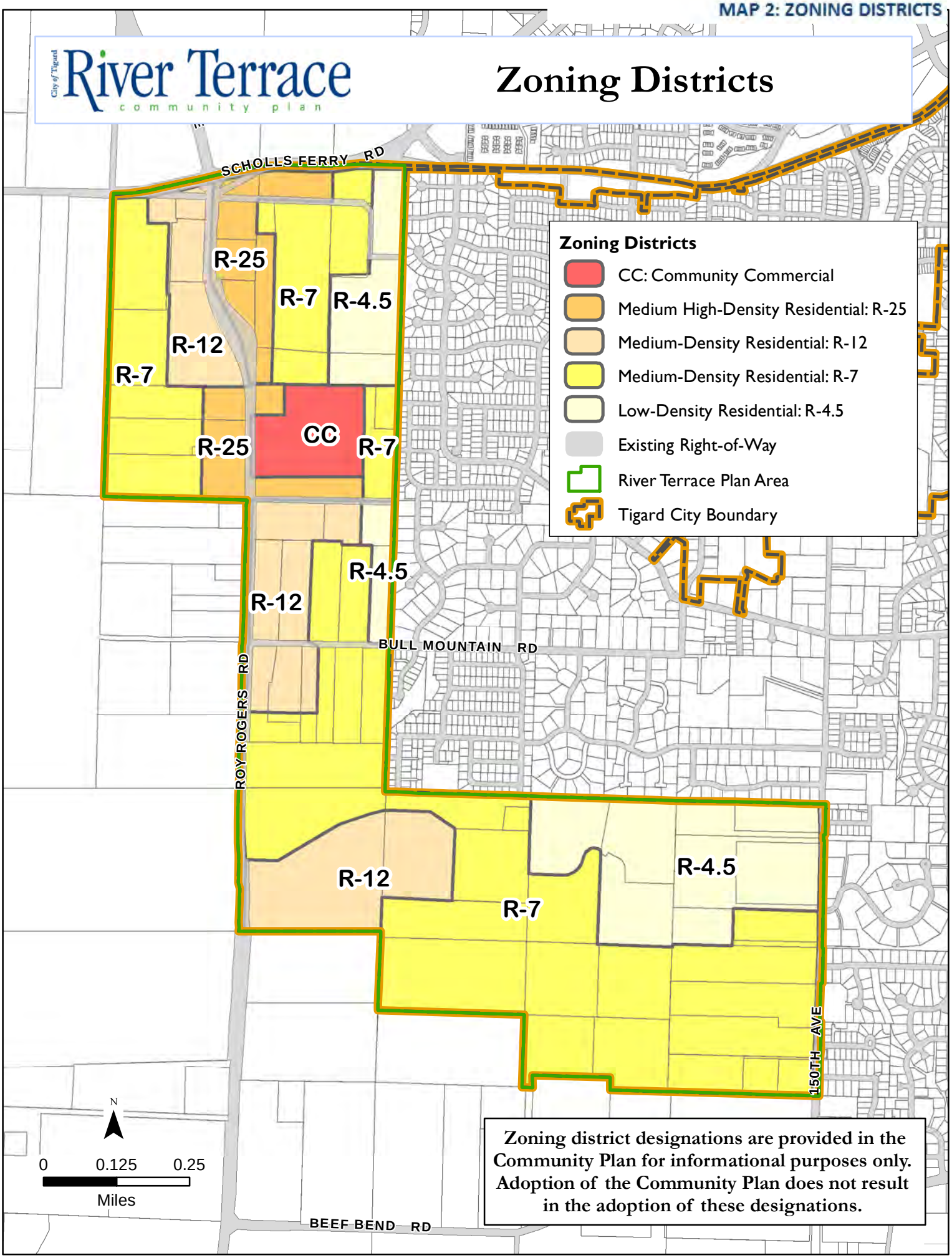
Community Plan Maps

MAP 1: COMPREHENSIVE PLAN DESIGNATIONS



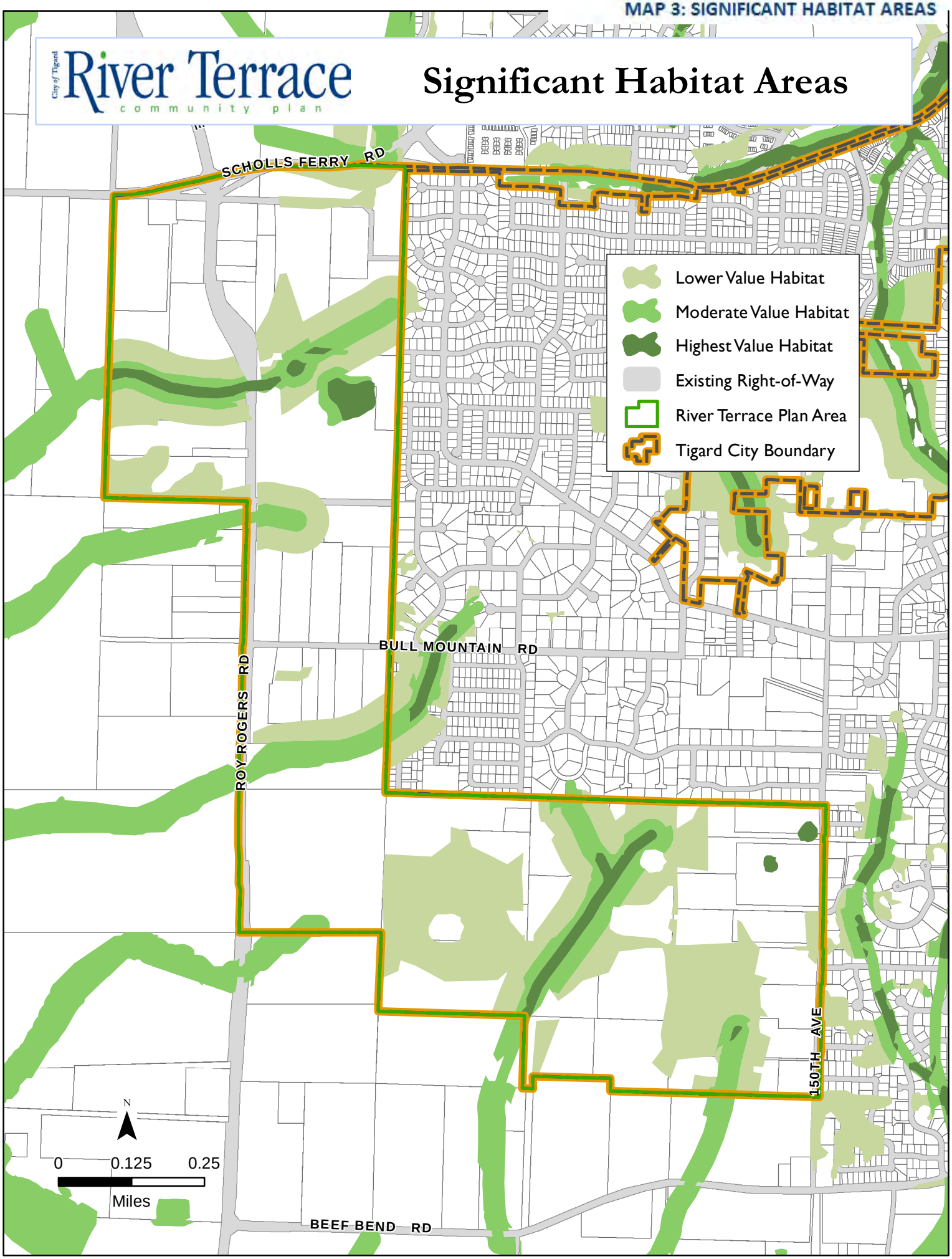
City of Tigard
River Terrace
community plan

Zoning Districts

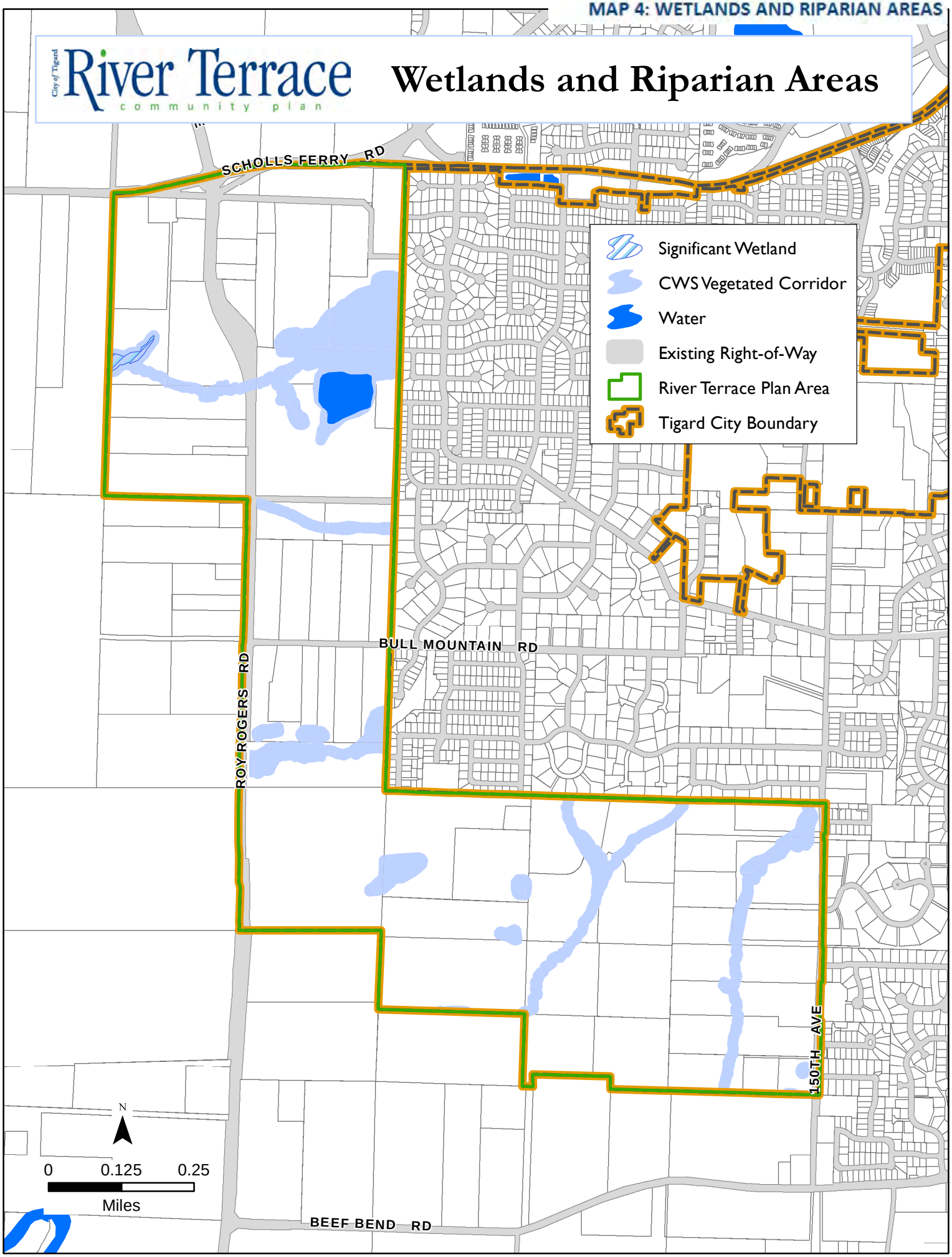


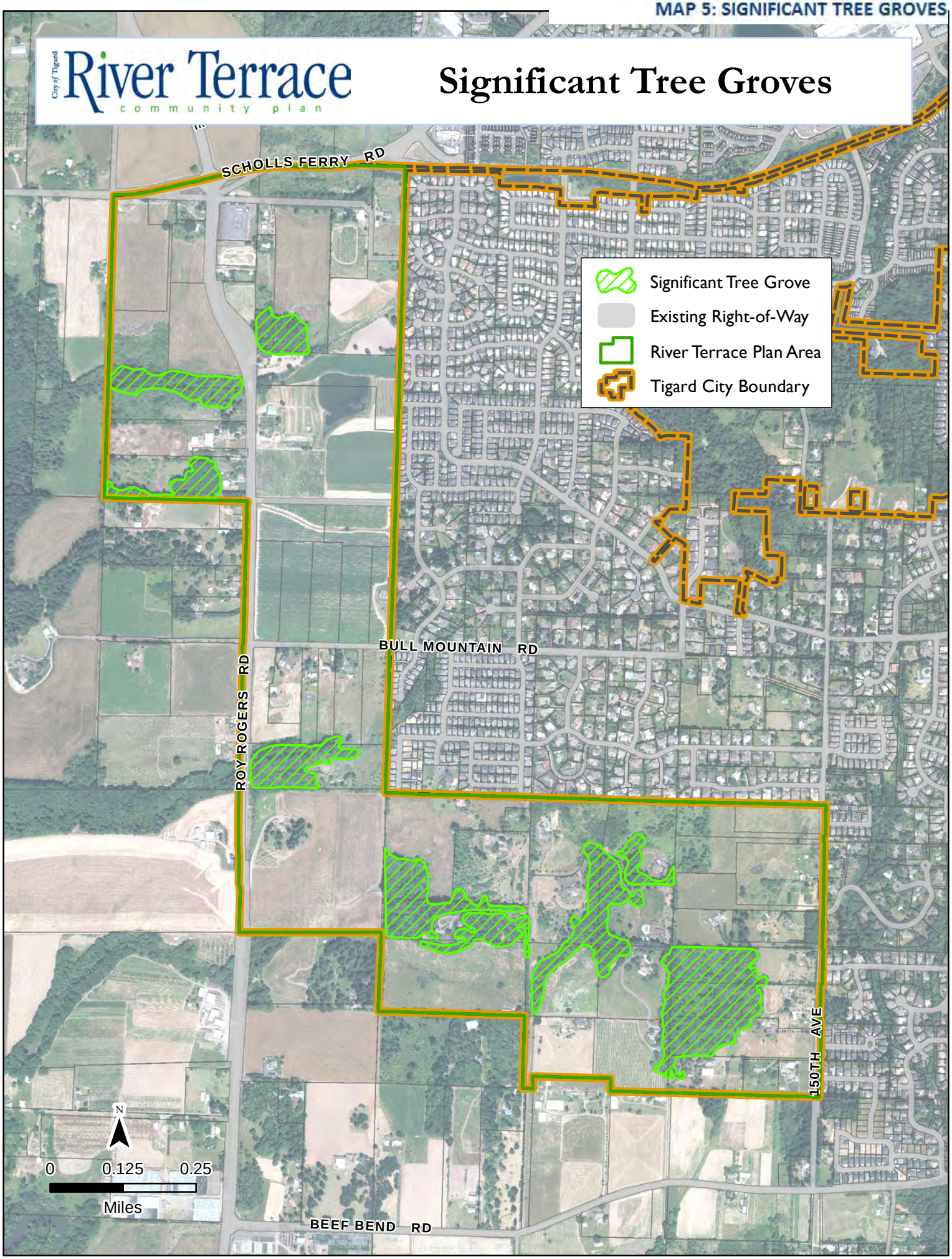
Zoning district designations are provided in the Community Plan for informational purposes only. Adoption of the Community Plan does not result in the adoption of these designations.

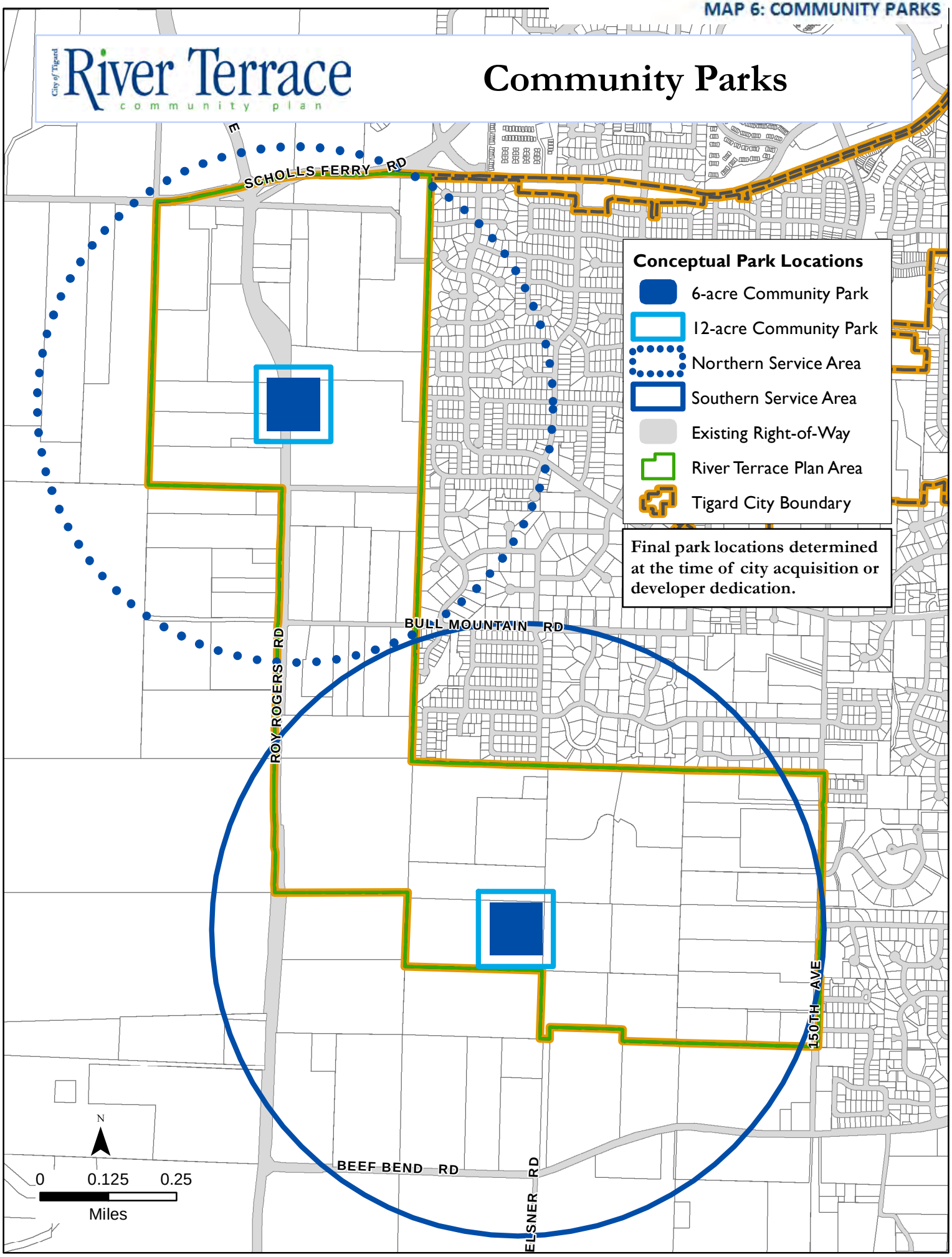
MAP 3: SIGNIFICANT HABITAT AREAS

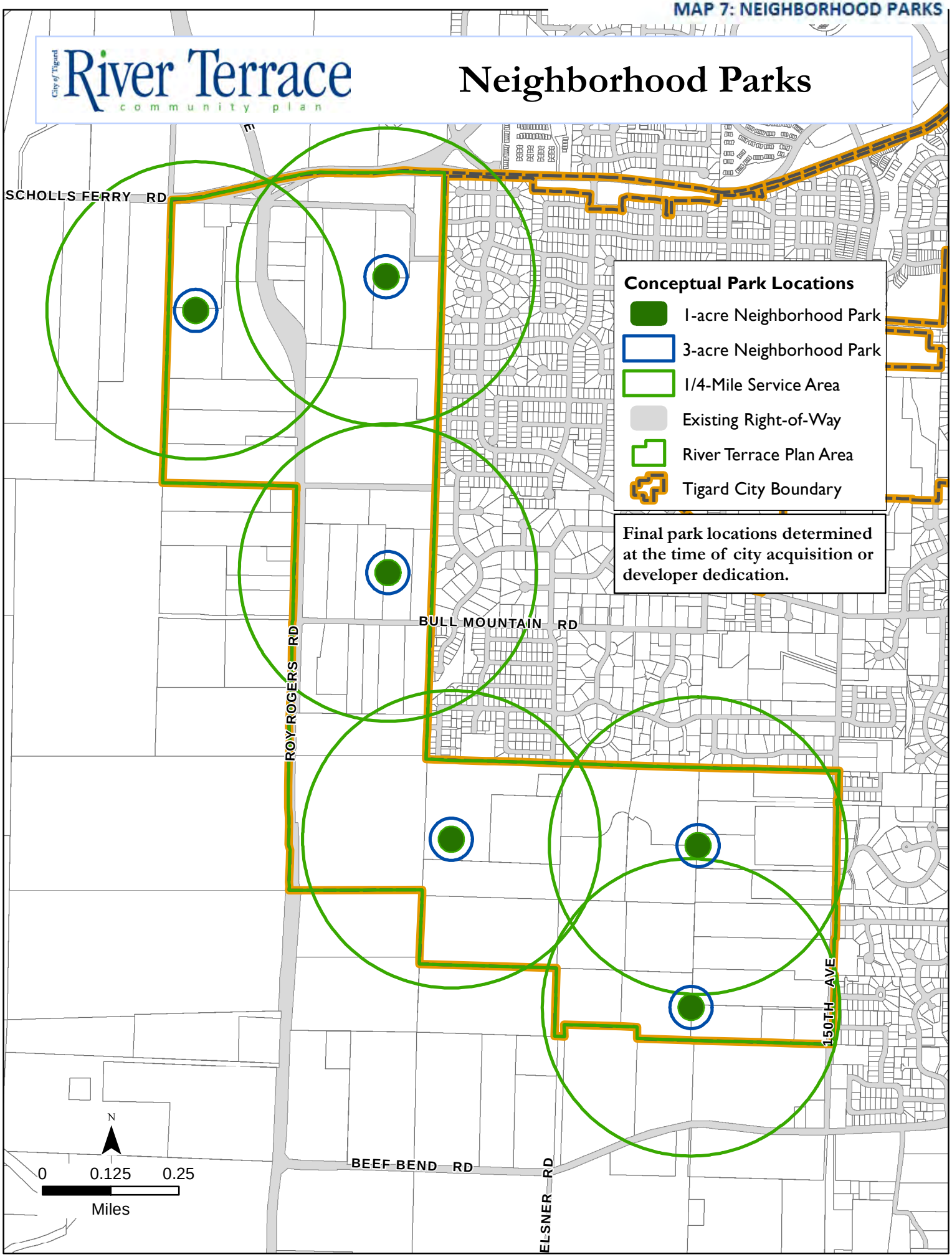


MAP 4: WETLANDS AND RIPARIAN AREAS




City of Tigard
River Terrace
community plan
Significant Tree Groves
SCHOLLS FERRY RD
BULL MOUNTAIN RD
ROY ROGERS RD
150TH AVE
BEEF BEND RD
Significant Tree Grove
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
N
0
0.125
0.25
Miles

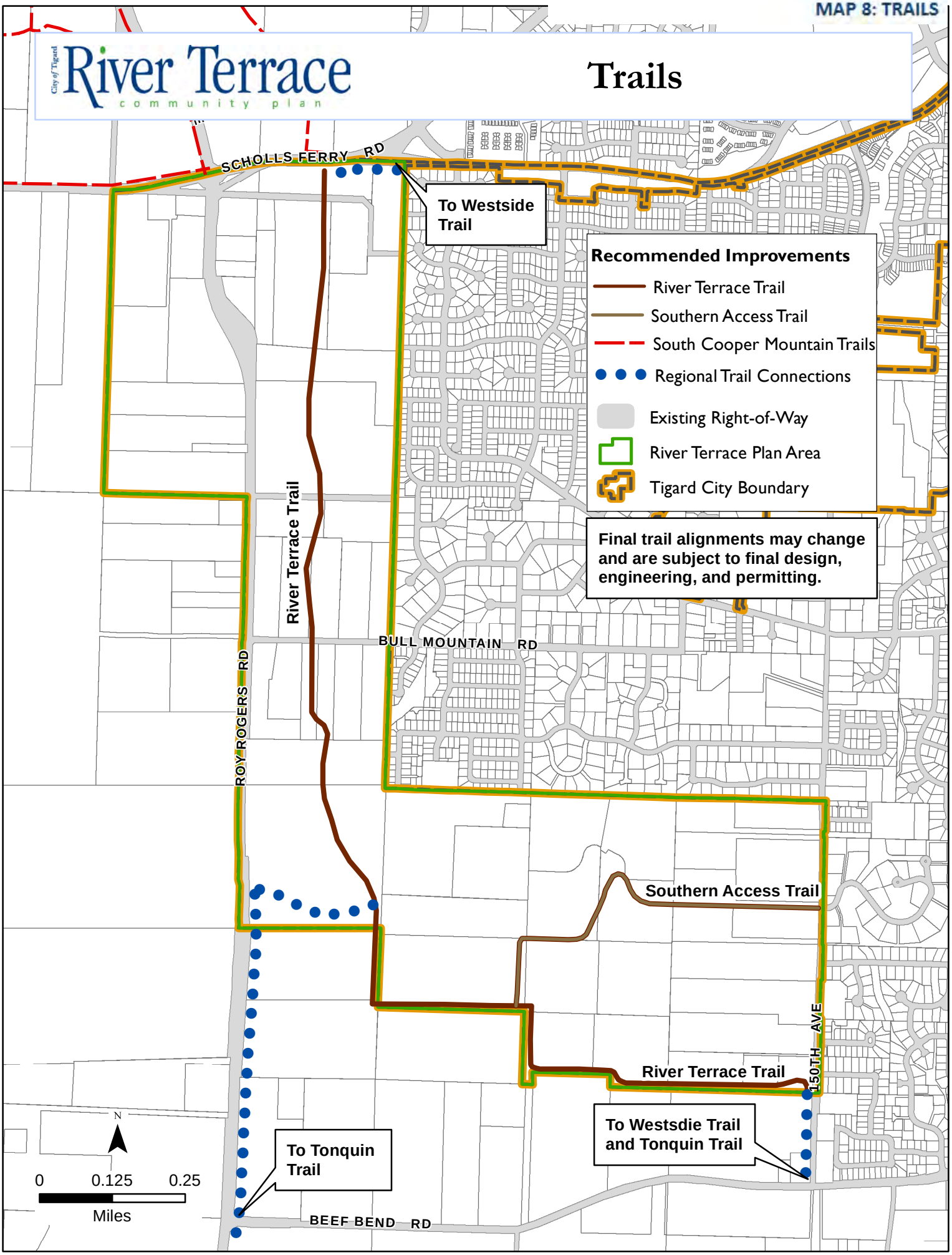

City of Tigard
River Terrace
community plan
Community Parks
SCHOLLS FERRY RD
BULL MOUNTAIN RD
ROY ROGERS RD
BEEF BEND RD
ELSNER RD
150TH AVE
Conceptual Park Locations
6-acre Community Park
12-acre Community Park
Northern Service Area
Southern Service Area
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
Final park locations determined at the time of city acquisition or developer dedication.
N
0
0.125
0.25
Miles


River Terrace
community plan
Neighborhood Parks
SCHOLLS FERRY RD
BULL MOUNTAIN RD
ROY ROGERS RD
BEEF BEND RD
ELSNER RD
150TH AVE
Conceptual Park Locations
1-acre Neighborhood Park
3-acre Neighborhood Park
1/4-Mile Service Area
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
Final park locations determined at the time of city acquisition or developer dedication.
N
0
0.125
0.25
Miles

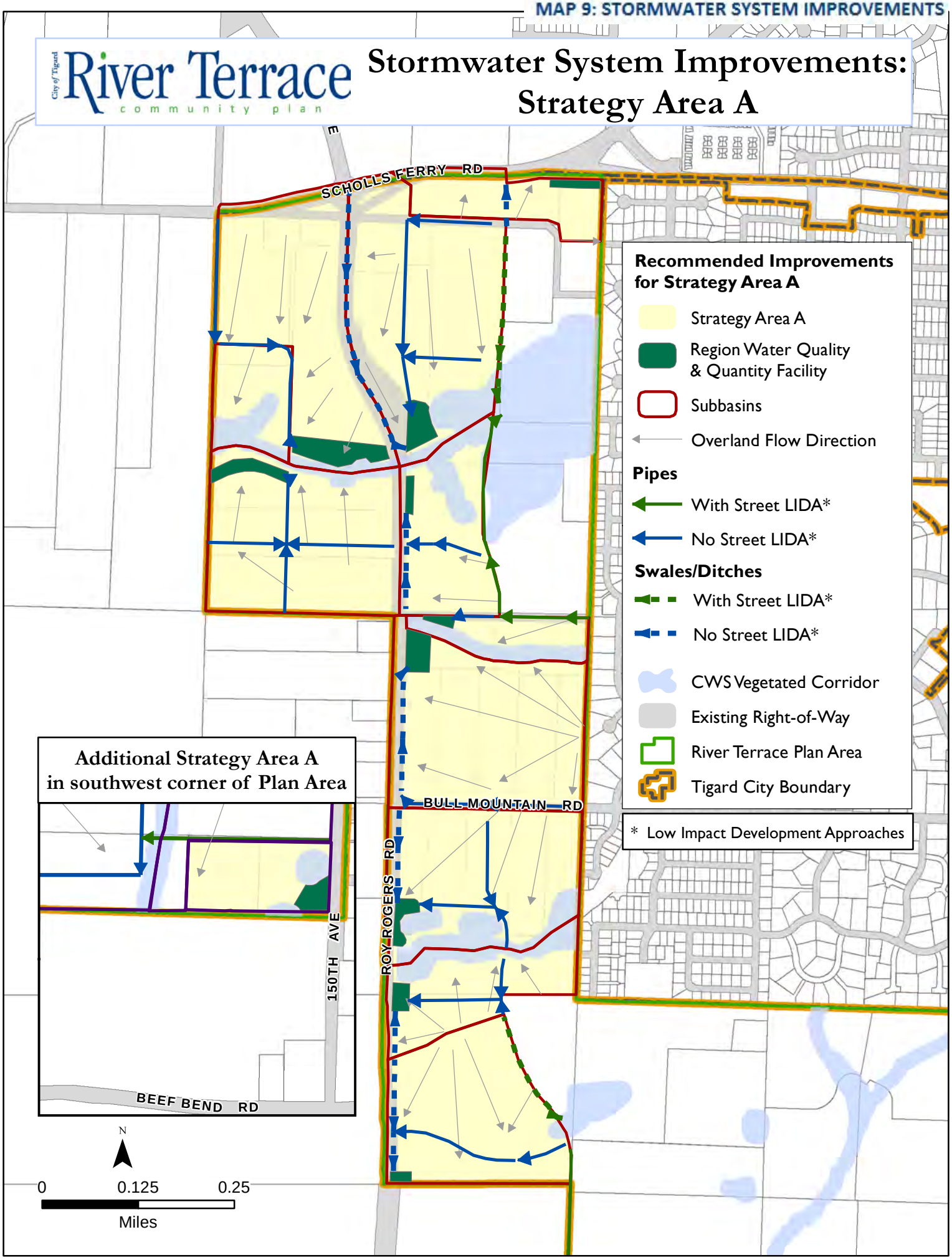
MAP 8: TRAILS

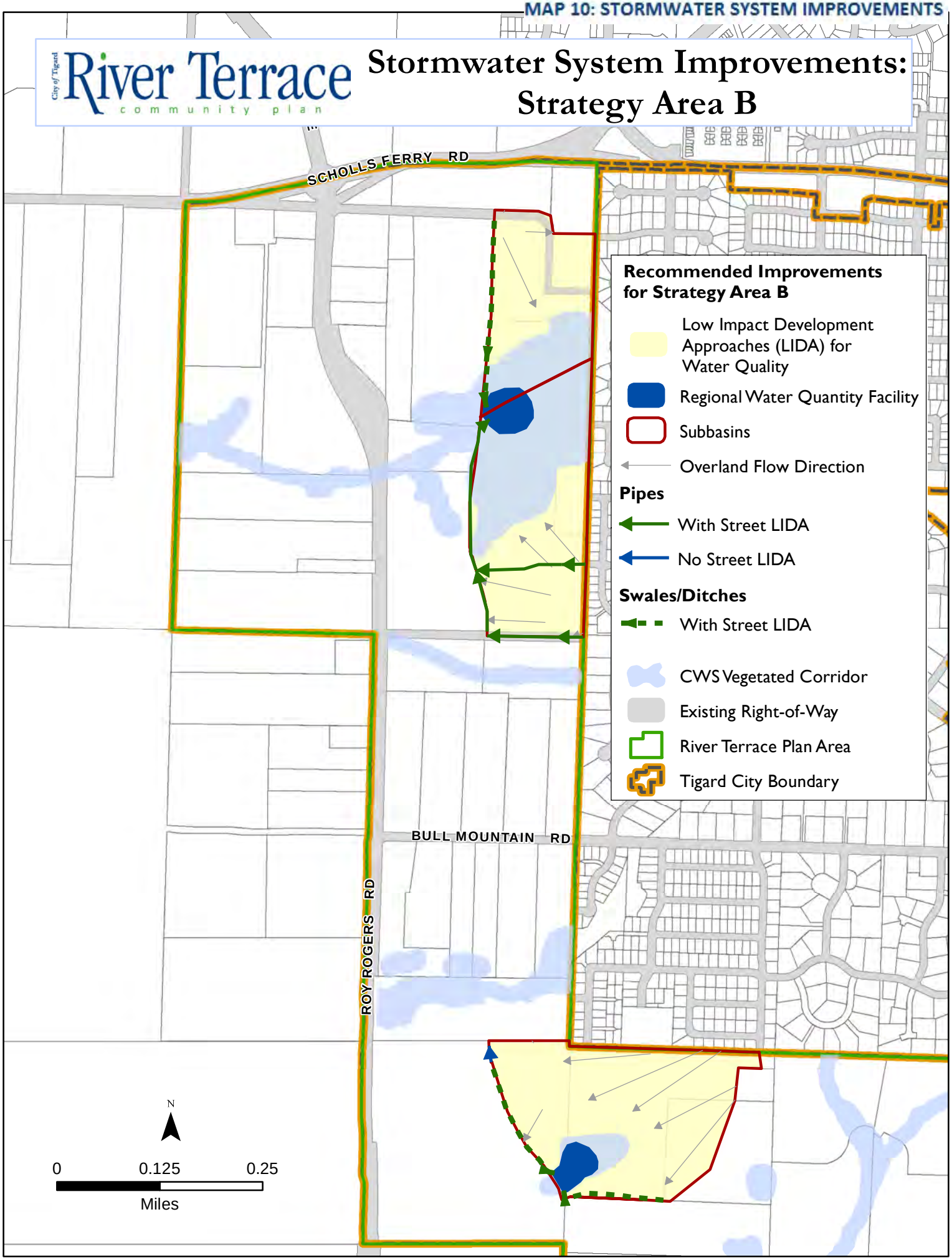
River Terrace community plan

Trails

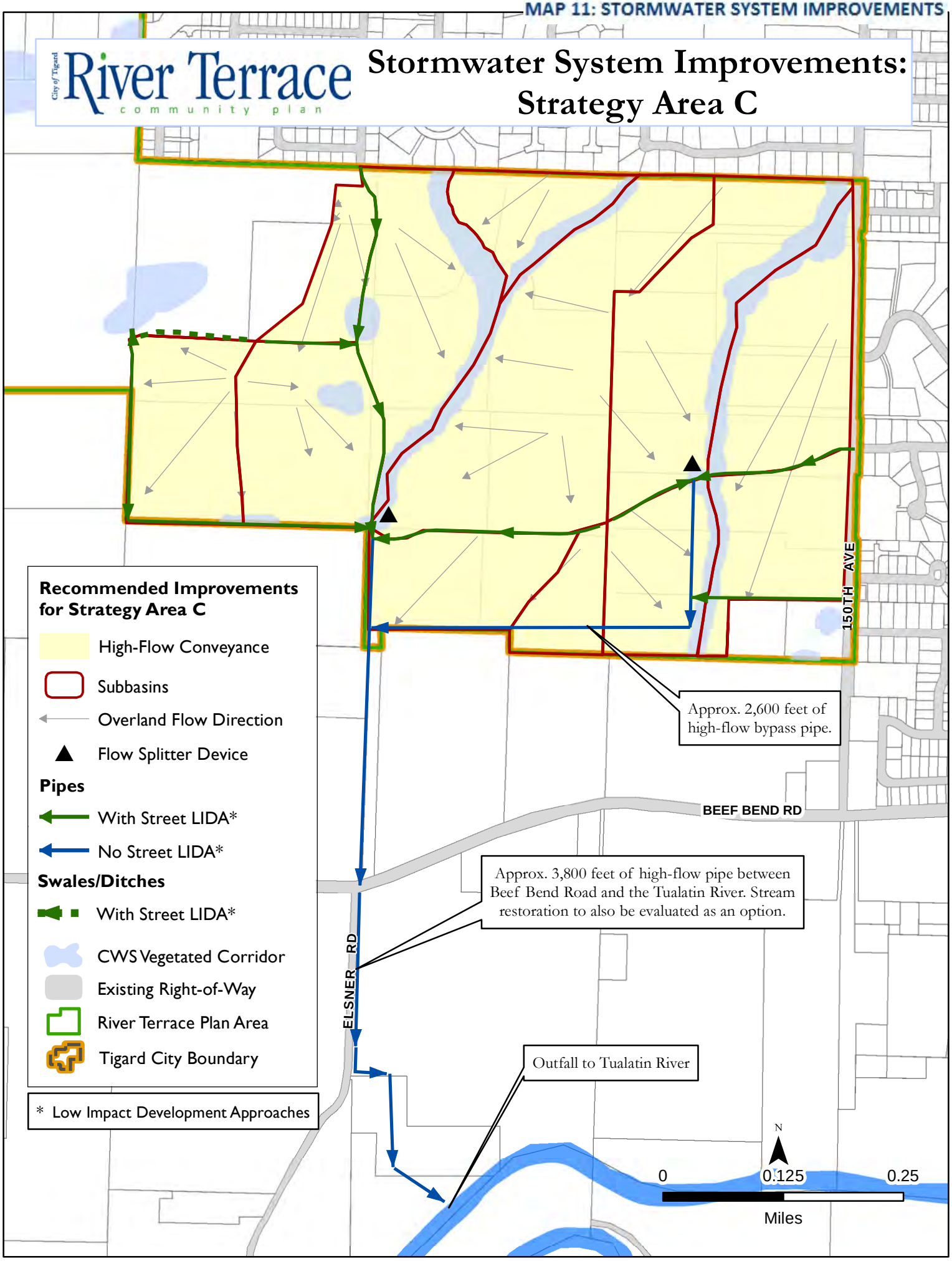


MAP 9: STORMWATER SYSTEM IMPROVEMENTS

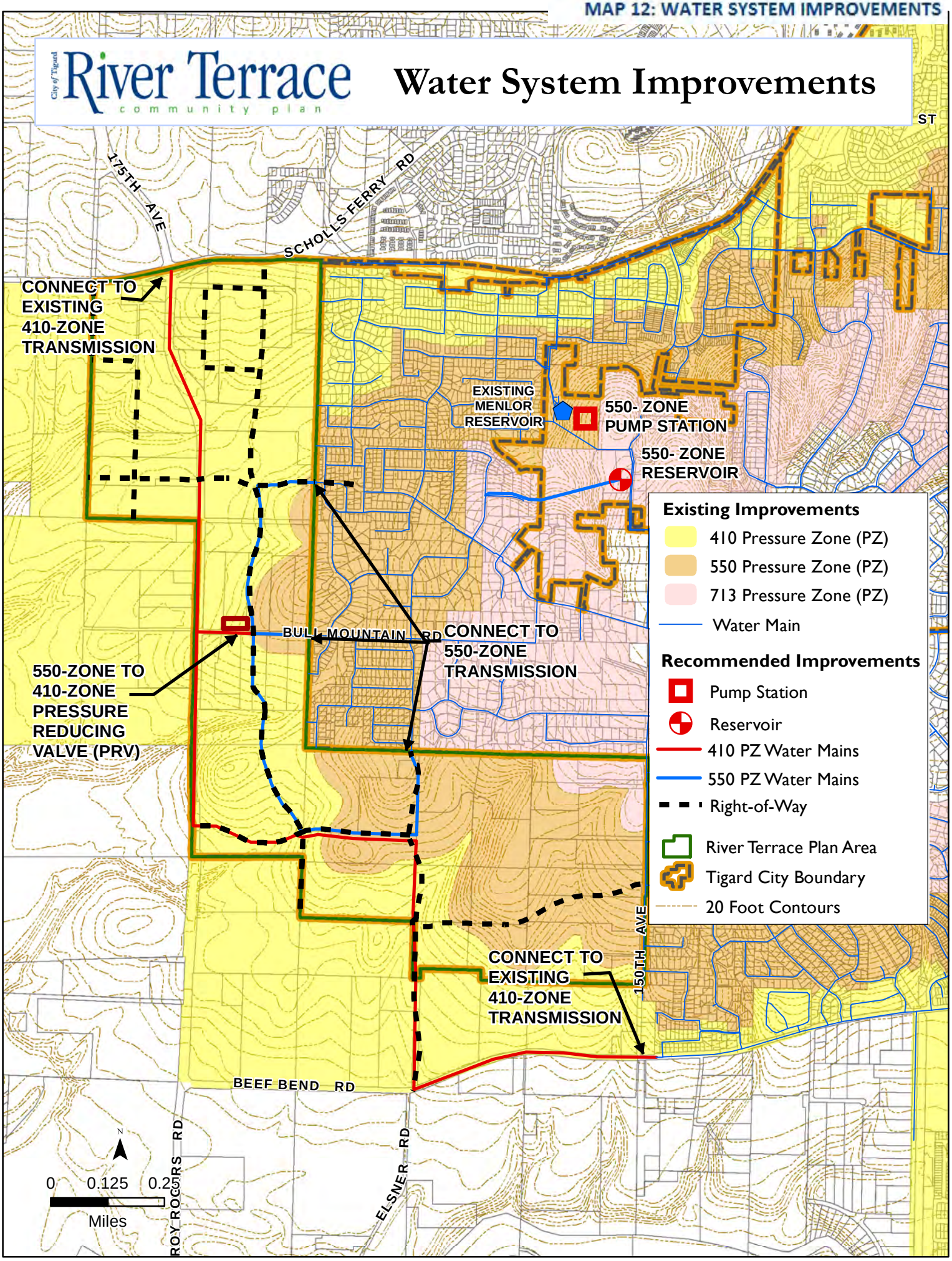



River Terrace
community plan
City of Tigard
Stormwater System Improvements:
Strategy Area B
SCHOLLS FERRY RD
BULL MOUNTAIN RD
ROY ROGERS RD
Recommended Improvements for Strategy Area B
Low Impact Development Approaches (LIDA) for Water Quality
Regional Water Quantity Facility
Subbasins
Overland Flow Direction
Pipes
With Street LIDA
No Street LIDA
Swales/Ditches
With Street LIDA
CWS Vegetated Corridor
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
N
0
0.125
0.25
Miles

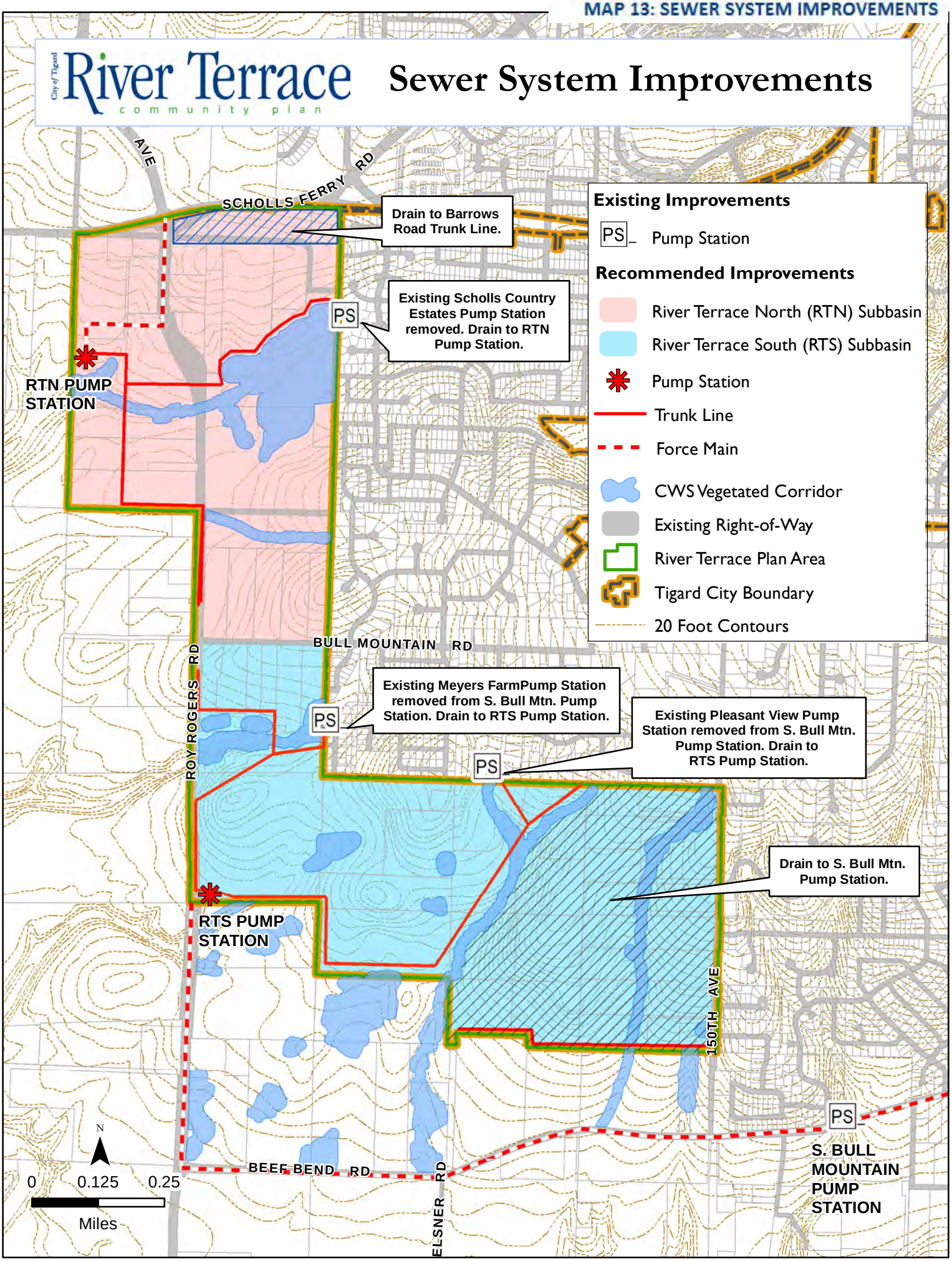
MAP 11: STORMWATER SYSTEM IMPROVEMENTS



MAP 12: WATER SYSTEM IMPROVEMENTS



MAP 13: SEWER SYSTEM IMPROVEMENTS



MAP 14: TRANSPORTATION IMPROVEMENTS

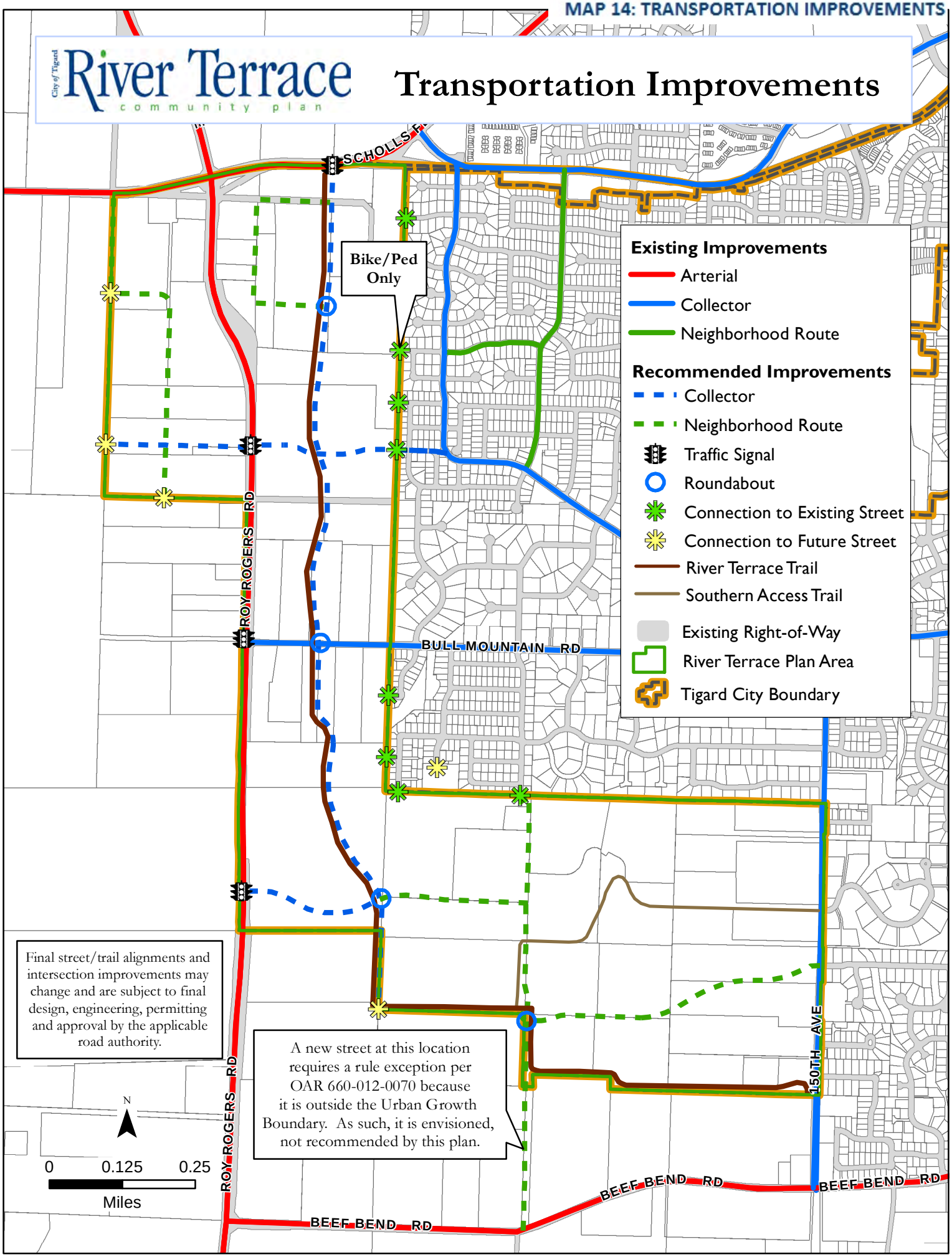


EXHIBIT B

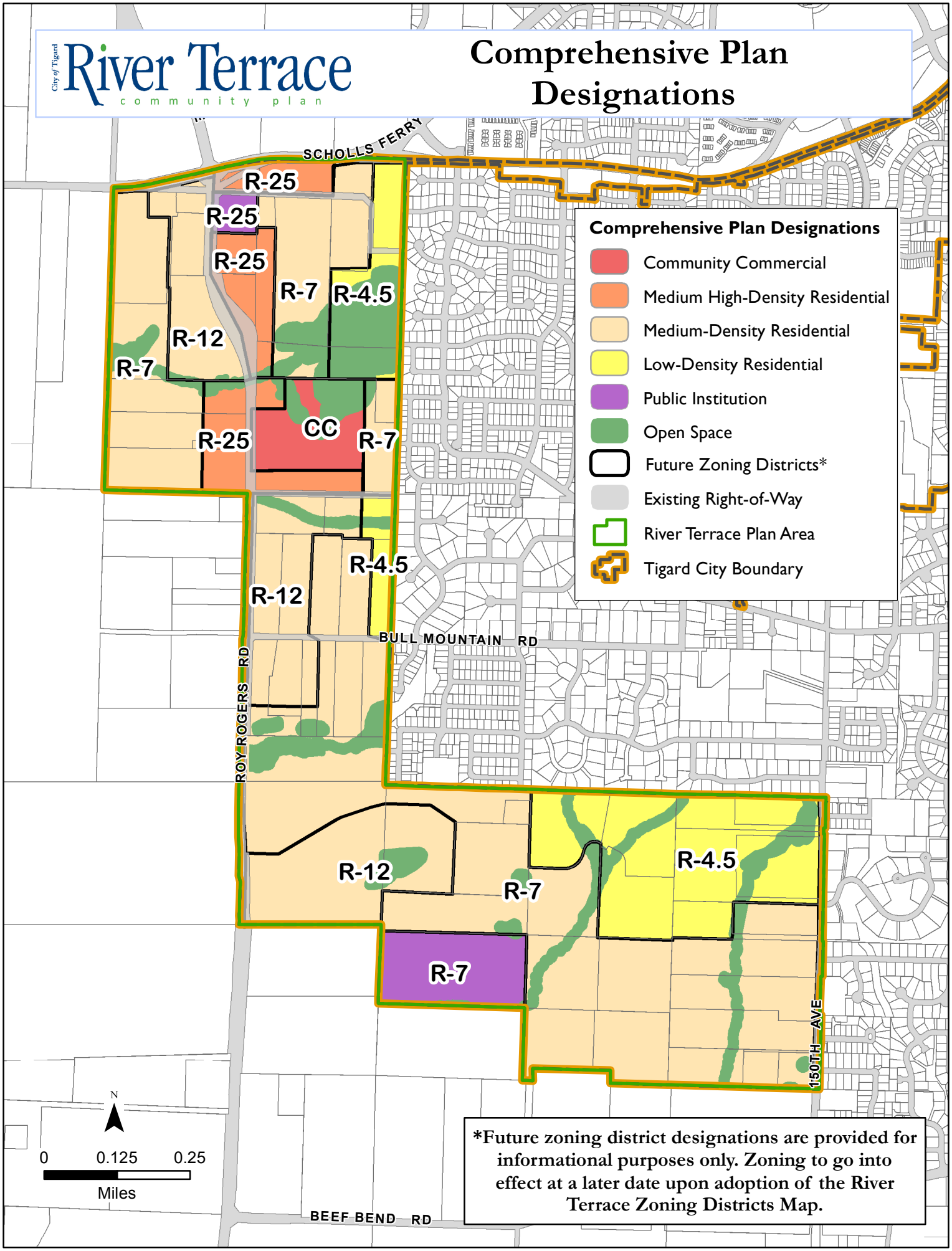

City of Tigard
River Terrace
community plan
Comprehensive Plan Designations
SCHOLLS FERRY
R-25
R-25
R-25
R-7
R-4.5
R-12
R-7
R-25
CC
R-7
R-4.5
R-12
BULL MOUNTAIN RD
ROY ROGERS RD
R-12
R-7
R-4.5
R-7
150TH AVE
BEEF BEND RD
Comprehensive Plan Designations
Community Commercial
Medium High-Density Residential
Medium-Density Residential
Low-Density Residential
Public Institution
Open Space
Future Zoning Districts*
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
N
0
0.125
0.25
Miles
*Future zoning district designations are provided for informational purposes only. Zoning to go into effect at a later date upon adoption of the River Terrace Zoning Districts Map.

EXHIBIT C1

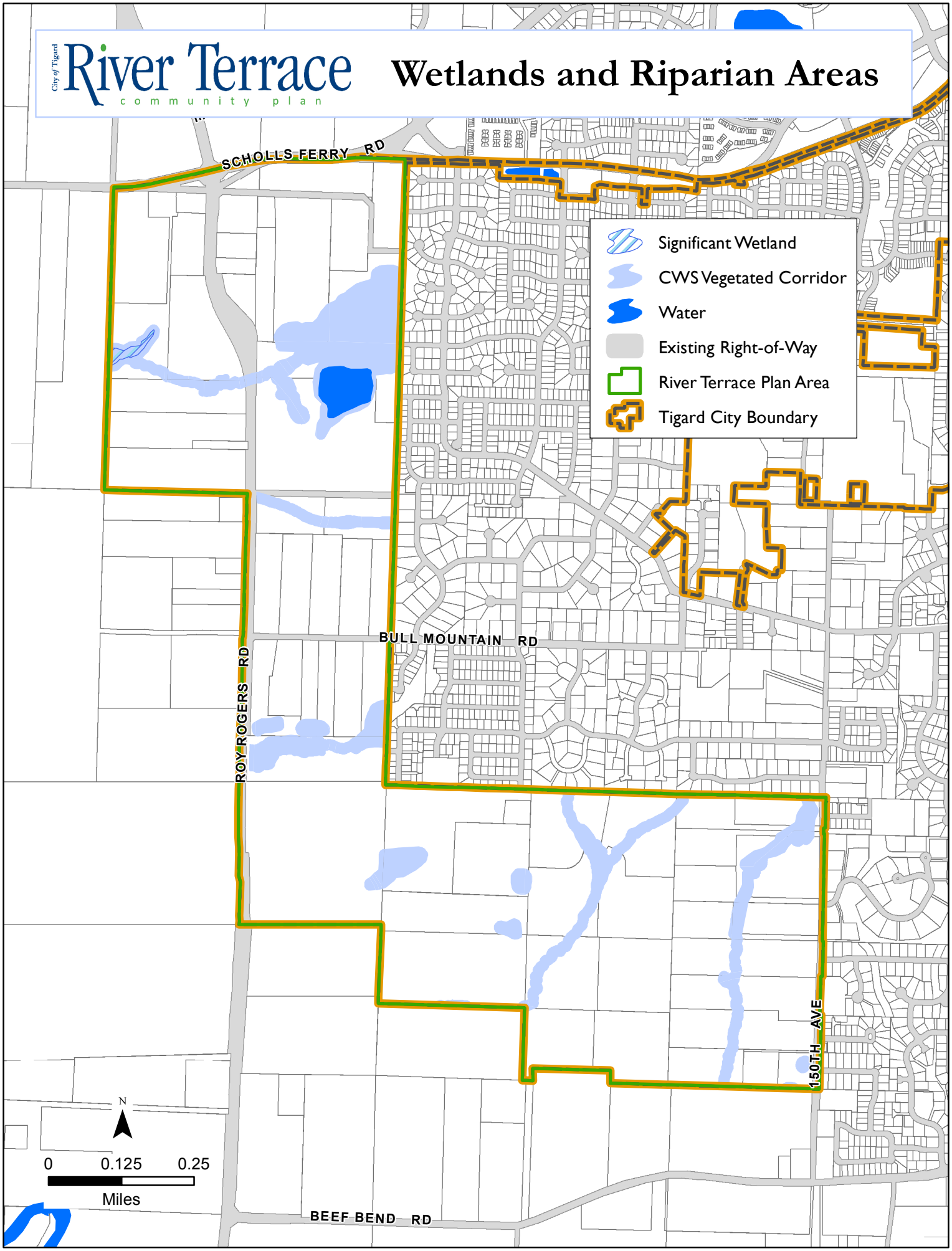

City of Tigard
River Terrace
community plan
Wetlands and Riparian Areas
SCHOLLS FERRY RD
BULL MOUNTAIN RD
ROY ROGERS RD
150TH AVE
BEEF BEND RD
Significant Wetland
CWS Vegetated Corridor
Water
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
N
0
0.125
0.25
Miles

EXHIBIT C2

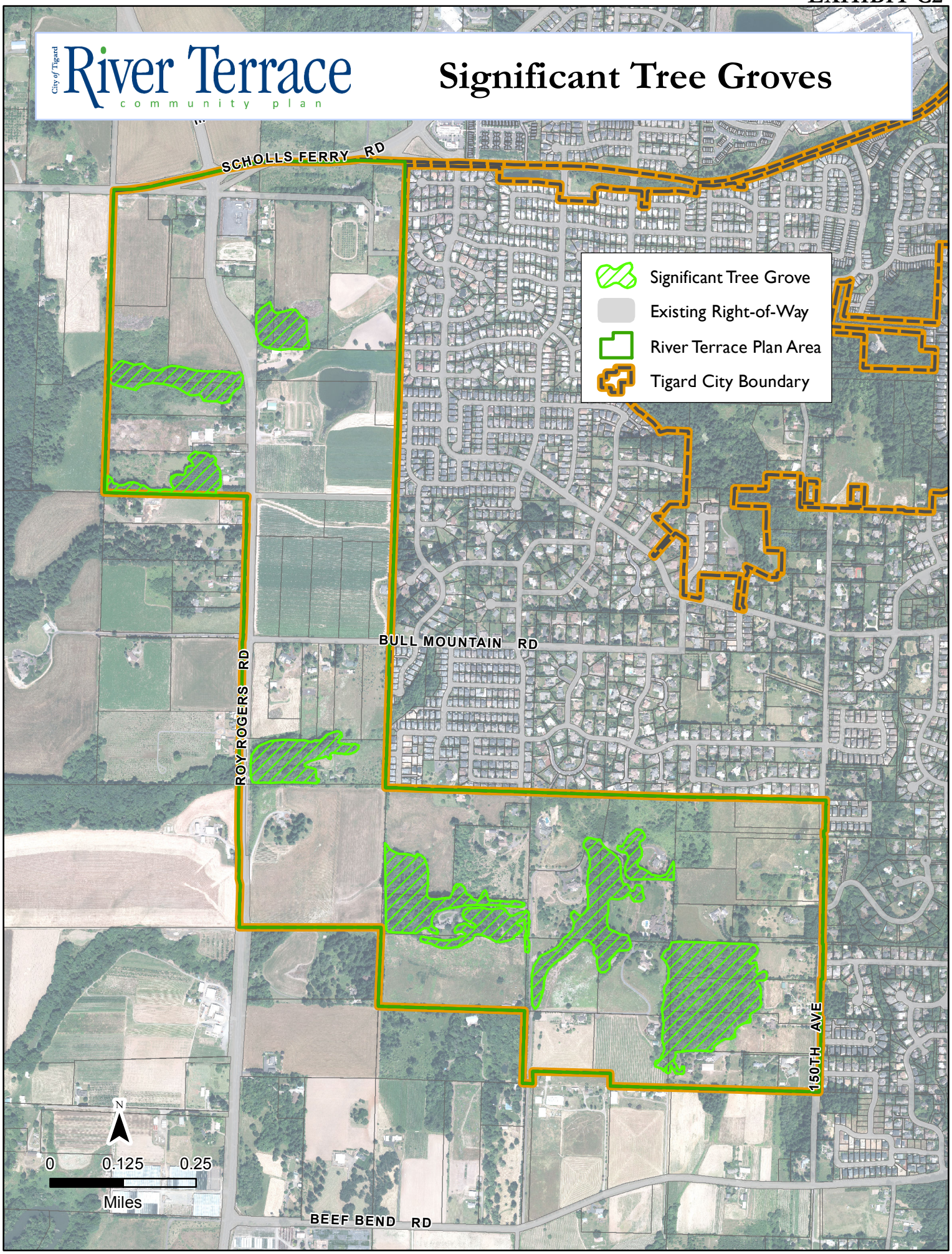

City of Tigard
River Terrace
community plan
Significant Tree Groves
SCHOLLS FERRY RD
BULL MOUNTAIN RD
ROY ROGERS RD
150TH AVE
BEEF BEND RD
Significant Tree Grove
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
N
0
0.125
0.25
Miles

EXHIBIT C3

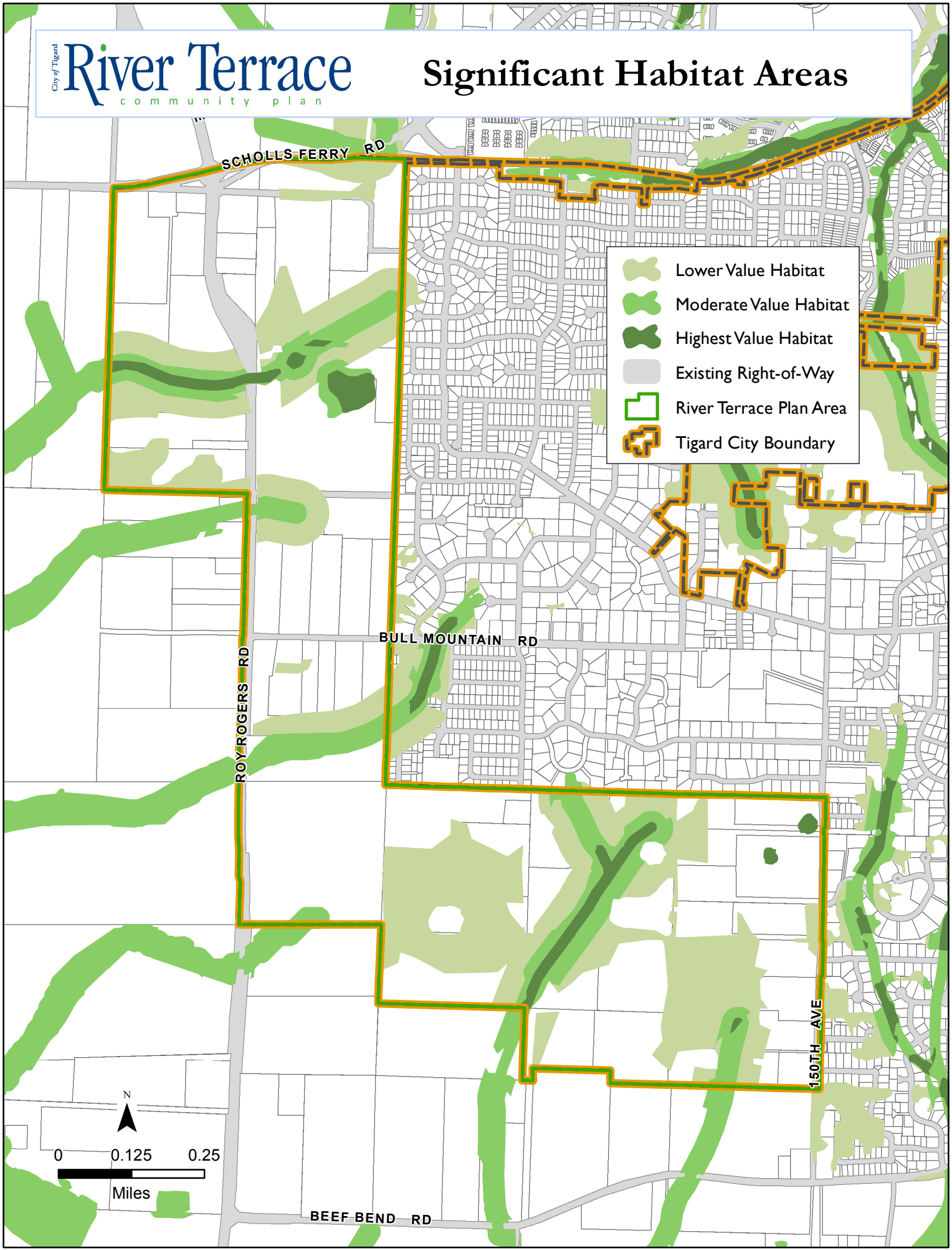

City of Tigard
River Terrace
community plan
Significant Habitat Areas
SCHOLLS FERRY RD
BULL MOUNTAIN RD
ROY ROGERS RD
150TH AVE
BEEF BEND RD
Lower Value Habitat
Moderate Value Habitat
Highest Value Habitat
Existing Right-of-Way
River Terrace Plan Area
Tigard City Boundary
N
0
0.125
0.25
Miles

EXHIBIT D

Agenda Item:
Hearing Date: **December 16, 2014 Time: 7:30 PM**

STAFF REPORT TO THE CITY COUNCIL FOR THE CITY OF TIGARD, OREGON

120 DAYS = N/A

SECTION I. APPLICATION SUMMARY

FILE NAME: **RIVER TERRACE COMMUNITY PLAN (RTCP)**

FILE NO.: **Comprehensive Plan Amendment (CPA) 2014-00001**

PROPOSAL: A Comprehensive Plan Amendment (CPA) to adopt the River Terrace Community Plan, Comprehensive Plan Designations, Natural Resources Maps and River Terrace Addendum to the city's Transportation System Plan.

APPLICANT: City of Tigard
13125 SW Hall Boulevard
Tigard, OR 97223

OWNER: N/A

LOCATION: River Terrace Plan Area

APPLICABLE REVIEW CRITERIA:
Community Development Code Chapters 18.380.020 and 18.390.060.G; Comprehensive Plan Goals 1, 2, 5, 6, 7, 8, 10, 11, 12, 13 and 14; Statewide Planning Goals 1, 2, 5, 6, 7, 8, 10, 11, 12, 13 and 14; and Metro's Urban Growth Management Functional Plan Title 1, 3, 11, 12, 13 and 14.

SECTION II. PLANNING COMMISSION RECOMMENDATION

The Planning Commission recommends that the City Council adopt by ordinance a Comprehensive Plan Amendment that adopts the River Terrace Community Plan, related changes to the Comprehensive Plan Designations Map and Natural Resources Maps, and the River Terrace Addendum to the Transportation System Plan, as determined through the public hearing process.

SECTION III. BACKGROUND INFORMATION

Project History

Most of the land in River Terrace, approximately 440 acres, was added to the UGB in 2002, at which time it was identified as Areas 63 and 64. Washington County completed the concept plan for Areas 63 and 64 in 2010. This plan is entitled the West Bull Mountain Concept Plan (WBMCP)

and included Areas 63 and 64 and a rural subarea to the south of both areas that extended to Beef Bend Road. This rural subarea was included in the concept planning process to facilitate logical street connections and urban service extensions since Areas 63 and 64 were not contiguous to one another.

Approximately 50 acres of this rural subarea was added to the UGB in 2011, at which time it was identified as Roy Rogers West (sometimes referred to as Area 4). Collectively these three areas, i.e. Area 63, Area 64, and Roy Rogers West, comprise the River Terrace planning area. Unlike the WBMCP, the River Terrace Community Plan (RTCP) does not include the remainder of the rural subarea (which is now an Urban Reserve Area) to the south of River Terrace. The entire 490-acre area that makes up River Terrace was annexed to the City in two batches. The first annexation petition was approved in 2011, and the second was approved in 2013.

In 2012, Washington County and the City of Tigard entered into an intergovernmental agreement (IGA) whereby the County assigned and the City agreed to accept responsibility for preparing a community plan based on the concept planning efforts completed by the County in 2010. Pursuant to the IGA and in compliance with Metro Functional Plan Titles 11 and 14, the City agreed to "refine the County's West Bull Mountain Concept Plan (WBMCP) and provide a detailed land use, public infrastructure, governance, and financial planning framework for urban development of the concept planned area." In turn, the County agreed to support the City's efforts to complete the RTCP.

Proposal Description

A Comprehensive Plan Amendment (CPA) to adopt the River Terrace Community Plan, Comprehensive Plan Designations Map, Natural Resource Maps, and a River Terrace Addendum to the city's Transportation System Plan.

River Terrace Community Plan

The River Terrace Community Plan (RTCP) is a long range planning document that supplements the Tigard Comprehensive Plan. It is designed to guide development and investment in River Terrace over the next several decades as it transitions from rural to urban land use to accommodate needed housing in the region. It is the result of many years of analysis and visioning by the community, City of Tigard leadership and staff, Washington County leadership and staff, and numerous partner agencies.

The city is required to prepare and adopt comprehensive plan provisions, public facility plans and land use regulations to meet the requirements of the specific Metro ordinances that added River Terrace to the Urban Growth Boundary UGB). The city is also required by Metro Functional Plan Titles 11 and 14 and Statewide Planning Goals 11 and 14 to ensure that areas brought into the UGB are efficiently urbanized and meet long-term population and employment needs. The completion and adoption of the River Terrace Community Plan contributes to meeting all city, state, and Metro requirements for land use and public facility planning.

The city will need to take additional actions to implement the RTCP. Identified implementation actions include, but are not limited to, the following:

- Adoption of the River Terrace Zoning Districts Map
- Development and adoption of River Terrace code amendments
- Development of a new stormwater modeling tool and design standards
- Development and adoption of new fees consistent with recommendations in the River Terrace Funding Strategy

Some of these actions are being timed and coordinated with other actions. The adoption of the River Terrace Zoning Districts Map, for example, is being delayed in order to more closely align its adoption with the completion of the River Terrace Code Amendments, which are still under development. Some, but not all, of these actions will require City Council review and approval and will be presented for Council's consideration at future dates.

Updates to Tigard Comprehensive Plan Designations and Natural Resource Maps

In order to apply the city's land use regulations in River Terrace, several maps must be updated. This includes the city's:

- Comprehensive Plan Designations - This map updates the city's existing Comprehensive Plan designations for River Terrace. The city initially adopted Comprehensive Plan designations for River Terrace in 2012 based on the land use recommendations contained in the West Bull Mountain Concept Plan (WBMCP). During the River Terrace community planning process, refinements were made to the recommended WBMCP land uses in order to support a better range and mix of zoning districts and, by extension, housing types. These refinements were vetted by stakeholders, are consistent with the density assumptions and guidelines in the WBMCP, and meet Metro's required residential densities for each area.
- Natural Resource Maps - These maps update existing city maps that regulate tree groves, habitat conservation areas, and wetland and riparian areas to include the River Terrace area. Detailed inventory work was required to update each map. This work was completed during the WBMCP and RTCP planning processes.

An advisory group made up of eighteen members was formed to provide advice and guidance to the project team during the Community Plan planning process. Known as the Stakeholder Working Group, they voted on August 22, 2013 to move the Comprehensive Plan Designations forward for adoption. Since the natural resource maps are very technical in nature and were developed using existing policies and standards, the Stakeholder Working Group was not asked to recommend them for adoption. They were, however, given multiple opportunities to review and understand their implications.

River Terrace Transportation System Plan Addendum

As part of State and Metro requirements for public facility planning, the city must adopt a local transportation system plan that provides for a multi-modal system of streets, trails, and sidewalks within River Terrace with connections to adjacent urban areas and the regional transportation system. This plan is being adopted as an addendum to the city's Transportation System Plan (TSP). Because TSP amendments require a Type IV legislative process, this is the only River Terrace master plan that Council needs to adopt by Ordinance.

The TSP links expected growth with transportation needs and sets the policy framework for the city's transportation system. The proposed TSP Addendum looks to accommodate the transportation needs anticipated in River Terrace in addition to contributing to the city's broader goal of completing the RTCP.

The Stakeholder Working Group voted to cautiously move the River Terrace TSP Addendum forward for adoption on June 9, 2014. Their recommendation for caution primarily revolved around project costs and their concern that costs may be too high for the market to bear. Council was briefed on these issues and the TSP Addendum in general at a workshop meeting on June 17, 2014.

Planning Commission Recommendation

On November 17, 2014 the Tigard Planning Commission held a public hearing to consider the proposal and make a recommendation to Council. As discussed in greater detail in Section VIII of this report and in the minutes of the hearing, public testimony was received and considered by the Planning Commission as part of their deliberations. At the conclusion of their deliberations, the Planning Commission made a unanimous recommendation to the City Council that all four elements of the proposal be approved and adopted as presented to the Commission.

SECTION IV. APPLICABLE CRITERIA, FINDINGS AND CONCLUSIONS

This section contains all the applicable city, state and metro policies, provisions, and criteria that apply to the proposed comprehensive plan amendment. Each section is addressed demonstrating how each requirement is met.

APPLICABLE PROVISIONS OF THE 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

FINDING: The proposed legislative amendments are being reviewed under the Type IV legislative procedure as set forth in the chapter. This procedure requires public hearings before both the Planning Commission and City Council.

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.

FINDING: This Comprehensive Plan Amendment (CPA) to the Tigard Comprehensive Plan establishes policies to be applied generally throughout the City of Tigard. Therefore it will be reviewed under the Type IV procedure as detailed in Section 18.390.060.G. In accordance with this section, the amendment is initially being considered by the Planning Commission with City Council making the final decision.

Chapter 18.390: Decision-Making Procedures

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.**

FINDING: Findings and conclusions are provided within this report for the applicable listed factors on which the recommendation by the Commission and the decision by the Council shall be based.

CONCLUSION: Based on the findings above and below, these provisions are met.

APPLICABLE COMPREHENSIVE PLAN POLICIES

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.**

Policy 3 **The City shall establish special citizen advisory boards and committees to provide input to the City Council, Planning Commission, and City staff.**

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.**

FINDING: The River Terrace Community Plan describes how citizens, affected agencies, and other jurisdictions were given the "opportunity to participate in all phases of the planning process." Community Plan Goal 1: Public involvement lists opportunities like:

- Advisory committees – a Stakeholder Working Group (SWG), Technical Advisory Committee (TAC), and Implementation Subcommittee were formed to advise the process.
- Community meetings – Eight were held prior to the adoption process.
- Online Tools – A blog and online forum were set up for public participation
- Several public comment periods were available on different aspects of the proposal

Several opportunities for participation are also built into the Comprehensive Plan amendment process, including:

- Public Hearing notification requirements pursuant to Chapter 18.390.060 of the Tigard Community Development Code and Measure 56. Public hearing notice of the Planning Commission and City Council public hearings was sent to the interested parties list and all River Terrace property owners.
- A notice was published in the October 30, 2014 issue of The Tigard 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.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 1.1 Policies 2, 3 and 5 are met.

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 4 **The City shall ensure citizens receive a timely response from policymakers regarding recommendations made through the citizen involvement program.**

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.**

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

FINDING: The River Terrace Community Plan describes how citizens could communicate directly to the city about the project and receive information on issues in an understandable form. Community Plan Goal 1: Public involvement lists opportunities like:

- Updates to City boards and commissions
- Presentations to neighborhood and special interest groups
- River Terrace project website, blog, and interactive maps
- Printed informational material and mailings

Citizen involvement led to several key River Terrace Community Plan and infrastructure master pan refinements.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 1.2 Policies 1, 2, 4, 5 and 6 are met.

<u>Chapter 2: Land Use Planning</u>

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.**

Policy 2 **The City's land use regulations, related plans, and implementing actions shall be consistent with and implement its Comprehensive Plan.**

Policy 3 **The City shall coordinate the adoption, amendment, and implementation of its land use program with other potentially affected jurisdictions and agencies.**

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.**

FINDING: The goals and policies contained in the Tigard Comprehensive Plan provide the basis for the city's land use planning program. The River Terrace Community Plan is a product of this program and an ancillary Comprehensive Plan document. The River Terrace Community Plan addresses Tigard's Comprehensive Plan Goal 2: Land Use Planning for River Terrace and provides more detail about how the plan is meeting Metro requirements for density and the community's vision for the area.

As described in this staff report, the amendment complies with all applicable statewide planning goals, regional regulations, comprehensive plan policies, and serves the interest of the citizens. The amendment ensures that the River Terrace area is urbanized efficiently and becomes a mixed-use, walkable, community.

Potentially affected jurisdictions and agencies were given an opportunity to collaborate with staff throughout the project as members of the Technical Advisory Committee. In addition, the city sent out a request for comments 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.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 1, 2, 3 and 20 are met.

Policy 6 **The City shall promote the development and maintenance of a range of land use types which are of sufficient economic value to fund needed services and advance the community's social and fiscal stability.**

Policy 10 **The City shall institute fees and charges to ensure development pays for development related services and assumes the appropriate costs for impacts on the transportation and other public facility systems.**

FINDING: This CPA, specifically the River Terrace Community Plan and Comprehensive Plan designations, provides for a variety of land uses and

residential densities consistent with the community's desire to create a community of great neighborhoods that includes housing, neighborhood-scale commercial businesses, schools, parks and recreational opportunities.

Community Plan Chapter 1: Introduction and Background describes that a funding strategy was developed concurrently with the Community Plan pursuant to state and regional requirements. The River Terrace Funding Strategy will be presented to Council for adoption by separate action during the same meeting that the Community Plan is considered for adoption. Additionally, a Citywide Infrastructure Financing Project is currently underway and is expected to result in updates to the city's existing utility fees and System Development Charges, some of which are expected to be specific to River Terrace per the recommendations contained in the River Terrace Funding Strategy.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 6 and 10 are met.

Policy 7 **The City's regulatory land use maps and development code shall implement the Comprehensive Plan by providing for needed urban land uses including:**
A. Residential;
B. Commercial and office employment including business parks;
C. Mixed use;
D. Industrial;
E. Overlay districts where natural resource protections or special planning and regulatory tools are warranted; and
F. Public services

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

FINDING: This CPA, specifically the River Terrace Community Plan and Comprehensive Plan designations, includes primarily residential Comprehensive Plan designations that provide a mix of residential densities. This allows for a variety of housing types that meet a wide range of housing needs. Higher residential densities are planned near commercial and institutional uses and along major corridors. Lower residential densities are planned in areas with steep slopes and along the area's eastern edge to provide a buffer between existing lower density neighborhoods and future higher density neighborhoods. The commercial area is sized and zoned to provide neighborhood-scale commercial goods and services. The co-location of land uses (e.g. parks and trails), public facilities (e.g. stormwater facilities and pump stations), and natural resource areas is strongly encouraged to maximize the efficient use of land and to create opportunities for community amenities.

The River Terrace Community Plan addresses the City's Goal 5 Natural Resources for River Terrace. In addition, the city's Natural Resource maps

are being updated for the River Terrace area to ensure that these areas are protected. The city's existing protection programs for natural resources will be extended to the newly mapped areas in River Terrace.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 7 and 22 are met.

Policy 8 **The City shall require that appropriate public facilities are made available, or committed, prior to development approval and are constructed prior to, or concurrently with, development occupancy.**

Policy 9 **The City may, upon determining it is in the public interest, enter into development agreements to phase the provision of required public facilities and services and/or payment of impact fees and/or other arrangements that assure the integrity of the infrastructure system and public safety.**

Policy 13 **The City shall plan for future public facility expansion for those areas within its Urban Planning Area that can realistically be expected to be within the City limits during the planning period.**

FINDING: River Terrace Community Plan Goal: 11 Public Facilities and Services addresses public facility planning for River Terrace. The Comprehensive Plan designations proposed for adoption determined the type, number and location of residential dwelling units in River Terrace. This information was used to help determine the size and location of needed public facilities and services.

The Community Plan more fully describes future public facility expansion in the sections on Parks, Public Facilities and Transportation and in the five infrastructure master plans developed for River Terrace. The five infrastructure master plans include: water, sewer, stormwater, transportation and parks. Water, sewer and stormwater master plans have already been adopted; while the transportation and parks master plans are proposed for adoption with this CPA. The plans include a list of infrastructure improvements necessary to accommodate the River Terrace area.

Updates to the city's adequate facility requirements will be included in the upcoming River Terrace Code Amendments as part of Community Plan implementation.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 8, 9 and 13 are met.

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:**
A. Transportation and other public facilities and services shall be available, or committed to be made available, and of sufficient capacity to serve the land uses allowed by the proposed map designation;

B. Development of land uses allowed by the new designation shall not negatively affect existing or planned transportation or other public facilities and services;
C. The new land use designation shall fulfill a proven community need such as provision of needed commercial goods and services, employment, housing, public and community services, etc. in the particular location, versus other appropriately designated and developable properties;
D. Demonstration that there is an inadequate amount of developable, appropriately designated, land for the land uses that would be allowed by the new designation;
E. Demonstration that land uses allowed in the proposed designation could be developed in compliance with all applicable regulations and the purposes of any overlay district would be fulfilled;
F. Land uses permitted by the proposed designation would be compatible, or capable of being made compatible, with environmental conditions and surrounding land uses; and
G. Demonstration that the amendment does not detract from the viability of the City's natural systems.

FINDING: The proposed amendment to Tigard's Comprehensive Plan Map meets the following specific criteria:

- Sufficient capacity: The Community Plan describes that updates to the city's adequate facility requirements will be included in River Terrace Code Amendments as part of Community Plan implementation.
- Not negatively affecting: The Community Plan more fully describes future public facility expansion in the sections on Parks, Public Facilities and Transportation and in the five infrastructure master plans developed for River Terrace. The plans include a list of infrastructure improvements necessary to accommodate development in River Terrace.
- Fulfills a proven community need: Almost 97% of the land in River Terrace is proposed for new housing. A citywide analysis of housing needs and capacity in 2012 found that Tigard has an estimated need for just over 6,500 new housing units over the next 20 years. Over 50% of the city's overall need (3,744 housing units) could be absorbed by River Terrace development.
- Demonstration of inadequacy: A significant portion of the city's estimated capacity for needed housing is assumed to come from River Terrace.
- Demonstration of compliance: The River Terrace Community Plan utilizes the city's existing Comprehensive Plan and zoning district designations.
- Compatibility: Higher residential densities are planned near commercial and institutional uses and along major transportation corridors. Lower residential densities are planned in areas with steep slopes and along the area's eastern edge to provide a buffer between existing lower density neighborhoods and future higher density neighborhoods.

- Viability of natural systems: The city's Natural Resource maps are being updated for the River Terrace area to ensure that these areas are protected. The city's exiting protection programs for natural resources will be extended to the newly mapped areas in River Terrace.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policy 15 is met.

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.

Policy 4 **The City shall actively coordinate and consult with landowners, local stakeholders, and governmental jurisdictions and agencies regarding the inventory, protection, and restoration of natural resources.**

Policy 10 **The City shall complete a baseline inventory of significant natural resources and update or improve it as necessary, such as at the time of Comprehensive Plan Periodic Review, changes to Metro or State programs, or to reflect changed conditions, circumstances, and community values.**

FINDING: This CPA amends the city's Natural Resource maps to include the River Terrace plan area. The city will utilize the same natural resource protection programs as the rest of the city. Implementation of these programs will occur through the adoption of several inventories and maps that provide various levels of natural resource assessment and protection as well as development flexibility.

The River Terrace Community Plan addresses the city's Goal 5: Natural Resources and speaks to the city's coordination and inventory of significant natural resources in River Terrace.

- The Natural Resource maps proposed for adoption update existing city maps that regulate tree groves, habitat conservation areas, and wetland and riparian areas to include the River Terrace area. Detailed inventory work was required to update each map, which was completed as part of the West Bull Mountain and River Terrace planning processes.
- The SWG, TAC, community, and outside agencies had an opportunity to review each map. Since the Natural Resource maps are very technical in nature and were developed using existing policies and standards, the Stakeholder Working Group was not asked to recommend them for adoption. They were, however, given multiple opportunities to review and understand their implications.

The River Terrace Addendum to the Transportation System Plan includes the following language on protection of natural resources:

- Street alignments and intersections should avoid and/or minimize impacts to identified natural resource areas whenever possible.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 5.1 Policies 4 and 10 are met.

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.**

Policy 6 **The City shall encourage the maintenance and improvement of open spaces, natural resources, and the City's tree canopy to sustain their positive contribution to air quality.**

FINDING: The River Terrace Community Plan and maps, and the Transportation System Plan Addendum support the city's adopted environmental quality goals and policies. Specifically:

- Land use patterns: The River Terrace Community Plan and Comprehensive Plan designations will allow for more intense urban land uses that reduce the dependency on the automobile and increase opportunities for walking, biking, and public transit. The Transportation System Plan Addendum identifies several multi-modal street and intersection improvements in and around the River Terrace area. The Walking and Biking Network, Figure 6 of the TSP Addendum illustrates the potential active transportation network for the River Terrace plan area. The emphasis of this network is on connecting residents to existing and future trails, as defined in the Metro Regional Trail and Greenways Plan, as well as key destinations within and near the River Terrace Community Plan area, including the neighborhood commercial area in the north and the future school in the south.
- Open spaces, natural resources, and tree canopy: This CPA updates the city's Natural Resource maps for the River Terrace area, including the significant tree groves map. As discussed in Goal 8: Parks, Recreation, Trails and Open Space of the Community Plan, 65 acres of open space is proposed in River Terrace.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 6.1 Policies 3 and 6 are met.

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

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

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.**

Policy 10 **The City shall continue to facilitate the extension of the City's wastewater system to neighborhoods without service within the Tigard Urban Service Area, provided:**
A. properties benefiting from the extension pay their fair share of the cost; and
B. annexation occurs prior to any property receiving service.

FINDING: River Terrace Community Plan Goal 11: Public Facilities and Services addresses planned infrastructure system improvements for stormwater and wastewater in River Terrace:

- A Stormwater Master Plan was created to manage stormwater in the River Terrace area. It recommends two water quality strategies: (1) Low Impact Development Approaches (LIDA) at a variety of scales, and (2) regional water quality facilities. The River Terrace Stormwater Master Plan has already been adopted.
- A River Terrace Sanitary Sewer Master Plan Addendum was developed to address sanitary sewer management for the River Terrace plan area. The River Terrace Sanitary Sewer Master Plan Addendum has already been adopted.

In addition, the River Terrace Community Plan aims to protect natural resources and preserve their aesthetic and environmental benefits. Natural resource protection will also be achieved through the development of effective stormwater management facilities that protect the community's water supply and the health and function of stream corridors for habitat and recreation. For example, the River Terrace Stormwater Master Plan contains goals to restore and enhance vegetative corridors, protect water quality, preserve existing hydrology, preserve existing mature vegetation, and more.

This CPA also updates the city's Natural Resource maps for the River Terrace area in order to implement the city's current protection and incentive programs to retain and protect the city's natural resources.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 6.2 Policies 3, 4 and 10 are met.

<u>Chapter 7: Hazards</u>

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

Policy 3 **The City shall coordinate land use and public facility planning with**

public safety providers (law enforcement, fire safety, and emergency service providers) to ensure their capability to respond to hazard events.

FINDING: The city's public safety providers (law enforcement and Tualatin Valley Fire and Rescue) served as members of the Technical Advisory Committee for this project. The Community Plan and River Terrace Addendum to the Transportation System Plan identify future connections needed to ensure these providers are capable of responding to future hazard events. These connections are intended to provide local and emergency vehicle access within and between new and existing neighborhoods.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 7.1 Policy 3 is met.

<u>Chapter 8: Parks, Recreation, Trails, and Open Space</u>

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 3 **The City shall seek to achieve or exceed the ideal park service level standard of 11.0 acres of parkland per thousand population.**

Policy 4 **The City shall endeavor to develop neighborhood parks [or neighborhood park facilities within other parks, such as a linear park] located within a half mile of every resident to provide access to active and passive recreation opportunities for residents of all ages.**

Policy 19 **The City shall seek to establish and manage a fully functional urban forest.**

FINDING: River Terrace Community Plan Goal 8: Parks, Recreation, Trails, and Open Space supports the city's adopted park goals and policies. No new goals or policies are needed to implement the park recommendations for River Terrace.

The city's adopted Level of service (LOS) standards for parks were used in planning for the River Terrace. Community Plan Table 5-2 describes River Terrace park standards, needs, and recommendations. Overall, the city is proposing to exceed the city's (updated) core standard by over 37 acres. The full range of park types is envisioned in River Terrace to provide access for both active and passive recreation. In lieu of identifying specific park locations, parks are conceptually located within service areas to show where community and neighborhood parks would be needed to meet LOS standards and achieve the goal of having an equitable distribution of parks in the area.

Additionally, adoption of the proposed River Terrace Community Plan and Significant Tree Groves map will extend the city's urban forestry program to River Terrace. The River Terrace area has nine significant tree grove sites totaling 61 acres.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 8.1 Policies 3, 4 and 19 are met.

Goal 8.2 Create a Citywide network of interconnected on- and off-road pedestrian and bicycle trails.

Policy 1 **The City shall create an interconnected regional and local system of on- and off-road trails and paths that link together neighborhoods, parks, open spaces, major urban activity centers, and regional recreational opportunities utilizing both public property and easements on private property.**

FINDING: The River Terrace Community Plan addresses trails in two sections - Goal 8: Parks, Recreation, Trails, and Open Space and Goal 12: Transportation. As stated in the Community Plan, the River Terrace Transportation System Plan Addendum envisions a comprehensive trail system for pedestrians and cyclists that links the many existing natural resources areas, proposed parks, future schools and services, and other planned regional trails in the area. The trail system is consistent with the River Terrace Park System Master Plan Addendum, the city's Strategic Plan for walkability, and the Metro Regional Trails and Greenways Plan.

The River Terrace Community Plan shows trails more specifically located than parks. The River Terrace Trail, whose design has been uniquely integrated with the main North-South Collector Street known as River Terrace Boulevard was planned, in part, to complement Metro's Westside Trail.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 8.2 Policy 1 is met.

<u>Chapter 10: Housing</u>

Goal 10.1 Provide opportunities for a variety of housing types at a range of price levels to meet the diverse housing needs of current and future City residents.

Policy 1 **The City shall adopt and maintain land use policies, codes, and standards that provide opportunities to develop a variety of housing types that meet the needs, preferences and financial capabilities of Tigard's present and future residents.**

Policy 2 **The City's land use program shall be consistent with applicable state and federal laws.**

FINDING: The River Terrace Community Plan addresses the city's Goal 10: Housing for River Terrace. The Community Plan supports the city's adopted housing goals and policies. Almost 97% of the buildable land in River Terrace is proposed for new housing.

River Terrace stakeholders prioritized a range of residential densities to provide diverse housing types, a variety of housing choices, and integration with existing adjacent Bull Mountain neighborhoods when designing the land use framework for River Terrace. The proposed land uses meet state and Metro requirements for density and the opportunity for attached housing.

The city's existing affordable housing program will apply to River Terrace. Updates to the citywide program are expected in 2015.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 10.1 Policies 1 and 2 are met.

Goal 10.2 Maintain a high level of residential livability.

Policy 2 **The City shall seek to provide multi-modal transportation access from residential neighborhoods to transit stops, commercial services, employment, and other activity centers.**

Policy 5 **The City shall encourage housing that supports sustainable development patterns by promoting the efficient use of land, conservation of natural resources, easy access to public transit and other efficient modes of transportation, easy access to services and parks, resource efficient design and construction, and the use of renewable energy resources.**

Policy 6 **The City shall promote innovative and well-designed housing development through application of planned developments and community design standards for multi-family housing.**

Policy 7 **The City shall ensure that residential densities are appropriately related to locational characteristics and site conditions such as the presence of natural hazards and natural resources, availability of public facilities and services, and existing land use patterns.**

Policy 8 **The City shall require measures to mitigate the adverse impacts from differing, or more intense, land uses on residential living environments, such as:**
A. orderly transitions from one residential density to another;
B. protection of existing vegetation, natural resources and provision of open space areas; and
C. installation of landscaping and effective buffering and screening.

FINDING: This CPA, through the River Terrace Community Plan and TSP Addendum, proposes a multi-modal transportation system that is designed to connect River Terrace to existing and future neighborhoods, services, parks, schools

and regional destinations through a hierarchy of streets and trails that provide residents and visitors with convenient, safe and comfortable travel options. This network of multi-modal streets conforms to the rolling topography, builds upon and connects to existing streets in the area, and effectively balances safety, comfort and mobility.

The Comprehensive Plan designations place higher residential densities near commercial and institutional uses and along major corridors in order to reduce dependency on vehicles. Lower residential densities are planned in areas with steep slopes and along the area's eastern edge to provide a buffer between existing lower density neighborhoods and future higher density neighborhoods. The River Terrace Community plan encourages the co-location of land uses (e.g. parks and trails), public facilities (e.g. stormwater facilities and pump stations), and natural resource areas to maximize the efficient use of land and to create opportunities for community amenities.

The city's current development code, specifically relating to buffering and screening, will apply to the River Terrace area ensuring orderly transition of residential densities. The city's current Planned Development regulations will also apply to River Terrace. The city intends to propose changes to the Planned development code to implement the River Terrace Community Plan. These amendments are anticipated to be reviewed by Planning Commission and Council in February 2015.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 10.2 Policies 2, 5, 6, 7 and 8 are met.

Chapter 11: 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.

Policy 2 **The City shall continue to collaborate with Clean Water Services in the planning, operation, and maintenance of a comprehensive stormwater management system.**

Policy 3 **The City shall require the stormwater management system to comply with all applicable federal, state, and regional regulations and programs.**

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.

Policy 7 **The City shall encourage low impact development practices and other measures that reduce the amount of, and/or treat, stormwater runoff at the source.**

Policy 8 **The City shall develop sustainable funding mechanisms:**
A. for stormwater system maintenance;
B. to improve deficiencies within the existing system; and
C. to implement stormwater system improvements identified in the Capital Improvement Plan.

FINDING: Community Plan Goal 11: Public Facilities and Services addresses stormwater management in River Terrace. The River Terrace Stormwater Master Plan, and by extension, the River Terrace Community Plan support the city's adopted stormwater management goals and policies.

- The River Terrace Stormwater Master Plan and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11.
- The strategies recommended in the River Terrace Stormwater Master Plan are based upon Clean Water Services (CWS) Design and Construction Standards and the CWS Low Impact Development Approaches (LIDA) Handbook. In addition, it reflects the city's intention to adopt new design standards for the River Terrace area in collaboration with CWS on or before the adoption of the Community Plan.
- There are two water quality strategies recommended in River Terrace: (1) Low Impact Development Approaches (LIDA) at a variety of scales, and (2) regional water quality facilities that offer community benefits in addition to stormwater management
- The River Terrace Stormwater Master Plan has already been adopted.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.1 Policies 1, 2, 3, 6, 7 and 8 are met.

Goal 11.2 Secure a reliable, high quality, water supply to meet the existing and future needs of the community.

Policy 2 **The City shall develop and maintain a water system master plan to coordinate the improvement and expansion of Tigard Water Service Area infrastructure to serve current and projected demand.**

FINDING: Community Plan Goal 11: Public Facilities and Services addresses water supply and distribution in River Terrace. The River Terrace Water System Master Plan Addendum and, by extension, the River Terrace Community Plan support the city's adopted water supply goals and policies.

- The city's Water System Master Plan (WSMP) addresses water supply capacity needs and guides water system infrastructure improvements

in the Tigard Water Service Area.

- The River Terrace Water System Master Plan Addendum has already been adopted.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.2 Policy 2 is met.

Goal 11.3 Develop and maintain a wastewater collection system that meets the existing and future needs of the community.

Policy 1 **The City shall require that all new development:**
A. connect to the public wastewater system and pay a connection fee;
B. construct the appropriate wastewater infrastructure; and
C. comply with adopted plans and standards for wastewater management.

Policy 2 **The City shall continue to collaborate with Clean Water Services in the planning, operation, and maintenance of a comprehensive wastewater management system for current and projected Tigard residents.**

Policy 3 **The City shall require the wastewater management system to comply with all applicable federal, state, and regional regulations and programs.**

FINDING: Community Plan Goal 11: Public Facilities and Services addresses sanitary sewer management in River Terrace. The River Terrace Sanitary Sewer Master Plan Addendum and, by extension, the River Terrace Community Plan support the city's adopted sanitary sewer goals and policies.

- The River Terrace Sanitary Sewer Master Plan Addendum and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11.
- The River Terrace Sanitary Sewer Master Plan Addendum addresses sanitary sewer management for the River Terrace plan area.
- The River Terrace Sanitary Sewer Master Plan Addendum has already been adopted.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.3 Policies 1, 2 and 3 are met.

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

Policy 1 **The City shall support the provision of accessible public facilities and services through ensuring adequate administrative and general governance services.**
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Policy 5 **The City shall work in conjunction with partner agencies and districts in the planning and locating of their new facilities.**

Policy 7 **The City shall coordinate with the school districts to address capacity needs associated with population growth.**

FINDING: The River Terrace Community Plan, in conjunction with the River Terrace Funding Strategy, provides a framework for urban development through the timely, orderly and efficient provision of public facilities and services in River Terrace. The city worked with agencies including, but not limited to, Clean Water Services, Washington County, the Tigard Tualatin School District, and the City of Beaverton on planning for public facilities. This collaboration with other agencies will continue into the future as River Terrace develops.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.4 Policies 1, 5 and 7 are met.

Chapter 12: Transportation

Goal 12.1 *Develop mutually supportive land use and transportation plans to enhance the livability of the community.*

Policy 1 **The City shall plan for a transportation system that meets current community needs and anticipated growth and development.**

Policy 3 **The City shall maintain and enhance transportation functionality by emphasizing multi-modal travel options for all types of land uses.**

Policy 4 **The City shall promote land uses and transportation investments that promote balanced transportation options.**

Policy 5 **The City shall develop plans for major transportation corridors and provide appropriate land uses in and adjacent to those corridors.**

Policy 6 **The City shall support land use patterns that reduce greenhouse gas emissions and preserve the function of the transportation system.**

Policy 7 **The City shall strive to protect the natural environment from impacts derived from transportation facilities.**

Policy 9 **The City shall coordinate with private and public developers to provide access via a safe, efficient, and balanced transportation system.**

FINDING: River Terrace Community Plan Goal 12: Transportation addresses transportation planning for the River Terrace area. The River Terrace Transportation System Plan (TSP) Addendum and, by extension, the River Terrace Community Plan support the city's adopted transportation goals and policies.

- Land use was a key factor in development of the River Terrace TSP Addendum. The impact of the increased vehicle trip generation on

the surrounding transportation system, as a result of the recommended land uses, was evaluated through the year 2035. The highest level of potential development for the River Terrace area (2,587 households and 149 employees) was assumed. The result is a set of transportation improvements and standards that updates the Tigard TSP for the River Terrace area.

- The streets in River Terrace are designed to accommodate all modes of travel for users of all ages and abilities where possible. They are also designed to safely connect people to where they need to go, providing residents and visitors with a number of travel choices to their destinations. The streets are also envisioned to be more than just places for automobile travel, recognizing that they are also where people gather, walk, bike, access transit, and park their vehicles.
- Comprehensive Plan designations place higher residential densities near commercial and institutional uses and along major corridors to reduce dependency on vehicles.
- The TSP Addendum envisions a comprehensive trail system for pedestrians and cyclists that links the many existing natural resource areas, proposed parks, future schools and services, and other planned regional trails in the area.
- The TSP Addendum recognizes that street alignments and intersections should avoid and/or minimize impacts to identified natural resource areas wherever possible.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.1 Policies 1, 3, 4, 5, 6, 7 and 9 are met.

Goal 12.2 Develop and maintain a transportation system for the efficient movement of people and goods.

Policy 3 **The City shall design streets to encourage a reduction in trip length by improving arterial, collector, and local street connections.**

Policy 4 **The City shall design arterial routes, highway access, and adjacent land uses in ways that facilitate the efficient movement of people, goods and services.**

Policy 6 **The City shall develop and maintain an efficient arterial grid system that provides access within the City, and serves through traffic in the City.**

FINDING: The River Terrace Community Plan acknowledges that the existing major streets in and around River Terrace serve an important regional through-travel function and will benefit new residents by connecting them to regional destinations. The following streets in/near the River Terrace area are classified as arterials: Beef Bend Road, Roy Rogers Road, and Scholls Ferry Road. These streets serve the highest volume of motor vehicle traffic and are expected to be utilized for longer distance regional trips.

In addition to connecting to existing major streets, the River Terrace TSP Addendum also proposes connections to existing local streets located to the east of River Terrace in existing Bull Mountain neighborhoods. These connections are consistent with the city's existing transportation policies on connectivity for reducing trip length, providing an efficient transportation network, and maximizing the investment in the existing transportation system.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.2 Policies 3, 4 and 6 are met.

Goal 12.3 Provide and accessible, multi-modal transportation system that meets the mobility needs of the community.

Policy 4 **The City shall support and prioritize bicycle, pedestrian, and transit improvements for transportation disadvantaged populations who may be dependent on travel modes other than private automobile.**

Policy 5 **The City shall develop and maintain neighborhood and local connections to provide efficient circulation in and out of the neighborhoods.**

Policy 8 **The City shall design all projects on Tigard city streets to encourage pedestrian and bicycle travel.**

Policy 10 **The City shall require and/or facilitate the construction of off-street trails to develop pedestrian and bicycle connections that cannot be provided by a street.**

Policy 11 **The City shall require appropriate access to bicycle and pedestrian facilities for all schools, parks, public facilities, and commercial areas.**

FINDING: The River Terrace Community Plan envisions an interconnected network of multi-modal streets, one that conforms to the rolling topography and builds upon and connects with the existing streets in the area. The streets are designed to accommodate all modes of travel for users of all ages and abilities where possible. They are also designed to safely connect people to where they need to go, providing residents and visitors with a number of travel choices to their destinations. Connections to existing streets in adjacent Bull Mountain neighborhoods to the east will improve street connectivity in the area.

Residents in the River Terrace area will be able to safely and efficiently travel between destinations via any number of active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks, schools, and commercial areas—improving the overall health and livability of the neighborhood.

River Terrace has many stream corridors and the potential for many neighborhood and community parks. To best serve the needs of future

residents to travel to these scenic, natural, and recreational areas, a high quality network of low-stress pedestrian and bicycle facilities is envisioned. For pedestrians, sidewalks will be required on all future streets. For bicyclists, dedicated facilities will vary based on the street classification. Arterial and collector streets will have either bike lanes or shared use paths, with consideration for a buffered bike lane or cycle track along Roy Rogers Road.

Additionally, the pedestrian and bicycle facilities in River Terrace are planned to be fully integrated with the existing trail and bikeway network and the planned active transportation projects in the Metro Regional Trail and Greenways Plan. These measures will help ensure that future River Terrace residents will be able to access goods and services on foot and by bicycle, both within and outside of the area.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.3 Policies 4, 5, 8, 10 and 11 are met.

Goal 12.4 Maintain and improve transportation system safety.

Policy 1 **The City shall consider the intended uses of a street during the design to promote safety, efficiency, and multi-modal needs.**

Policy 2 **The City shall coordinate with appropriate agencies to provide safe, secure, connected, and desirable pedestrian, bicycle, and public transit facilities.**

FINDING: The River Terrace Community Plan and TSP Addendum state that residents in the River Terrace area will be able to safely and efficiently travel between destinations via any number of active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks, schools, and commercial areas—improving the overall health and livability of the neighborhood.

For pedestrians, sidewalks will be required on all future streets. For bicyclists, dedicated facilities will vary based on the street classification. Arterial and collector streets will have either bike lanes or shared use paths, with consideration for a buffered bike lane or cycle track along Roy Rogers Road.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.4 Policies 1 and 2 are met.

Goal 12.5 Coordinate planning, development, operation, and maintenance of the transportation system with appropriate agencies.

Policy 1 **The City shall coordinate and cooperate with adjacent agencies and service providers—including Metro, TriMet, ODOT, Washington County, and neighboring cities—when appropriate, to develop transportation projects which benefit the region as a whole, in addition**

to the City of Tigard.

FINDING: The transportation projects listed in the TSP Addendum were created with guidance from the Technical Advisory Committee (TAC). The TAC included members from Metro, Oregon Department of Transportation, the City of Beaverton, and Washington County, as well as other affected agencies and jurisdictions.

The City sent out a 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 of this Staff Report.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.5 Policy 1 is met.

<u>Chapter 13: Energy Conservation</u>

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.

FINDING: This CPA supports the city's adopted energy conservation goals and policies. No new goals or policies are being proposed.

The River Terrace Community Plan and TSP Addendum envision that residents in the River Terrace area will be able to safely and efficiently travel between destinations via any number of active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks, schools, and commercial areas.

The Comprehensive Plan designations place higher residential densities near commercial and institutional uses and along major corridors, potentially reducing vehicle dependency making transit a viable option in the future.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 13.1 Policy 1 is met.

<u>Chapter 14: Urbanization</u>

Goal 14.1 Provide and/or coordinate the full range of urban level services to lands and citizens within the Tigard City Limits.

Policy 1 **The City shall only approve the extension of City services:**
A. where applications for annexation for those properties have been approved; or
B. in circumstances where applicable state and county health agencies have declared a potential or imminent health hazard pursuant to ORS 431.705 to 431.760 (Health Hazard Annexation or Service District Formation); or
C. as outlined in the intergovernmental agreement regarding water provision within the Tigard Water Service Area.

Policy 3 **The City shall, as needed, coordinate and/or participate in planning activities or development decisions within the Tigard Urban Services Area.**

FINDING: Community Plan Goal 14: Urbanization addresses the city's urbanization policies for River Terrace.

- The River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively provide for the orderly and efficient transition of River Terrace from rural to urban land use. These plans are consistent with Metro Functional Plan Titles 11 and 14 and Statewide Planning Goal 14 for accommodating future population growth, ensuring the efficient use of land and creating livable communities.
- The Community Plan also meets Metro Functional Plan Title 11 and Statewide Planning Goal 11 requirements for ensuring that areas like River Terrace, which have been brought into the Urban Growth Boundary (UGB) for urban development purposes, are efficiently urbanized and developed as complete communities.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 14.1 Policies 1 and 3 are met.

Goal 14.2 ***Implement the Tigard Urban Services Agreement through all reasonable and necessary steps, including the appropriate annexation of unincorporated properties.***

Policy 6 **The City shall periodically update and/or amend its Public Facility Plan to ensure the predictable and logical provision of urban services for areas anticipated to be within the Tigard city limits.**

FINDING: This CPA updates the transportation section of the Public Facility Plan through incorporating the River Terrace TSP Addendum. The River Terrace TSP Addendum is an update to the adopted plan and ensures the most reliable, up-to-date information, is being used to plan for the community's transportation needs into the future. The River Terrace TSP Addendum also ensures compliance with Oregon Administrative Rule 660-012, which governs transportation system development in the state and requires conformance with the Regional Transportation Plan.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 14.2 Policy 6 is met.

APPLICABLE METRO REGULATIONS

Urban Growth Management Functional Plan

Title 1 **Housing Capacity - The Regional Framework Plan calls for a compact urban form and a "fair-share" approach to meeting regional housing needs. It is the purpose of Title 1 to accomplish these policies by requiring each city and county to maintain or increase its housing capacity.**

FINDING: Title 1 facilitates the efficient use of land within the Urban Growth Boundary (UGB). This Title requires cities and counties to determine their capacity for housing and adopt minimum density requirements. Title 1 also requires cities and counties to report changes in capacity annually to Metro.

This amendment (CPA2014-00001) adopts the River Terrace Community Plan, Comprehensive Plan designations, Natural Resource maps and a River Terrace Transportation System Plan Addendum, which was completed following the rules outlined in OAR 660, Division 7. The amendment sets policy related to a 20-year supply of land and does not affect compliance with Title 1.

Both Metro and Oregon Department of Land Conservation and Development staff were provided the opportunity to review and comment on all work leading up to the documents proposed for adoption as members of the Technical Advisory Committee.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 1 is met.

Title 3 **Water Quality and Flood Management - To protect the beneficial water uses and functions and values of resources within the Water Quality and Flood Management Areas by limiting or mitigating the impact on these areas from development activities and protecting life and property from dangers associated with flooding.**

FINDING: Metro's Title 3 requires that cities and counties adopt provisions that protect life and property from flooding. The Natural Resource maps proposed for adoption update existing city maps that regulate wetland and riparian areas in the River Terrace area. Detailed inventory work was required to update each map and was completed as part of the West Bull Mountain and River Terrace planning processes. By adopting wetland and riparian area maps for River Terrace and applying the city's Sensitive Lands regulations to the area, the city is ensuring that River Terrace is in compliance with Title 3.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 3 is met.

Title 11 **Planning for New Urban Areas - The Regional Framework Plan calls for long-range planning to ensure that areas brought into the UGB are urbanized efficiently and become or contribute to mixed-use, walkable, transit friendly communities. It is the purpose of Title 11 to guide such long-range planning for urban reserves and areas added to the UGB. It is also the purpose of Title 11 to provide interim protection for areas added to the UGB until city or county amendments to land use regulations to allow urbanization become applicable to the areas.**

FINDING: This CPA meets the requirements of Metro Functional Plan Title 11 for ensuring that areas like River Terrace, which have been brought into the Urban Growth Boundary (UGB) for urban development purposes, are efficiently urbanized and developed as complete communities.

The River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively provide for the orderly and efficient transition of River Terrace from rural to urban land use. These plans are consistent with Metro Functional Plan Titles 11 and 14 and Statewide Planning Goal 14 for accommodating future population growth, ensuring the efficient use of land and creating livable communities. They also further the city's goal of facilitating development in River Terrace in a way that results in high-quality development, natural resource protection and the provision of essential public facilities and services in a coordinated, logical and fiscally sound manner.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 11 is met.

Title 13 **Nature in Neighborhoods - The purposes of this program are to (1) 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 (2) to control and prevent water pollution for the protection of the public health and safety, and to maintain and improve water quality throughout the region.**

FINDING: By expanding the city's natural resource program to include the River Terrace area, the city is ensuring that River Terrace is in compliance with Title 13. River Terrace will utilize the same natural resource protection programs as the rest of the city. Implementation of these programs will occur through the adoption of several inventories and maps that provide various levels of natural resource assessment and protection as well as development flexibility.

The River Terrace Community Plan addresses natural resources and speaks to the city's coordination and inventory of significant natural resources in River Terrace.

- The Natural Resource maps proposed for adoption update existing city maps that regulate tree groves, habitat conservation areas, and wetland and riparian areas to include the River Terrace area. Detailed inventory work was required to update each map and completed as part of the West Bull Mountain and River Terrace planning processes.
- The SWG, TAC, community, and outside agencies had an opportunity to review each map. Since the natural resource maps are very technical in nature and were developed using existing policies and standards, the Stakeholder Working Group was not asked to recommend them for adoption. They were, however, given multiple opportunities to review and understand their implications.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 13 is met.

THE STATEWIDE PLANNING GOALS AND GUIDELINES ADOPTED UNDER OREGON REVISED STATUTES CHAPTER 197

The city's Comprehensive Plan incorporated the Statewide Planning Goals and was acknowledged by the state as being in compliance with state law; therefore, the Statewide Goals are addressed under the Comprehensive Plan Policies Sections. The following Statewide Planning Goals are applicable:

Goal 1: Citizen Involvement; Goal 2: Land Use Planning; Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces; Goal 6: Air, Water and Land Resources Quality; Goal 7: Areas subject to Natural Hazards; Goal 8: Recreational Needs; Goal 10: Housing; Goal 11: Public Facilities and Services; Goal 12: Transportation; Goal 13: Energy Conservation; Goal 14: Urbanization.

SECTION VI. ADDITIONAL CITY STAFF COMMENTS

Tigard Police Department, (Jim Wolf, 503-718-2561) had an opportunity to review this proposal and provided comments regarding the importance of connectivity. Mr. Wolf stated that street connectivity provides for efficient police travel and response times to emergencies. However, he also noted that connectivity may also provide criminals with more ways to flee the scene of a crime as well as result in increased traffic volume and unlawful speeds on certain streets.

The City of Tigard's Current Planning Division, Administrative Department, Development Services Division (Engineering), and Public Works Department had an opportunity to review this proposal and had no objections. Numerous staff from the Finance and Public Works Departments were involved throughout the entire planning process, including sitting on the project's Technical Advisory Committee.

SECTION VII. OUTSIDE AGENCY COMMENTS

The following agencies/jurisdictions had an opportunity to review this proposal and did not respond:

City of King City
Metro Land Use and Planning
Oregon Department of Environmental Quality
Oregon Department of Fish and Wildlife
Oregon Division of State Lands
Oregon Public Utilities Commission
US Army Corps of Engineers
Century Link
Clean Water Services
Comcast Cable
Metro Area Communications Commission
NW Natural
Portland General Electric
Tigard Tualatin School District #23J
Tualatin Valley Fire and Rescue
Tri-Met
Verizon

City of Beaverton had an opportunity to review this proposal and had no objections. They expressed appreciation for having the opportunity to coordinate the River Terrace and South Cooper Mountain projects.

Beaverton School District #48 had an opportunity to review this proposal and provided comments expressing support for the adoption of the River Terrace Community Plan. The District acknowledges the importance of providing safe pedestrian and vehicle access to the future high school site. The District appreciates the fact that the River Terrace transportation proposal incorporates pedestrian trails.

Washington County, Department of Land Use and Transportation had an opportunity to review this proposal and provided comments regarding the level of detail on several transportation improvements on county roads identified in the River Terrace Community Plan and River Terrace Addendum to the Transportation System Plan. Washington County agreed that it was prudent to delay the adoption of zoning districts.

Oregon Department of Land Conservation and Development had an opportunity to review this proposal and provided comments stating that the River Terrace Community Plan should address the requirements of the Metropolitan Housing Rule. In addition, it was noted that improvements or extensions to county roads outside the Urban Growth Boundary cannot be "planned." It was advised to identify these roads as "conceptual" or "recommended".

Oregon Department of Transportation, Region 1 had an opportunity to review this proposal and provided a clarification to the River Terrace Addendum to the Transportation System Plan stating that for projects listed in Table 6, ODOT is the jurisdiction that owns part of the listed intersections, but is not responsible for, and has not committed to funding the listed

improvements. ODOT also provided a few additions and clarifications to the Recommended Action Measures for Transportation (page 8-5) in the River Terrace Community Plan.

The River Terrace Community Plan and River Terrace Transportation System Plan Addendum have subsequently been modified in response to these comments.

SECTION VIII. PUBLIC COMMENTS

The Planning Commission received and considered both written and oral comments from residents and stakeholders as part of their deliberations on November 17, 2014.

Written comments were submitted by the following interested parties:

- Marc Butorac and Kelly Laustsen; Kittelson & Associates, letter dated Sep 4, 2014
- Don Hanson; Otak, letter dated Oct 31, 2014
- Jamie Stasny; Metropolitan Land Group, letter Oct 31, 2014
- Andrea Bonard, letter dated Nov 14, 2014
- Barbara and Steve Jacobson, letter dated Nov 14, 2014
- Alita Anne and Michael McCleskey, letter dated Nov 15, 2014
- Daniel and Pat Knox, email dated Nov 17, 2014
- Fred Gast; Polygon Northwest, letter dated Nov 15, 2014
- Kelly S. Hossaini; Miller Nash, LLP, letter dated Nov 17, 2014

Oral comments were submitted by the following individuals:

- Don Hanson; Otak
- Christopher Brehmer; Kittelson & Associates
- Kelly S. Hossaini; Miller Nash, LLP
- Jamie Stasny; Metropolitan Land Group
- Jim Lange; Pacific Community Design
- Barbara and Steve Jacobson; 15915 SW 150th Avenue, Tigard, OR 97224
- Alita Anne and Michael McCleskey; 15590 SW April Lane, Tigard, OR 97224

Listed below are the main highlights from the oral and written comments received. The full text of all comments can be found in the project file and Planning Commission minutes of November 17, 2014.

- River Terrace Boulevard is too expensive and too wide:
    - The design should be revised to reduce cost.
    - Design flexibility is needed along the entire length to respond to land uses, topography, and stream crossings.
    - The concept design illustration should be removed to eliminate the expectation that the full cross section will be built in all locations.
    - Minimum and standard cross sections should be developed and shown alongside the full cross section.

- The easternmost segment of the River Terrace Trail should be relocated or revised to show a less specific alignment.
- The 161st Avenue extension project should be added to the near-term TSP project list to facilitate access to the school property.
- The River Terrace Community Plan map should not show specific street alignments or intersection treatments. In the alternative, it should include the same design flexibility language as the Transportation System Plan (TSP) map.

The Planning Commission was presented copies of all written comments and heard all oral testimony before rendering four unanimous motions to recommend approval of the River Terrace Community Plan, updates to the Comprehensive Plan Designations Map and Natural Resource Maps, and the River Terrace Addendum to the city's Transportation System Plan (TSP). Commissioners supported keeping the River Terrace Boulevard illustration and the River Terrace Trail alignment in the Community Plan and TSP in part due to allowances for design and alignment flexibility already contained in the proposed amendments. Commissioners also preferred to leave the 161st Avenue extension off the TSP near-term project list, as it is atypical for a Neighborhood Route to be publicly funded. Overall, the Planning Commission found the project to meet all relevant approval criteria pertaining to the issues raised by the public.

SECTION IX. 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, the Planning Commission recommends that the City Council adopt by ordinance a Comprehensive Plan Amendment that adopts all of the following documents as determined through the public hearing process:

1. River Terrace Community Plan and associated amendments to the Comprehensive Plan Designations Map and Natural Resource Maps; and
2. River Terrace Addendum to the city's Transportation System Plan.

PREPARED BY: John Floyd
Associate Planner

December 2, 2014
DATE

APPROVED BY: Kenny Asher
Community Development Director

December 2, 2014
DATE

CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
ORDINANCE NO. 14-_____

AN ORDINANCE ADOPTING THE RIVER TERRACE TRANSPORTATION SYSTEM PLAN ADDENDUM AS PART OF THE CITY OF TIGARD'S TRANSPORTATION SYSTEM PLAN FOR THE FUTURE ACCOMMODATION OF MULTIMODAL TRANSPORTATION NEEDS WITHIN THE RIVER TERRACE COMMUNITY PLAN AREA

WHEREAS, the City of Tigard annexed the properties in River Terrace in 2011 and 2013; and

WHEREAS, the City of Tigard has an existing Transportation System Plan (TSP) that does not include the River Terrace area, and

WHEREAS, the City of Tigard has completed a TSP Addendum specific to the River Terrace area, contributing to the city's broader goal of completing the River Terrace Community Plan and meeting state requirements for public facility planning, and

WHEREAS, multimodal transportation projects have been identified as part of the TSP Addendum, and

WHEREAS, these projects are appropriate and necessary additions to the City of Tigard TSP, and

WHEREAS, the City of Tigard may desire to use transportation development tax (TDT) charges to fund part of these projects, and

WHEREAS, the City of Tigard may desire to adopt additional fees and/or charges to fund part of these projects, and

WHEREAS, a comprehensive funding strategy for all public facility projects in River Terrace will be developed as part of the River Terrace Funding Strategy. This strategy will include a list of projects to complete in the near term and recommended funding sources.

WHEREAS, on November 17, 2014, the Tigard Planning Commission held a public hearing, which was noticed in accordance with city standards, and recommended approval of the proposed River Terrace TSP Addendum by motion and with vote in support; and

WHEREAS, on December 16, 2014, the Tigard City Council held a public hearing, which was noticed in accordance with city standards, to consider the Planning Commission's recommendation on the River Terrace TSP Addendum, hear public testimony, and apply applicable decision-making criteria; and

WHEREAS, on December 16, 2014, the Tigard City Council adopted the River Terrace TSP Addendum pursuant to the public hearing and its deliberations; and

WHEREAS, Tigard City Council's decision to adopt the River Terrace TSP Addendum was based on the findings and conclusions found in Exhibit B and the associated land use record, which is incorporated herein by reference and contained in land use file CPA 2014-00001.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: The River Terrace TSP Addendum is hereby adopted as part of the City of Tigard Transportation System Plan as shown in Exhibit A.

SECTION 2: The projects identified in the River Terrace TSP Addendum shall be eligible for funding from transportation development tax charges (TDTs) as allowed under Tigard Municipal Code Section 3.24.060 and Washington County Ordinance 691-A, as amended.

SECTION 3: Tigard City Council adopts the findings and conclusions contained in Exhibit B in support of this action and as the legislative basis for this ordinance.

SECTION 4: This ordinance shall be effective 30 days after its passage by Tigard City 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 _____, 2014.

_____
Carol Krager, City Recorder

APPROVED: By Tigard City Council this _____ day of _____, 2014.

_____
John Cook, Mayor

Approved as to form:

_____
City Attorney

EXHIBIT A

City *of* Tigard

DEC. 2014

River Terrace

Transportation System Plan Addendum

City of Tigard
Transportation System Plan Addendum

December 2014

ACKNOWLEDGEMENTS

We would like to thank the many citizens, staff, and community groups who provided extensive input into the development of this Transportation System Plan Addendum. Special thanks are due to the members of the River Terrace Technical Advisory Committee and Stakeholder Working Group.

CITY STAFF

Kenny Asher, Community Development Director
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Judith Gray, Senior Transportation Planner
Michael Stone, City Engineer
Mike McCarthy, Senior Project Engineer
Marissa Grass, Associate Planner

This addendum was completed by DKS Associates of Portland, Oregon, Principal – Carl Springer and Transportation Planner – Kevin Chewuk.

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Introduction

In 2010, the City of Tigard updated the community's Transportation System Plan, hereafter referred to as the TSP. The TSP serves as a long term guide for city transportation investments by incorporating the vision of the community into an equitable and efficient transportation system. It evaluates the current transportation system and outlines policies and projects that are important to protecting and enhancing the quality of life in Tigard through the next 20 years by balancing the needs of walking, bicycling, driving, transit and freight. The City Council adopted the TSP on November 23, 2010.

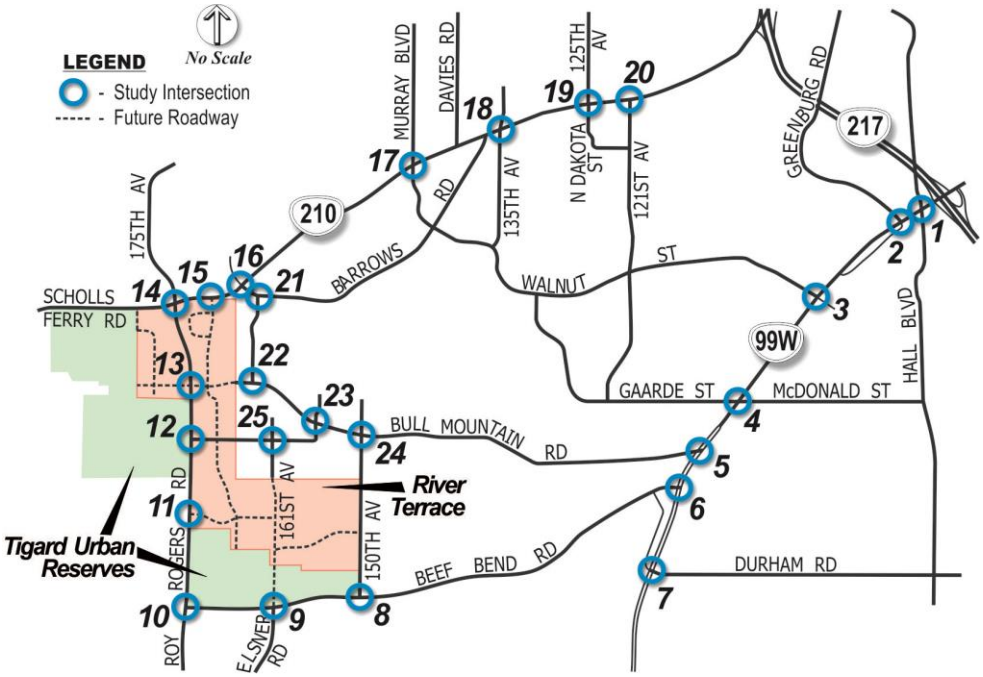
Since the adoption of the TSP in 2010, the West Bull Mountain Concept Plan (WBMCP) was completed and adopted by Washington County and the city. The area now known as River Terrace (and formerly known as West Bull Mountain) was also annexed to the city. This addendum provides an update to the TSP specific to the River Terrace study area and contributes to the city's broader goal of completing a River Terrace Community Plan.

The nearly 500 acres encompassing the River Terrace Community Plan study area was brought into the Metro Urban Growth Boundary in 2002 and 2011 to accommodate future growth. This land, coupled with adjacent City of Tigard Urban Reserves, was studied to identify appropriate areas for urbanization, natural resource protection, and trunk infrastructure. Prior to establishing and as a part of adopting the needed zoning to allow for development in suitable areas, the city was required to update all public facilities plans, including the TSP. This effort began with the West Bull Mountain Concept Plan, which will serve as the foundation for the River Terrace Community Plan, upon which new information obtained from this system analysis and stakeholder input was used to address changing transportation needs in the area.

Lands within the River Terrace Community Plan study area are within the Urban Growth Boundary (UGB) and will be addressed in this community plan to describe their intended zoning and development implementation. Lands within the Urban Reserve are not available for urban development until they are brought into the UGB.

This transportation system analysis includes two levels, local and regional. The local level analysis includes the immediate River Terrace Community Plan study area, and is generally bounded by Scholls Ferry Road to the north, Beef Bend Road to the south, Roshak Road/ 150th Avenue to the east, and Roy Rogers Road to the west. The regional level analysis includes several major streets that provide connections to the River Terrace Community Plan study area. The 25 intersections shown in Figure 1 have been identified as study intersections.

Figure 1: Study Area



Transportation Vision for River Terrace

The River Terrace Community Plan envisions an interconnected network of multi-modal streets, one that conforms to the rolling topography and builds upon and connects with the existing streets in the area. The streets are designed to accommodate all modes of travel for users of all ages and abilities where possible. They are also designed to safely connect people to where they need to go, providing residents and visitors with a number of travel choices to their destinations. The streets are also envisioned to be more than just places for automobile travel, recognizing that they are also where people gather, walk, bike, access transit, and park their vehicles.

As a major street connection through the River Terrace area, Roy Rogers Road will continue to connect residents, commuters, and visitors to the regional transportation system. It will be designed in a manner to serve the through travel demand, while still being viewed as an asset to the neighborhood rather than a barrier. Those walking and cycling will be accommodated with safe and comfortable facilities along the street and at each street intersection. For those driving, the street will be widened to four travel lanes with a center turn lane or median.

To the east and west of Roy Rogers Road will be a connected network of streets and shared-use paths providing on- and off-street connections to schools, parks, housing and shopping. Primary street connections to Roy Rogers Road for those driving in the River Terrace area will be via Lorenzo Lane, Bull Mountain Road, and a new street located midway between Bull Mountain Road and Beef Bend Road. These streets will employ design techniques to create safe, slow streets without significantly

changing vehicle capacity. These design techniques will help mitigate the impacts of traffic on adjacent residences and effectively balance safety, comfort, and mobility.

Those walking and biking in the River Terrace area will be accommodated primarily through sidewalks, off-street trails, or on-street shared facilities. Bike lanes, or parallel off-street facilities, will be required along the major street system (i.e. along arterial and collector streets). Off the main street system will be a network of comfortable, low-stress walking and biking routes between neighborhoods and local parks, schools, and shopping areas.

South Cooper Mountain Concept Plan Coordination

The City of Beaverton is currently involved in a concept planning process for the South Cooper Mountain annexation area, located northwest of the Scholls Ferry Road/175th Avenue intersection. The long range build-out of this area (both UGB areas and Urban Reserves) is estimated to include over 8,100 housing units and more than 450 jobs. These updated housing and employment assumptions for the South Cooper Mountain Concept Plan were incorporated into the traffic analysis work for the River Terrace Community Plan to coordinate these two parallel planning efforts. This helped to more accurately forecast future traffic volumes along streets in the area, including regional routes such as Scholls Ferry Road and 175th Avenue-Roy Rogers Road that provide primary access to both sites.

Future Growth in River Terrace

Land use is a key factor in developing a functional transportation system. The amount of land that is planned to be developed, the type of land uses, and how the land uses are mixed together have a direct relationship to the expected demands on the transportation system. Understanding the amount and type of land use is critical to maintaining or enhancing transportation system operations.

The nearly 500 acres in the River Terrace Community Plan area were designated with specific land uses in the West Bull Mountain Concept Plan. These land uses were adopted by the city of Tigard in 2012. They serve as the foundation for the development of zoning in the River Terrace Community Plan area.

The impact of the increased vehicle trip generation on the surrounding transportation system, as a result of the adopted land uses, was evaluated through the year 2035. The new information obtained from this system analysis was used to refine the recommendations contained in the West Bull Mountain Concept Plan. The result is a set of transportation improvements and standards that updates the Tigard TSP for the River Terrace area.

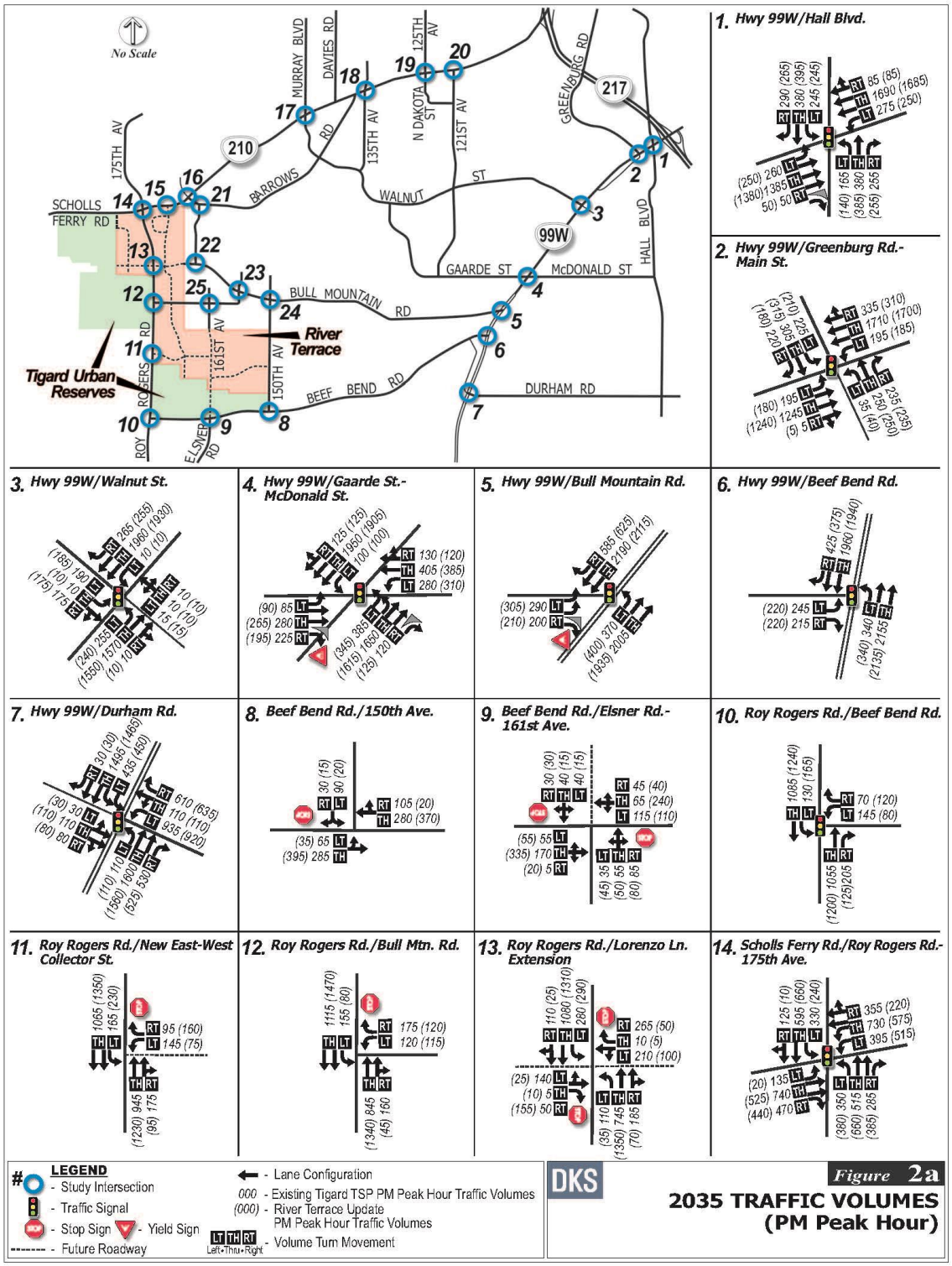
Traffic Forecasting

Future traffic forecasts were prepared for 2035 for two major scenarios:

- **2035 Existing Tigard TSP** – This scenario assumes the land uses within Washington County's version of Metro's Regional Travel Demand Forecast Model. This scenario includes 3,294 households and 391 employees in the River Terrace area and closely matches the forecast of the 2010 Tigard Transportation System Plan.[1] It assumes build-out of the urban reserves in the region outside of the City of Tigard planning influence area, and some growth within the Tigard urban reserves. It also includes the improvement projects listed in the "Baseline Transportation System Improvements" section and the traffic volumes shown in Figures 2a and 2b.
- **2035 River Terrace Update** – This scenario assumes the highest level of potential development for the River Terrace area (2,587 households and 149 employees). It assumes build-out of the urban reserves in the region outside of the City of Tigard planning influence area (e.g. South Copper Mountain area), but no growth within the Tigard urban reserves. It also includes the improvement projects listed in the "Baseline Transportation System Improvements" section and the traffic volumes shown in Figures 2a and 2b.

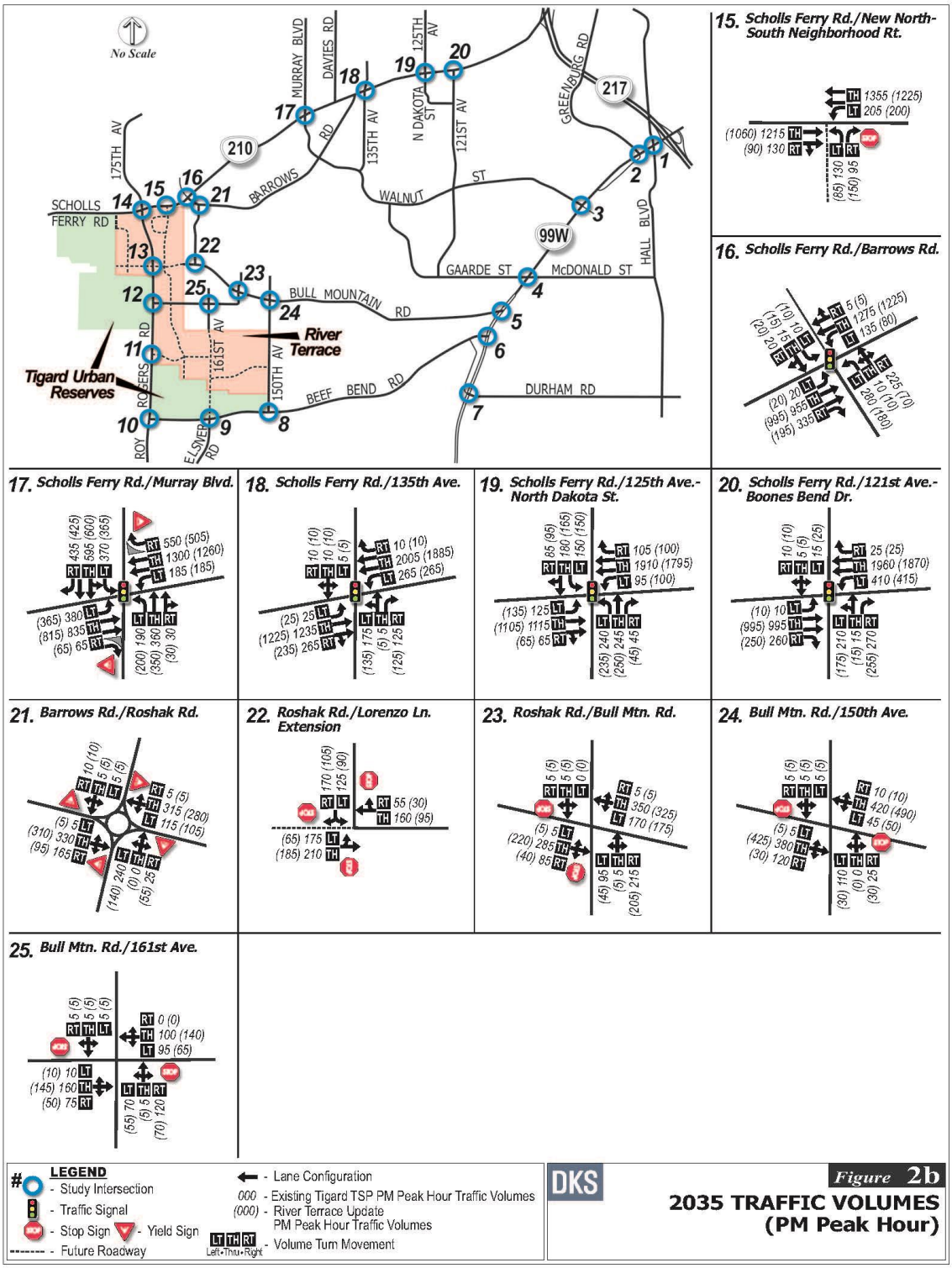
[1] This scenario is assumed to closely match the forecast of the 2010 Tigard TSP, but is not identical since different versions of the Regional Travel Demand Model were used. The land uses are based on the disaggregated Washington County Model.

Figure 2a: 2035 Traffic Volumes (PM Peak)



City of Tigard River Terrace community plan

Figure 2b: 2035 Traffic Volumes (PM Peak)



City of Tigard River Terrace community plan

Baseline Transportation System Improvements

The starting point for the 2035 system analysis relied on the list of street system improvement projects located in the study area or at study intersections contained in the Tigard, Beaverton, and Washington County Transportation System Plans. Since these projects are expected to be funded (i.e. are identified as financially constrained), they were used in the baseline traffic forecasts for the River Terrace Community Plan analysis for 2035. In addition, the street extensions envisioned in the West Bull Mountain Concept Plan were assumed, despite not being funded, since they will be needed before development can occur. The improvements that were assumed include:

- Lorenzo Lane extension, Woodhue Street extension, 161st Avenue extension, two north-to-south routes (one to the east and one west of Roy Rogers Road), and two east-to-west routes south of Bull Mountain Road (Source: West Bull Mountain Concept Plan)
- Scholls Ferry Road widening to five lanes from Teal-Horizon Boulevard to west of 175th Avenue-Roy Rogers Road (Source: Washington County)
- Roy Rogers Road widening to five lanes from just north of Scholls Ferry Road to the south Urban Growth Boundary, north of Beef Bend Road[2] (Source: Draft Washington County TSP)
- Traffic signal installation at the Roy Rogers Road/Beef Bend Road intersection (Source: Washington County)
- Durham Road widening to five lanes from Highway 99W to Upper Boones Ferry Road (Source: Tigard TSP Project # 39 and # 40)
- Davies Road extension from Scholls Ferry Road to Barrows Road, and closure of the existing Barrows Road (east) connection to Scholls Ferry Road (Source: Beaverton TSP Project # 41 and # 252)
- Highway 99W/ Gaarde Street-McDonald Street intersection improvements to include widening Highway 99W to add a third southbound through lane, a second northbound left turn lane and a northbound right turn lane, and widening Gaarde-McDonald Street to add a second through lane (Source: Tigard TSP Project # 66k)

In addition, several non-specific improvement projects were identified at study intersections along Highway 99W in the Tigard Transportation System Plan. This includes improvements at the Walnut Street, and Durham Road intersections. Further refinement is necessary to determine the extent of improvements that could be achieved with the allocated TSP budget at each of these locations. Lacking these specific details, no baseline improvements were assumed to occur at these intersections despite being financially constrained in the Tigard Transportation System Plan.

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[2] This project is included in the Draft Washington County TSP and is assumed to be needed by 2035.

Estimating Driving Trips

A determination of future street network needs requires the ability to accurately forecast travel demand resulting from estimates of future population and employment in the River Terrace study area, and the rest of the city and Metro region. The objective of the transportation planning process is to provide the information necessary for making decisions about how and where improvements should be made to create a safe and efficient transportation system.

The travel demand forecasting process generally involves estimating travel patterns for new development based on the decisions and preferences demonstrated by existing residents, employers and institutions around the region. Travel demand models are mathematical tools that help us understand future commuter, school and recreational travel patterns including information about the length, mode and time of day a trip will be made. The latest travel models are suitable for motor vehicle and transit planning purposes, and can produce total volumes for autos, trucks and buses on each street and highway in the system. Model forecasts are refined by comparing outputs with observed counts and behaviors on the local transportation system. This refinement step is completed before any evaluation of system performance is made. Once the traffic forecasting process is complete, the 2035 volumes are used to determine the areas of the street network that are expected to be congested and that may need future investments to accommodate growth.

Washington County has a travel demand model that is based on Metro's regional travel demand model. For River Terrace, the Washington County travel demand model was refined to reflect the proposed land use and roadway network.

Land Use and Motor Vehicle Trip Assumptions

The zoning developed during the River Terrace Community Plan process equates to about 2,587 housing units and a neighborhood commercial/mixed-use area with approximately 40,000 square feet. To convert concept plans of neighborhood commercial land uses into forecasts in the travel demand model, estimates of land use by acreage were converted into employment figures (i.e. number of retail employees or other employees). Table 1 describes the assumptions that were used. In the Tigard TSP, vehicle trips within the River Terrace area were estimated based on around 700 additional housing units[3], i.e. 3,294 vs. 2,587 housing units as shown in Table 1.

[3] The land uses in the urban and urban reserve areas of River Terrace were combined into a single Transportation Analysis Zone (TAZ) in the disaggregated Washington County Model used for the "Existing Tigard TSP" scenario. They have since been separated. This is one of the reasons why there are more housing units in the "Existing Tigard TSP" scenario than in the "River Terrace Update" scenario.

Future vehicle trips generated by the River Terrace area were estimated by applying travel demand model trip generation rates by land use type, which were developed based on the rates in the existing Bull Mountain neighborhoods just to the east of the River Terrace area. Overall, the River Terrace Community Plan area is expected to generate about 1,500 motor vehicle trips during the p.m. peak hour, or about 100 less than what is currently assumed in the Tigard TSP, i.e. 1,580 vs. 1,489 trips as shown in Table 1.

Table 1: Land Use Assumptions for the River Terrace Community Plan

Scenario	Housing Units	Retail Employees	Other Employees	PM Peak Hour Vehicle Trips Ends
2035 Existing Tigard TSP *	3,294	43	348	1,580
2035 River Terrace Update	2,587	29	120	1,489

*Based on the disaggregated Washington County Model

2035 Motor Vehicle Operations

Motor vehicle conditions were evaluated during the 2035 evening peak hour at the twenty-five intersections reviewed. The evaluation utilized 2000 Highway Capacity Manual methodology for signalized and 2010 Highway Capacity Manual methodology for unsignalized intersections.

After assuming the transportation system improvement projects with expected funding contained in the Tigard, Beaverton and Washington County Transportation System Plans, several intersections are expected to exceed mobility targets under each scenario (as shown in Table 2). Many of these intersections were previously forecasted to exceed standards in the Tigard, Beaverton, and Washington County Transportation System Plans. In fact, the "2035 River Terrace Update" scenario has slightly better operations at many intersections than reported in the Tigard TSP since the level of development would be less than assumed in the "2035 Existing Tigard TSP" scenario.

The recommended improvements for the intersections that are expected to exceed mobility targets can be seen in Table 3. It should be noted that the Metro Regional Transportation Plan, Tigard Transportation System Plan, Washington County Transportation System Plan, and West Bull Mountain Concept Plan recommend various improvements, including intersection improvements along Highway 99W at the Walnut Street, Gaarde Street-McDonald Street, and Durham Road intersections; widening of Roy Rogers Road to five lanes; and installation of traffic signals at the Roy Rogers Road/ New E-W Collector Street, Roy Rogers Road/ Bull Mountain Road, and Roy Rogers Road/ Lorenzo Lane Extension intersections. This updated system analysis reaffirms the need for capacity and safety improvements at these locations.

Table 2: Motor Vehicle Operations (PM Peak Period)

ID	Intersection (traffic control)**	Mobility Target	2013 Existing Conditions		2035 Existing Tigard TSP		2035 River Terrace Update	
			V/C	LOS	V/C	LOS	V/C	LOS
1	Highway 99W/ Hall Boulevard (signalized)	0.99 v/c	0.81	D	0.98	E	0.97	E
2	Highway 99W/ Greenburg Road-Main Street (signalized)	0.99 v/c	0.76*	C	0.94	E	0.92	D
3	Highway 99W/ Walnut Street (signalized)	0.99 v/c	0.76*	B	**1.03**	C	0.93	C
4	Highway 99W/ Gaarde Street-McDonald Street (signalized)	0.99 v/c	0.89*	C	0.96	D	0.95	D
5	Highway 99W/ Bull Mountain Road (signalized)	0.99 v/c	0.77*	B	**1.03**	C	**1.03**	D
6	Highway 99W/ Beef Bend Road (signalized)	0.99 v/c	0.85	C	**1.01**	D	0.99	D
7	Highway 99W/ Durham Road (signalized)	0.99 v/c	0.90	E	**1.17**	**F**	**1.15**	**F**
8	Beef Bend Road/ 150th Avenue (unsignalized)	0.99 v/c	0.10	B	0.32	C	0.09	C
9	Beef Bend Road/ Elsner Road-161st Avenue extension (unsignalized)	0.99 v/c	0.03	B	0.40	C	0.65	E
10	Roy Rogers Road/ Beef Bend Road (signalized)***	0.90 v/c	**0.99**	**F**	0.87	C	0.93	D
11	Roy Rogers Road/ New E-W Collector Street (unsignalized)***	0.99 v/c	-	-	**>1.50**	**F**	**>1.50**	**F**
12	Roy Rogers Road/ Bull Mountain Road (unsignalized)***	0.99 v/c	0.34	E	**>1.50**	**F**	**>1.50**	**F**
13	Roy Rogers Road/ Lorenzo Lane Extension (unsignalized)***	0.99 v/c	-	-	**>1.50**	**F**	**>1.50**	**F**
14	Scholls Ferry Road/ Roy Rogers Road-175th Avenue (signalized)***	0.99 v/c	0.92	D	**1.06**	**F**	0.87	D
15	Scholls Ferry Road/ New N-S Collector Street (unsignalized)	0.99 v/c	-	-	**>1.50**	**F**	**>1.50**	**F**
16	Scholls Ferry Road/ Barrows Road (signalized)	0.99 v/c	0.58	B	0.72	C	0.61	B
17	Scholls Ferry Road/ Murray Boulevard (signalized)	0.99 v/c	0.85	D	**1.06**	**F**	**1.04**	**F**
18	Scholls Ferry Road/ 135th Avenue (signalized)	0.99 v/c	0.61	A	0.87	C	0.79	B
19	Scholls Ferry Road/ 125th Avenue-North Dakota Street (signalized)	0.99 v/c	0.77	C	**1.00**	E	0.96	E
20	Scholls Ferry Road/ 121st Avenue (signalized)	0.99 v/c	0.68	B	0.82	C	0.76	B
21	Barrows Road/ Roshak Road (roundabout)	0.99 v/c	0.34	A	0.56	B	0.43	A
22	Roshak Road/ Lorenzo Lane extension (unsignalized)	0.99 v/c	-	-	0.61	C	0.35	B
23	Roshak Road/ Bull Mountain Road (unsignalized)	0.99 v/c	0.30	C	**1.21**	**F**	0.70	D
24	Bull Mountain Road/ 150th Avenue (unsignalized)	0.99 v/c	0.15	B	0.72	**F**	0.27	D
25	Bull Mountain Road/ 161st Avenue (unsignalized)	0.99 v/c	0.03	B	0.37	C	0.24	B

Bolded red values indicate intersection exceeds the v/c (volume/capacity) mobility target or operates with a Level of service "F".

* Intersection is impacted by queuing from adjacent intersections along Highway 99W. Travel demand may not always be served, thus the intersection may operate closer to capacity at times during peak periods.

** V/C ratio, LOS and delay reported as the intersection average at signalized locations and worst stop controlled approach at unsignalized locations

*** Roy Rogers Road was assumed to be widened to five lanes by 2035.

Table 3: Recommended Intersection Improvements

ID	Intersection (existing traffic control)	Mobility Target	2035 with Planned Intersection Solution V/C	LOS	Planned Intersection Solution
5	Highway 99W/ Bull Mountain Road (signalized)	0.99 v/c	*	*	Improvements such as additional northbound left turn lane (would require an additional receiving lane on Bull Mountain Road)
7	Highway 99W/ Durham Road (signalized)	0.99 v/c	*	*	Improvements such as additional turn lanes (Source: Tigard TSP Project # 66n)
11	Roy Rogers Road/ New E-W Collector Street (unsignalized)	0.99 v/c	0.67	B	Widen Roy Rogers Road to 5 lanes; Install a traffic signal (Source: West Bull Mountain Concept Plan)
12	Roy Rogers Road/ Bull Mountain Road (unsignalized)	0.99 v/c	0.66	B	Widen Roy Rogers Road to 5 lanes; Install a traffic signal (Source: Draft Washington County TSP; West Bull Mountain Concept Plan)
13	Roy Rogers Road/ Lorenzo Lane Extension (unsignalized)	0.99 v/c	0.82	C	Widen Roy Rogers Road to 5 lanes; Install a traffic signal (Source: Draft Washington County TSP; West Bull Mountain Concept Plan)
14	Scholls Ferry Road/ Roy Rogers Road-175th Avenue (signalized)	0.99 v/c	0.88	D	Widen Roy Rogers Road to 5 lanes (Source: Draft Washington County TSP; West Bull Mountain Concept Plan)
15	Scholls Ferry Road/ New N-S Collector Street (unsignalized)	0.99 v/c	0.36	C	Restrict access to right-in, right-out, left-in only
17	Scholls Ferry Road/ Murray Boulevard (signalized)	0.99 v/c	**1.07**	**F**	Enhanced transit and other demand management options**

Bolded red values indicate intersection exceeds the v/c (volume/capacity) mobility target or operates with a level of service "F".

* Due to the range of potential solutions at these intersections, the intersection operations with a planned solution could not be evaluated. It was assumed that these investments would allow the intersections to meet mobility targets.

** This intersection is within the City of Beaverton and under Washington County jurisdiction. Capacity issues have been identified at this intersection, but no feasible motor vehicle capacity solutions could be identified at this time. Long range planning efforts for South Cooper Mountain in Beaverton may provide other solutions.

Sensitivity Analysis

A few scenarios were tested to help supplement the ultimate design recommendations for the new N-S Collector Street and the future intersection with Scholls Ferry Road. These scenarios are discussed below.

- *Traffic control at the New N-S Collector Street/ Scholls Ferry Road intersection*

  This scenario tested the traffic control at the Scholls Ferry Road/ New N-S Collector Street intersection with and without a traffic signal. With a traffic signal, full motor vehicle access would be allowed at the intersection. Without a signal, access would be limited to right-in, right-out, and

left-in only. Left turns from the new N-S Collector Street to Scholls Ferry Road would be prohibited.

An unsignalized intersection would have little impact during the evening peak period since the left-turn demand from the new N-S Collector Street to Scholls Ferry Road is not expected to be significant. However, drivers (around 90 trips during the morning peak and 85 trips during the evening peak periods, plus others throughout the day) would have to re-route to either Roshak Road or Roy Rogers Road to access Scholls Ferry Road. Operations at the two adjacent intersections (Scholls Ferry Road/ Roy Rogers Road-175th Avenue and Scholls Ferry Road/ Barrows Road), would also not be expected to be significantly impacted.

A signalized intersection, on the other hand, would potentially impact westbound approaches to both the Roy Rogers Road-175th Avenue and new N-S Collector Street intersections. However, drivers wishing to travel west on Scholls Ferry Road would not have to travel out of direction or travel through the adjacent Bull Mountain neighborhood to the east. A signalized intersection at this location meets Washington County's signal and intersection spacing standards and may likely meet signal warrants in the future.

The final recommendation includes a signal at the Scholls Ferry Road/ New N-S Collector intersection to minimize impacts to the adjacent neighborhood to the east and to provide a signalized crossing for pedestrians and bicyclists at this location. The nearest intersections to the east and west are approximately 1,000 feet away. All intersection improvements must meet operational standards and the signal must meet warrants. If signal construction becomes infeasible or the road authority does not allow it, then a grade separated (bridge or tunnel) pedestrian crossing should be considered at this location.

- *Alignment of the New N-S Collector Street between Scholls Ferry Road and the Lorenzo Lane extension*

  This scenario tested different alignments for the new N-S Collector Street between Scholls Ferry Road and the Lorenzo Lane extension, with one alignment being more direct and the other being more circuitous. Overall, the more direct alignment is expected to attract more drivers who would have previously used Roshak Road or Roy Rogers Road to access Scholls Ferry Road.[4] The more direct alignment is expected to slightly reduce motor vehicle travel demand along both of these adjacent routes. This, however, does not take the design of the street into consideration, which would also significantly affect driver behavior.

  The final recommendation includes a more direct route and utilizes design treatments to encourage slow travel speeds while allowing for efficient through movements. The more direct route also avoids impacts to a significant tree grove.

[4] This finding is based on professional judgment. The travel demand model is not sensitive enough to test subtle street alignment changes.

- *Cross-section of the New N-S Collector Street*

  This scenario tested the impacts of the new N-S Collector Street with two travel lanes (one travel lane in each direction) and three travel lanes (one travel lane in each direction with a center turn lane/median). Overall, the three-lane cross-section provides slightly more motor vehicle capacity than the two-lane cross-section. While left-turn demand at mid-block locations along the new N-S Collector Street is expected to be minimal, the center lane could be used for landscaping or pedestrian crossing refuges, acting as a way to visually narrow the paved street width. It could also provide an opportunity to more effectively manage access to the new N-S Collector Street by limiting the locations where full access is allowed.

  The final recommendation includes a landscaped median that is wide enough to allow for left turn lanes at specific locations where warranted.

Street Functional Classification

To manage the street network, streets in the River Terrace Community Plan area are classified based on a hierarchy according to the intended purpose of each street, as shown in Figure 3. From highest to lowest intended vehicular usage, the classifications are arterials, collectors, neighborhood routes, and local streets. Streets with a higher intended usage generally provide more efficient traffic movement (or mobility), while streets with lower intended usage provide greater access for shorter trips to local destinations such as businesses or residences.

The recommended functional classifications of streets in the West Bull Mountain Concept Plan were reviewed during the River Terrace Community Plan process against the city's standards and the updated system analysis information. The classifications of two streets, a north-to-south route east of and parallel to Roy Rogers Road (connecting Scholls Ferry Road with the south end of the planning area) and an east-to-west route south of Bull Mountain Road (connecting Roy Rogers Road with the main north-to-south River Terrace street), were changed to collector streets from neighborhood routes to reflect anticipated traffic volumes and to be consistent with other collector streets in the city.

Final street alignments as shown in Figure 3 may change and are subject to final design, engineering, and permitting. Street alignments and intersections should avoid and/or minimize impacts to identified natural resource areas wherever possible.

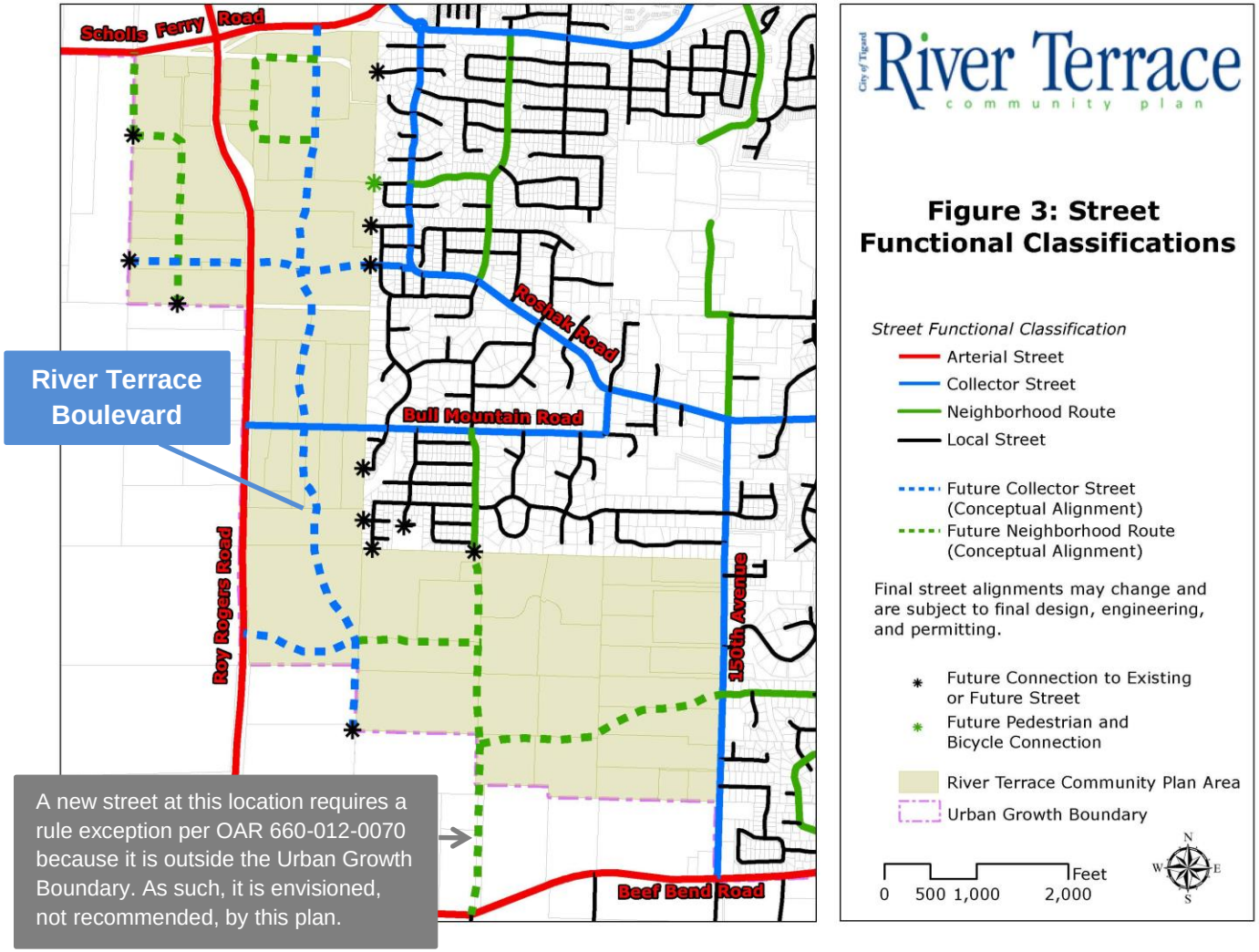
- **Arterials** are intended to serve as the main travel routes. These streets serve the highest volume of motor vehicle traffic and are primarily utilized for longer distance regional trips. The only streets in the River Terrace area classified as arterials are Beef Bend Road, Roy Rogers Road, and Scholls Ferry Road.

- **Collector Streets** are intended to connect many parts of the city and serve traffic traveling to and from arterial streets. These streets provide greater accessibility to neighborhoods, often connecting to major activity generators and provide efficient through movement for local traffic. In the River Terrace area, Bull Mountain Road, 150th Avenue, the Lorenzo Lane extension, a north-to-south route east of and parallel to Roy Rogers Road, and an east-to-west route south of

Bull Mountain Road are classified as collectors.

- **Neighborhood Routes** often connect the neighborhoods to arterial or collector streets. These streets serve as major neighborhood routes and generally provide more direct property access (via driveways) than collector streets. In River Terrace, neighborhood routes are expected to include the Woodhue Street extension, 161st Avenue extension, a north-to-south route west of Roy Rogers Road, and two east-to-west routes south of Bull Mountain Road.
- **Local Streets** provide more direct access to residences without serving through travel. These streets are often lined with residences and are designed to serve lower volumes of traffic with a statutory speed limit of 25 miles per hour. All remaining streets in River Terrace will be designed as local streets.

Figure 3: Street Functional Classifications

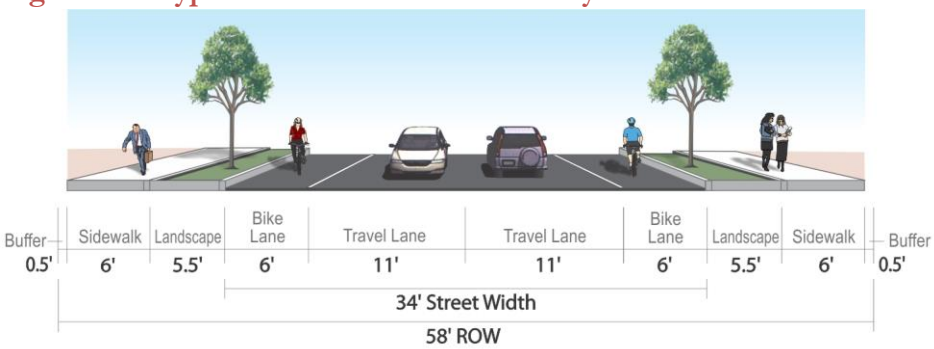


City of Tigard River Terrace community plan

Street Design

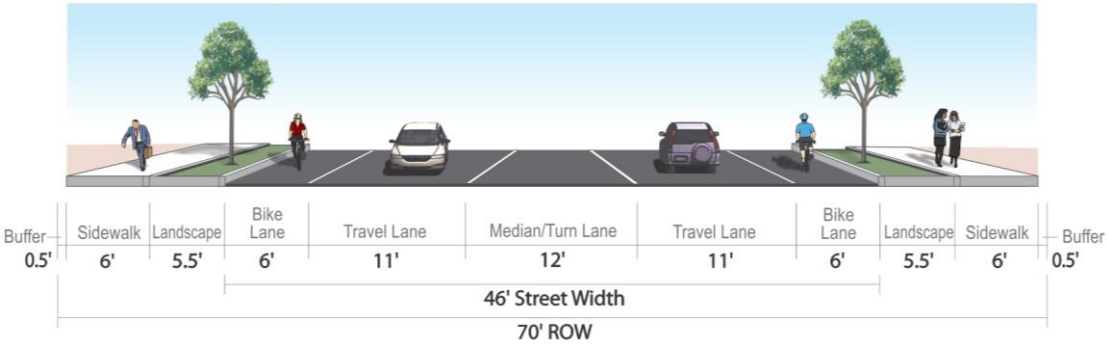
The applicable typical street cross sections for the River Terrace Community Plan area can be seen in Figures 4a, 4b, 4c, and 4d. The recommended street design for the future collector street through the neighborhood commercial area (Lorenzo Lane extension) includes on-street parking, tree wells, and a furnishing zone. This would require a modification to the Tigard Street Utility Improvement Standards, which currently only allows these street elements along collector streets in the downtown urban renewal district. The conceptual street design for the future collector street that runs in a north-south direction parallel to Roy Rogers Road would also require modifications to the city's street design standards to allow for the inclusion of on-street parking and the River Terrace Trail in its design. The location of this street, identified as River Terrace Boulevard, is shown on Figure 3. The conceptual design for it is shown on Figure 5.

Figure 4a: Typical Section for a 2-Lane City Collector



* A shared-use path could replace the required sidewalk and bike lane on the adjacent side of the street.

Figure 4b: Typical Section for a 3-Lane City Collector



* A shared-use path could replace the required sidewalk and bike lane on the adjacent side of the street.

Figure 4c: Typical Section for a Collector in the Community Commercial Zone

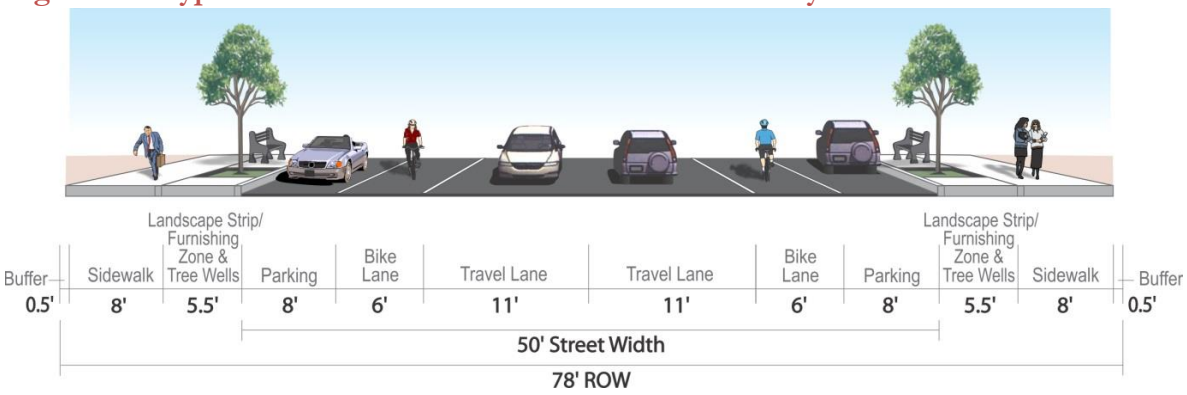
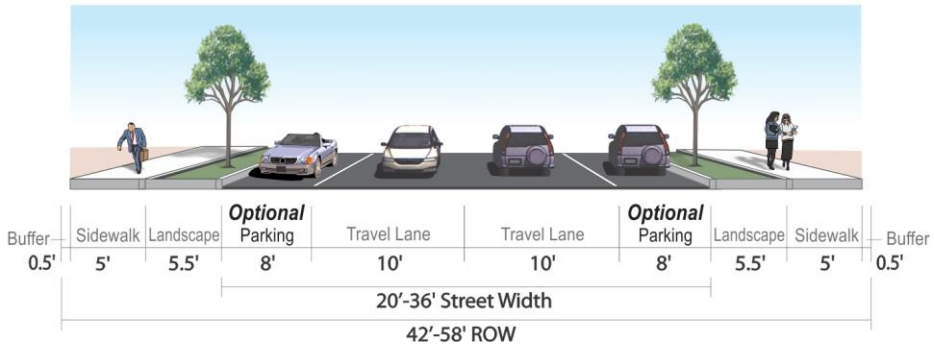
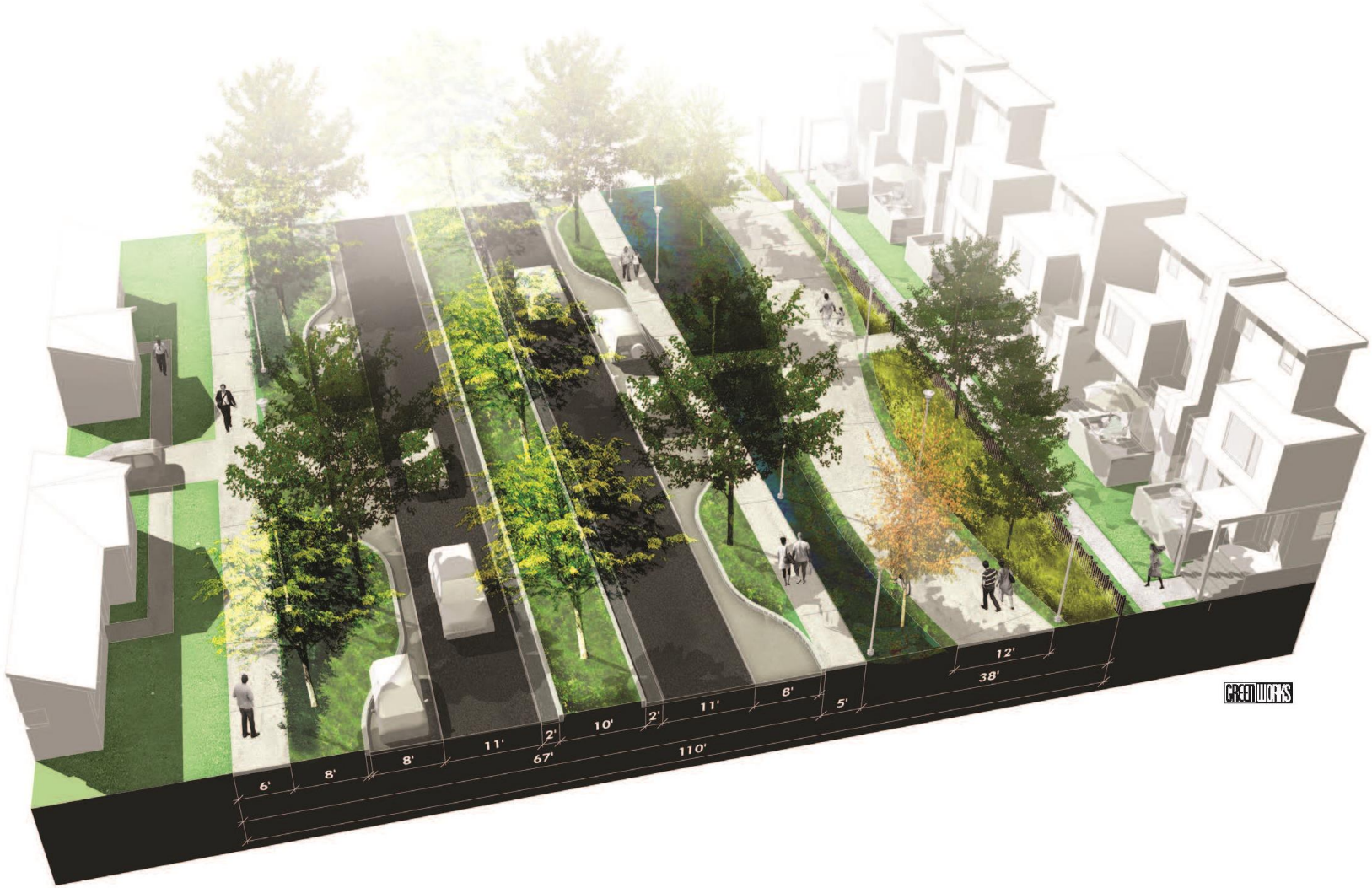


Figure 4d: Typical Section for a City Neighborhood Route



* Optional parking area could also be a bike lane in areas with hilly topography.

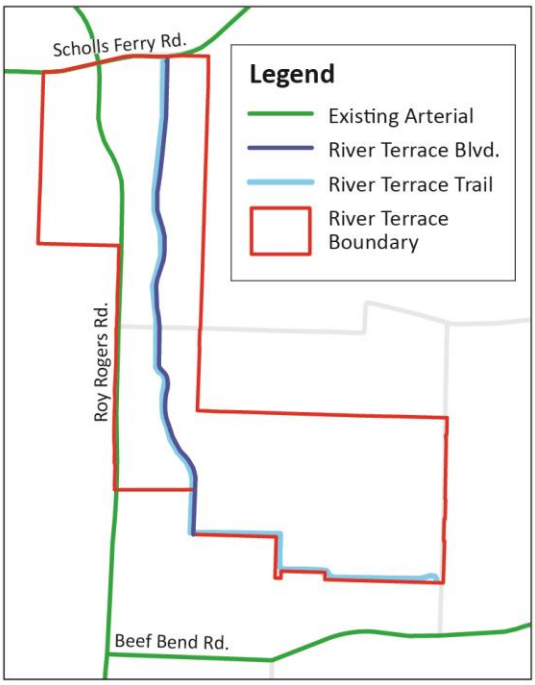
Figure 5: River Terrace Boulevard Design Concept



City of Tigard River Terrace community plan

While the application of typical street cross sections will work in many situations, there are several future streets in the River Terrace area that are in need of additional design treatments or are envisioned to be different from the typical cross sections. They are as follows:

- **The main N-S Collector Street**, also identified as River Terrace Boulevard, is parallel to and east of Roy Rogers Road. It is envisioned as a boulevard that seamlessly integrates the River Terrace Trail into its design, provides safe and comfortable multi-modal travel options, and includes high-quality pedestrian-scale design treatments that defines it as the neighborhood's signature street. A conceptual design for this street is shown in Figure 5. Its location relative to other major streets and the River Terrace Trail is shown on the inset graphic to the left.



Key elements of the design include two vehicle travel lanes divided by a landscaped median, a 12-foot multi-modal trail parallel to the street on the west side,[5] and areas for large street trees along and down the middle of the street. No on-street bicycle facilities are proposed. It is intended for slower-moving bicyclists to use the trail. Faster-moving bicyclists would have the option of using the trail, sharing the street with cars, or using the bicycle facilities on Roy Rogers Road.

In order to successfully balance mobility with safety and comfort, it will be important to control speeds along this street through a variety of design approaches so as to facilitate through travel but not attract cut-through traffic. One potential design treatment involves the construction of roundabouts at key intersections as shown in Figure 7. Traffic calming treatments include on-street parking and a landscaped median and bulbouts that are sizeable enough to support large trees. Such treatments visually narrow the roadway and create friction along the edges, which has been shown to encourage drivers to proceed more slowly and carefully. On the other hand, individual driveways for residences are not proposed, as driveways can significantly interrupt efficient through travel movements.

The overall design of the street should serve to enhance the neighborhood and the adjacent residences and not serve as a barrier or feel unsafe to those who will live on either side of it in the future. Since homes will not access the street directly by car, it will be important to create design standards for street-facing facades and yards to ensure a high-quality and safe public realm.

[5] A trail down the center median was considered and rejected for safety reasons.

Where topography allows, homes should either face the street, with vehicle access taken from side streets, or be oriented with their sides to the street with enough windows to allow for many "eyes on the street" opportunities. Zoning flexibility with respect to housing types will be necessary to support the vision of having homes front the street.

Lastly, it will be important to allow the alignment to shift to the east or west in response to topography and stream crossings. Design flexibility will also be necessary along the entire length to accommodate topography, stream crossings, and different land uses. On-street parking and the westernmost sidewalk, for example, may not always be feasible or necessary in all locations. It may even be desirable to allow exceptions to the city's block length standards in order to reduce the number of trail-side street crossings, thereby creating a more continuous trail experience. In general, the final alignment and design of the River Terrace Boulevard may change subject to engineering, permitting, and emergency vehicle access.

- **The widening of Roy Rogers Road** should include safe and appropriate bicycle and pedestrian facilities along its whole length while continuing to function as a main north-south vehicular route through the region. A buffered bike lane or cycle track should be considered to ensure the highest level of protection for cyclists. Design recommendations include the creation and implementation of a high-quality edge treatment that serves to unify and define the River Terrace area along this segment of the corridor.

An example of street trees placed in the parking lane to visually narrow the street

- **The Lorenzo Lane extension** travels through the only neighborhood commercial area in River Terrace. As such, it will be important to control speeds along this street and make it comfortable for pedestrians and bicyclists. Recommended traffic calming techniques include narrowing of the street width with curb extensions and mid-block chokers or pedestrian refuge islands, and providing visual cues with on-street parking and planted bulbouts in parking lanes. It will also be important to carefully design the future intersection of Lorenzo Lane with Roshak Road, which exists just outside the River Terrace area in unincorporated Washington County.
- **The 161st Avenue extension** connects an existing single family residential neighborhood in the north to Beef Bend Road in the south. With a fairly direct and steep route, it will be important to design this street to make it unattractive to cut-through traffic and to keep travel speeds at safe levels. A roundabout is recommended at the intersection with the Woodhue Street extension, and an all-way stop is recommended at the intersection with the future E-W Neighborhood Route, both of which are near a future school site. The design of the roundabout will be an important factor for controlling motor vehicle travel speeds and ensuring visibility for pedestrians. Potential design solutions to control travel speeds include

curving the road to deflect the path of vehicles, narrowing the width of the travel lanes, and visually narrowing the width of the street by including on-street parking and planted bulbouts in the parking lanes.

- **The Luke Lane extension** provides a local connection option for existing Bull Mountain residents and future River Terrace residents. It will be important to design this extension so as to discourage cut-through traffic. This extension should only be allowed via a circuitous route through a future River Terrace neighborhood to the main N-S Collector Street to the west. It will also be important to retrofit the existing cul-de-sac portion of this street with sidewalks when the street is extended to the west.

Multi-Modal Connectivity

The aggregate effect of local street design impacts the effectiveness of the regional system when local travel is restricted by a lack of connecting routes, and local trips are forced onto the regional network.[6] Therefore, streets should be designed to keep through motor vehicle trips on arterial streets and provide local trips with alternative routes. Street system connectivity is critical because roadway networks provide the backbone for bicycle and pedestrian travel in the region. Metro's local street connectivity principal encourages communities to develop a connected network of local streets to provide a high level of access, comfort, and convenience for bicyclists and walkers that travel to and among centers. To improve connectivity of the region's arterial system and support walking, bicycling and access to transit, the Metro Regional Transportation Functional Plan requires that, to the extent possible, major arterial streets be spaced at one-mile intervals, and minor arterial or collector streets to be spaced at half-mile intervals.[7]

In addition, to improve local access and circulation, and preserve capacity on the region's arterial system, each local Transportation System Plan must include a conceptual map of new streets for all contiguous areas of vacant and redevelopable lots and parcels of five or more acres that are zoned to allow residential or mixed-use development. Full street connections should be provided at least every 530 feet (or 1/10th of a mile) or pedestrian and bicycle connections every 330 feet if a full-street connection is not possible or where the city has identified a need to minimize the number of trail crossings, such as along River Terrace Trail. Cul-de-sac or other closed-end street designs are also restricted to circumstances in which barriers prevent full street extensions and such streets are limited in length to 200 feet and the number of dwellings along the street to no more than 25.

The City of Tigard street spacing standards are consistent with the Metro Regional Transportation Functional Plan, requiring full street connections every 530 feet.[8] The city standards differ slightly

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[6] Metro 2035 Regional Transportation Plan, Local Street Network Concept

[7] Metro Regional Transportation Functional Plan, Section 3.08.110 Street System Design Requirements

[8] City of Tigard Community Development Code, Section 18.810.030, Subsection H

from the regional standards by allowing the perimeter of blocks to measure up to 2,000 feet in length, however, the city requires pedestrian and bicycle connections every 330 feet[9] in these instances, consistent with the regional standard.

A multi-modal connectivity plan for the River Terrace area is shown in Figure 6. It specifies the general location where new streets or shared-use paths could potentially be installed as nearby areas are developed or as the opportunity arises. The purpose of the plan is to ensure that new developments accommodate circulation between adjacent neighborhoods to improve connectivity for all modes of transportation.

Walking and Biking

Residents in the River Terrace area will be able to safely and efficiently travel between destinations via any number of active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks, schools, and commercial areas—improving the overall health and livability of the neighborhood. Figure 6 illustrates the walking and biking network envisioned for the River Terrace Community Plan area.

Walking and Biking Gaps

Due to the rural nature of the abutting land uses, most streets in and around the River Terrace area have not been improved to urban standards and generally lack facilities for pedestrian and bicycle users. The exception is a short segment along Roshak Road, which provides a sidewalk on both sides of the street between Barrows Road and SW 159th Terrace, in an area with newer residential development. However, those walking in the study area typically have to walk along the edge of a street, which at times have posted speeds that range up to 40 miles per hour. These travel speeds are generally not conducive to shared walking and biking travel. Table 4 shows the streets with pedestrian and bicycle facilities.

A cyclist riding along the shoulder of Roy Rogers Road

Most of the major streets connecting the River Terrace area to nearby shopping and employment, including Scholls Ferry Road, Roy Rogers Road, Beef Bend Road, Bull Mountain Road, and 150th Avenue, lack adequate pedestrian and bicycle facilities. These streets are under the jurisdiction of Washington County, and will require further coordination before any improvements are implemented.

Scholls Ferry Road, as an east-to-west through-street traversing reasonably flat terrain, is an important connection for bicycle travel in the study area. It provides a link for bicyclists to other key routes in the region, including Roy Rogers Road and Murray Boulevard.

[9] City of Tigard Community Development Code, Section 18.810.040

It has been designated as a bike route, but lacks bike lanes along much of the corridor, although a shoulder of varying width is provided along much of the street. Bike lanes are provided along Scholls Ferry Road east of Teal Boulevard-Horizon Boulevard; however, bicyclists from the study area must ride along the shoulder for over a mile before reaching this facility. Scholls Ferry Road is currently being widened through the River Terrace area and will include continuous bike lanes to Teal Boulevard-Horizon Boulevard once construction is complete. Roy Rogers Road is also a designated bike route that provides a north-to-south connection to and within the study area. It provides accommodations for bicyclists via a shoulder bikeway.

Table 4: Existing Pedestrian and Bicycle Facilities

Roadway (limits)	Pedestrian Facilities	Bike Facilities
Roy Rogers Road (Scholls Ferry Road to Beef Bend Road)	Shoulder	Shoulder
Scholls Ferry Road (Roy Rogers Road to Barrows Road)	Shoulder	Shoulder
Beef Bend Road (Roy Rogers Road to 150th Avenue)	None	None
Bull Mountain Road (Roy Rogers Road to Roshak Road)	Intermittent sidewalks	None
150th Avenue (Bull Mountain Road to Beef Bend Road)	Intermittent sidewalks	None
Roshak Road (Barrows Road to Bull Mountain Road)	Sidewalks on both sides north of SW 159th Terrace; intermittent on west side south of SW 159th Terrace	None
Barrows Road (Scholls Ferry Road to Roshak Road)	Sidewalks on north side	None (Bike lanes east of Roshak Road)

Walking and Biking Improvements

River Terrace has many stream corridors and the potential for many neighborhood and community parks. To best serve the needs of future residents to travel to these scenic, natural, and recreational areas, a high quality network of low-stress pedestrian and bicycle facilities is envisioned. For pedestrians, sidewalks will be required on all future streets. For bicyclists, dedicated facilities will vary based on the street classification. Arterial and collector streets will have either bike lanes or shared use paths, with consideration for a buffered bike lane or cycle track along Roy Rogers Road.

Additionally, the pedestrian and bicycle facilities in River Terrace are planned to be fully integrated with the existing trail and bikeway network and the planned active transportation projects in the

Metro Regional Trail and Greenways Plan. These measures will help ensure that future River Terrace residents will be able to access goods and services on foot and by bicycle, both within and outside of the area.

While motor vehicle traffic volumes on collector and neighborhood streets, like the new N-S Collector Street and the 161st Avenue extension, are expected to be within typical ranges for those facilities, the rolling topography provides challenges. This condition is generally not conducive to shared walking and biking travel, and may require some streets to include bike lanes that would typically not (such as on neighborhood routes).

Trails

Figure 6 illustrates the potential active transportation network for the River Terrace Community Plan area. The emphasis of this network is on connecting residents to existing and future trails, as defined in the Metro Regional Trail and Greenways Plan, as well as key destinations within and near the River Terrace Community Plan area, including the neighborhood commercial area in the north and the future school in the south.

The future River Terrace Trail will be integrated with the new N-S Collector Street, connecting the proposed trail on the north side of Scholls Ferry Road (as part of Beaverton's South Cooper Mountain Concept Plan) with 150th Avenue, north of Beef Bend Road. It will provide an alternate and less steep walking and biking route to the Westside Trail, located to the east of the River Terrace area. In addition, the future Southern Access Trail will connect the River Terrace Trail near the Woodhue Street Extension/ 161st Avenue Extension intersection with 150th Avenue, north of Woodhue Street, and will offer views of the valley.

Future connections from the River Terrace area to the Westside Trail will be possible via a trail just south of Scholls Ferry Road, linking the northern end of the River Terrace Trail to Barrows Road, and a future trail connecting the southern end of the River Terrace Trail with the Beef Bend Road/ 150th Avenue intersection. Future connections from the River Terrace area to the Ice Age Tonquin Trail will be possible via a trail linking the New E-W Collector Street/ New N-S Collector Street intersection with the Roy Rogers Road/ Beef Bend Road intersection.

Street Crossings

River Terrace is surrounded by three major streets, namely Scholls Ferry Road to the north, Roy Rogers Road to the west, and Beef Bend Road to the south.

As a major street connection through the River Terrace area, Roy Rogers Road should be designed to be an asset to the neighborhood rather than a barrier. Roy Rogers Road is currently a two lane rural arterial street with posted speeds between 45 and 55 miles per hour, but it is expected to be widened and improved to urban standards in the future. With the River Terrace commercial area and the future school site on the east side of the street and residential neighborhoods on both sides of the

street, safe and comfortable pedestrian and bicycle crossings must be provided in convenient areas to encourage ease of access between the neighborhoods and to the commercial area and future school.

Crossings along Roy Rogers Road must comply with the Washington County mid-block crossing policy.[10] Each proposed crossing would have to be evaluated based on existing and planned roadway characteristics, observed speeds and volumes, pedestrian trip generators, proximity of existing traffic signals, sight distance, topography and other considerations. At-grade crossings are not permitted within 300 feet of an existing signalized intersection. Due to the travel speeds, and expected widening of Roy Rogers Road, the County standard would likely require pedestrian actuated signals/beacons or pedestrian over- or under-crossings. Since traffic signals will likely be needed at several proposed and existing intersections along Roy Rogers Road between Scholls Ferry Road and Beef Bend Road (see Figure 6), including the Lorenzo Lane extension, Bull Mountain Road, and the new E-W Collector south of Bull Mountain Road, no additional crossings of Roy Rogers Road are recommended.

Scholls Ferry Road is currently being widened to urban standards. River Terrace residents will need safe and convenient places to cross to access the new proposed high school at the northwest corner of Scholls Ferry Road and Roy Rogers Road, various future South Cooper Mountain trails, and other services and amenities to the north. As envisioned, the new N-S Collector Street currently intersects Scholls Ferry Road approximately half way between the Roy Rogers Road/ Scholls Ferry Road and the Barrows Road/ Scholls Ferry Road intersections. The new N-S Collector Street is expected to be heavily used by pedestrians and bicyclists since it includes the River Terrace Trail in its design. As such, the final recommendation for this intersection includes a signal at the Scholls Ferry Road/ New N-S Collector intersection for the benefit of all travel modes. All intersection improvements must meet operational standards and the signal must meet warrants. If signal construction becomes infeasible or the road authority does not allow it, then a grade separated (bridge or tunnel) pedestrian crossing should be considered at this location.

Transit

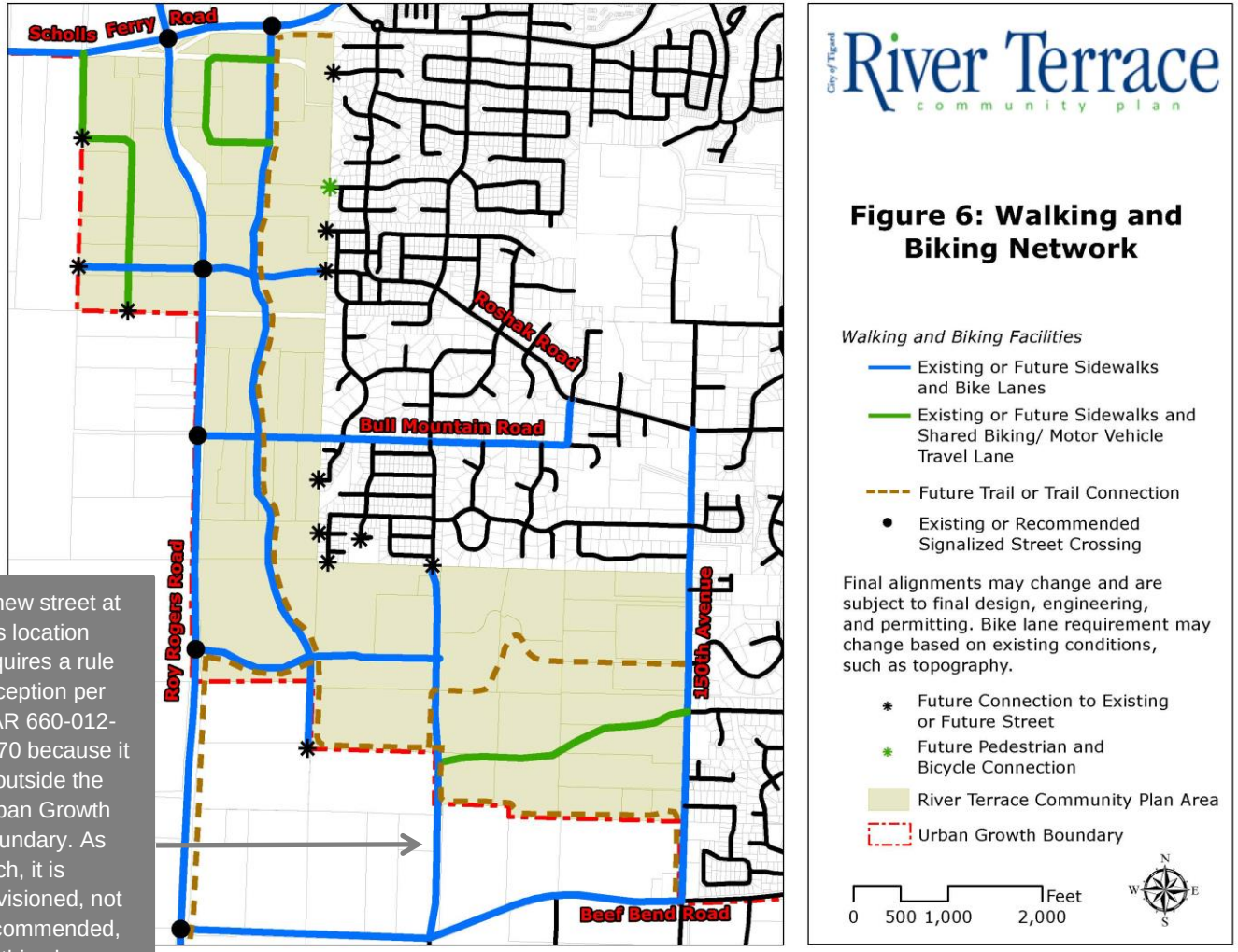
The River Terrace Community Plan sets the stage for future transit, recognizing that the type and extent of service improvements will play out over time. Specifics of transit service will depend on the actual rate and type of development built, Tri-Met resources and policies, and consideration of local options. The land use designations in the River Terrace Community Plan area make transit a viable option in the future.

Both Beef Bend Road and Bull Mountain Road have been identified on the 2035 Conceptual Bus Network in the Regional Transportation Plan. While these streets are not guaranteed to have transit service in the future, they have been identified by the region as important bus connections from the

[10] 2035 Washington County Transportation System Plan, Chapter 4- Active Transportation and Transit, Page 4-24, Draft, January 2013

River Terrace area to Highway 99W. In addition, Tri-Met's Westside Service Enhancement Plan envisions future express bus service along Scholls Ferry Road from Washington Square to Roy Rogers Road. This route could potentially include a bus stop near the proposed signalized intersection of the new N-S Collector Street with Scholls Ferry Road. Service would potentially run daily throughout most of the day with fairly frequent service (15 to 20 minute headways) during peak times and half-hour to hour headways during off times. The River Terrace Community Plan will provide walking and biking accommodations and connections that enhance the future viability of potential transit service along these routes.

Figure 6: Pedestrian and Bicycle Framework



A new street at this location requires a rule exception per OAR 660-012-0070 because it is outside the Urban Growth Boundary. As such, it is envisioned, not recommended, by this plan.

Summary of Transportation System Recommendations

Overall, an estimated $121 million in transportation system improvements are expected to be needed in and around River Terrace to support the growth conceptually planned for in the full planning area. Of these investments, an estimated $51 million are needed in the River Terrace area (see Table 5), while over $70 million are needed outside of the River Terrace area (see Table 6).

Estimated costs for individual projects are shown in Tables 5 and 6, but not all of these costs are meant to be borne by River Terrace alone. Financial responsibility for these improvements is to be shared by the city, Washington County, ODOT, and private development, with cost shares to be sorted out at a later date. Cost estimates include planning level costs for construction, engineering, and project administration. They also include some basic assumptions about the need for stream crossings and stormwater facilities to treat and manage street runoff. Projects 5, 6, 7, and 22 assume stream crossings. Project costs are subject to change based on final design, engineering, and permitting.

The recommended improvements can be seen in Figures 7 and 8. The Project ID numbers shown in these figures correspond with the Project ID numbers in Tables 5 and 6, with one exception. Neighborhood Routes are shown on Figure 7 but are not included in Tables 5 and 6 because the cost to construct them is assumed to be completely borne by private development. Not all recommended improvements are required to be in place prior to developing land within the River Terrace Community Plan area. In general, the need to upgrade existing streets and intersections will be driven by the multi-modal access needs of adjacent properties.

Several of the projects listed in Tables 5 and 6 and shown on Figures 7 and 8 were previously identified in other studies or plans surrounding the River Terrace Community Plan area, such as the Tigard Transportation System Plan, Washington County Transportation System Plan, Metro Regional Transportation Plan, and West Bull Mountain Concept Plan. This updated system analysis reaffirms the need for these improvements, many of which are driven by regional traffic issues and are not entirely caused by growth within the River Terrace Community Plan area.

Table 5: Recommended Transportation System Improvements in River Terrace

Project ID	Project Description	Project Summary	Total Estimated Cost	Jurisdiction[1]
Projects Constructing New Streets and Trails in River Terrace				
2	E-W Collector Street Lorenzo Lane Extension (west of Roy Rogers Rd)	Extend Lorenzo Lane from the west UGB to Roy Rogers Road, as a 2-lane city collector street	$2,500,000	Tigard
3	E-W Collector Street Lorenzo Lane Extension (east of Roy Rogers Rd)	Extend Lorenzo Lane from Roshak Road to Roy Rogers Road, as a 2-lane city collector street with on-street parking	$3,500,000	Tigard
5	N-S Collector Street (east of Roy Rogers Rd, Scholls Ferry Rd to Lorenzo Ln)	Create a new north-to-south 3-lane city collector street and trail, between Scholls Ferry Road and the Lorenzo Lane extension	$9,000,000	Tigard
6	N-S Collector Street (east of Roy Rogers Rd, Lorenzo Ln to Bull Mountain Rd)	Create a new north-to-south 3-lane city collector street and trail, between the Lorenzo Lane extension and Bull Mountain Road	$6,500,000	Tigard
7	N-S Collector Street (east of Roy Rogers Rd, Bull Mountain Rd to South UGB)	Create a new north-to-south 3-lane city collector street and trail, between Bull Mountain Road and the South UGB	$12,500,000	Tigard
8	E-W Collector Street (Roy Rogers Rd to N-S Collector Street)	Create a new east-to-west 2-lane city collector street, between Roy Rogers Road and the new N-S Collector Street	$2,500,000	Tigard
NA	East-West River Terrace Trail	Construct River Terrace Trail and trail connection from Roy Rogers Rd to 150th Ave	$3,600,000	Tigard
	SUBTOTAL		**$40,100,000**	
Projects Improving Existing or Proposed Intersections in/adjacent to River Terrace				
13	Roy Rogers Road/ New E-W Collector Street Intersection Improvement	Install a traffic signal	$1,000,000	Washington County
14	Roy Rogers Road/ Bull Mountain Road Intersection Improvement	Install a traffic signal	$1,000,000	Washington County

Project ID	Project Description	Project Summary	Total Estimated Cost	Jurisdiction[1]
15	Roy Rogers Road/ Lorenzo Lane Extension Intersection Improvement	Install a traffic signal	$1,000,000	Washington County
16	Scholls Ferry Road/ New N-S Collector Street Intersection Improvement	Install a traffic signal[2]	$1,000,000	Washington County
17	New Neighborhood Route east of Roy Rogers/ New N-S Collector Street Intersection Improvement	Install a roundabout[3]	$1,500,000	Tigard
18	Bull Mountain Road/ New N-S Collector Street Intersection Improvement	Install a roundabout[3]	$1,500,000	Washington County
19	New E-W Collector Street/ New N-S Collector Street Intersection Improvement	Install a roundabout[3]	$2,000,000	Tigard
20	Woodhue Street Extension/ 161st Avenue Extension Intersection Improvement	Install a roundabout[3]	$2,000,000	Tigard
SUBTOTAL			**$11,000,000**	
Total Recommended Transportation System Improvements in River Terrace			**$51.1 million**	

1 Any improvement to a road not under the jurisdiction of the city must be coordinated with and approved by the road authority for that road. Signals and intersection improvements must meet signal warrants and operational standards.

2 If signal construction becomes infeasible or the road authority does not allow it, then a grade separated (bridge or tunnel) pedestrian crossing should be considered at this location.

3 Roundabouts are preferred at these locations but other intersection improvements may be approved by the City Engineer or applicable road authority. All intersection improvements are subject to more detailed traffic analysis and design and emergency access review at the time of development.

Table 6: Recommended Transportation System Improvements Outside River Terrace

Project ID	Project Description	Project Summary	Total Estimated Cost	Jurisdiction[1]
Projects Upgrading Existing County Streets adjacent to River Terrace				
21	Bull Mountain Road Upgrade to Urban Standards	Improve to a 2/3-lane county collector from Roy Rogers Road to Roshak Road[2]	$4,000,000	Washington County
22	Roy Rogers Road-175th Avenue Upgrade to Urban Standards	Improve to a five-lane county arterial from just north of Scholls Ferry Road to just south of Beef Bend Road[3]	$35,000,000	Washington County
23	150th Avenue Upgrade to Urban Standards	Improve to a 2/3-lane county collector from Bull Mountain Road to Beef Bend Road	$4,000,000	Washington County
NA	Street Connection Improvements	Street improvements at various locations where new streets connect to existing streets	$2,500,000	Washington County
	SUBTOTAL		**$45,500,000**	
Projects Improving Existing or Proposed Intersections outside River Terrace				
24	Highway 99W/ Walnut Street Intersection	Improvements such as additional turn lanes (Tigard TSP Project # 66j)[4]	$10,000,000	ODOT[5]
25	Highway 99W/ Bull Mountain Road Intersection	Improvements such as additional northbound left turn lane (would require an additional receiving lane on Bull Mountain Road)[4]	$5,000,000	ODOT[5]
26	Highway 99W/ Durham Road Intersection	Improvements such as additional turn lanes (Tigard TSP Project # 66n)[4]	$10,000,000	ODOT[5]
NA	Other Intersections Beyond River Terrace Study Area Intersections	Other intersections to be added to this list in the future where River Terrace traffic significantly impacts existing intersections on major corridors[4]	***	ODOT/ Washington County/ Tigard
	SUBTOTAL		**25,000,000**	
	Total Recommended Transportation System Improvements Outside River Terrace		**$70.5+ million**	

1 Any improvement to a road not under the jurisdiction of the city must be coordinated with and approved by the road authority for that road. Signals and intersection improvements must meet signal warrants and operational standards.

2 The westernmost portion of this project is in River Terrace.

3 This project will likely need to be completed in two phases, with the first phase stopping at the southern UGB boundary.

4 The project cost attributed to River Terrace will be a proportionate amount based on the number of trips added by River Terrace divided by the capacity added by the improvement.

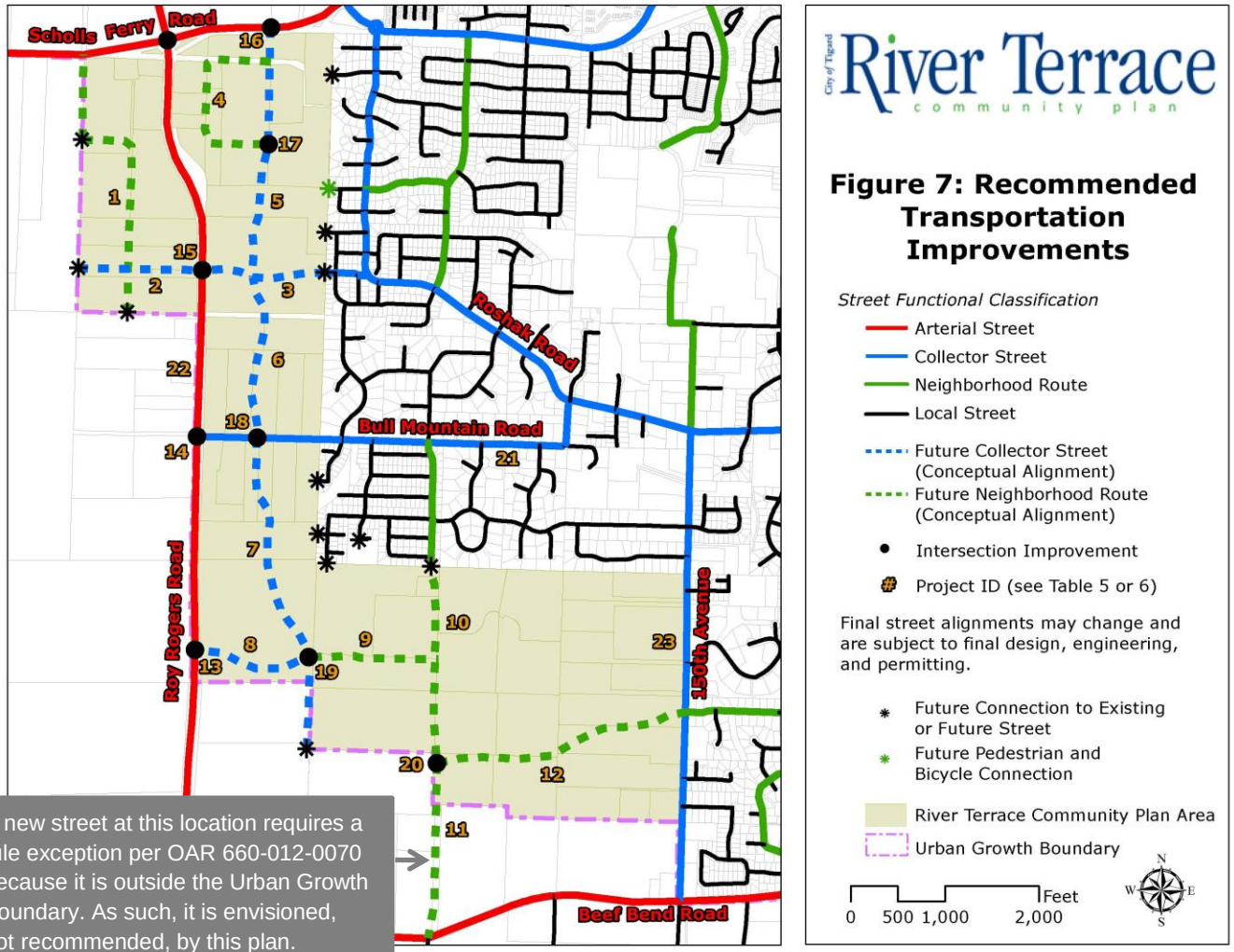
5 ODOT owns part of this intersection but is not responsible for, nor has committed to, funding this improvement.

TSP Amendments

The following is a summary of the recommended amendments to the Tigard Transportation System Plan (TSP) and Community Development Code resulting from the River Terrace community planning process.

- The recommended transportation system improvements, shown in Tables 5 and 6, are adopted into the Tigard TSP and supplement the Multi-Modal Project Improvement List upon adoption of the River Terrace TSP Addendum.
- The street functional classifications, shown in Figure 3, are adopted into the Tigard TSP and supplement Tigard TSP Figure 5-2 upon adoption of the River Terrace TSP Addendum.
- The recommended street design for the future collector street through the neighborhood commercial area (Lorenzo Lane extension) includes on-street parking, tree wells, and a furnishing zone. Collector streets do not typically include these elements. A new cross section should be added to the street characteristics table (Table 18.810.1 of the Street Utility Improvement Standards) in the Community Development Code to allow this design in the River Terrace Community Commercial Zoning District.
- The recommended street design for the main N-S Collector Street through River Terrace, also known as River Terrace Boulevard, includes many unique design features, such as a trail, that are not currently reflected in any of the city's existing cross sections. A new cross section should be added to the street characteristics table (Table 18.810.1 of the Street Utility Improvement Standards) in the Community Development Code to allow this design. This cross section should include a caveat that additional walking and biking facilities (e.g. sidewalks or bike lanes) may not be required on the side of the street adjacent to the trail.
- A v/c ratio of 0.99 during the peak hour is recommended as the performance measure for city streets in the River Terrace area. This is consistent with the Metro Regional Transportation Plan mobility target for "Neighborhoods." Where significant alternative mode provisions are provided that would substantially reduce vehicular travel demand, those effects may be considered in calculations to determine if this standard is met. This recommendation only applies to city streets. County facilities are subject to county performance measures.

Figure 7: Recommended Transportation Improvements in/near River Terrace



A new street at this location requires a rule exception per OAR 660-012-0070 because it is outside the Urban Growth Boundary. As such, it is envisioned, not recommended, by this plan.

Figure 8: Recommended Transportation Improvements Outside River Terrace

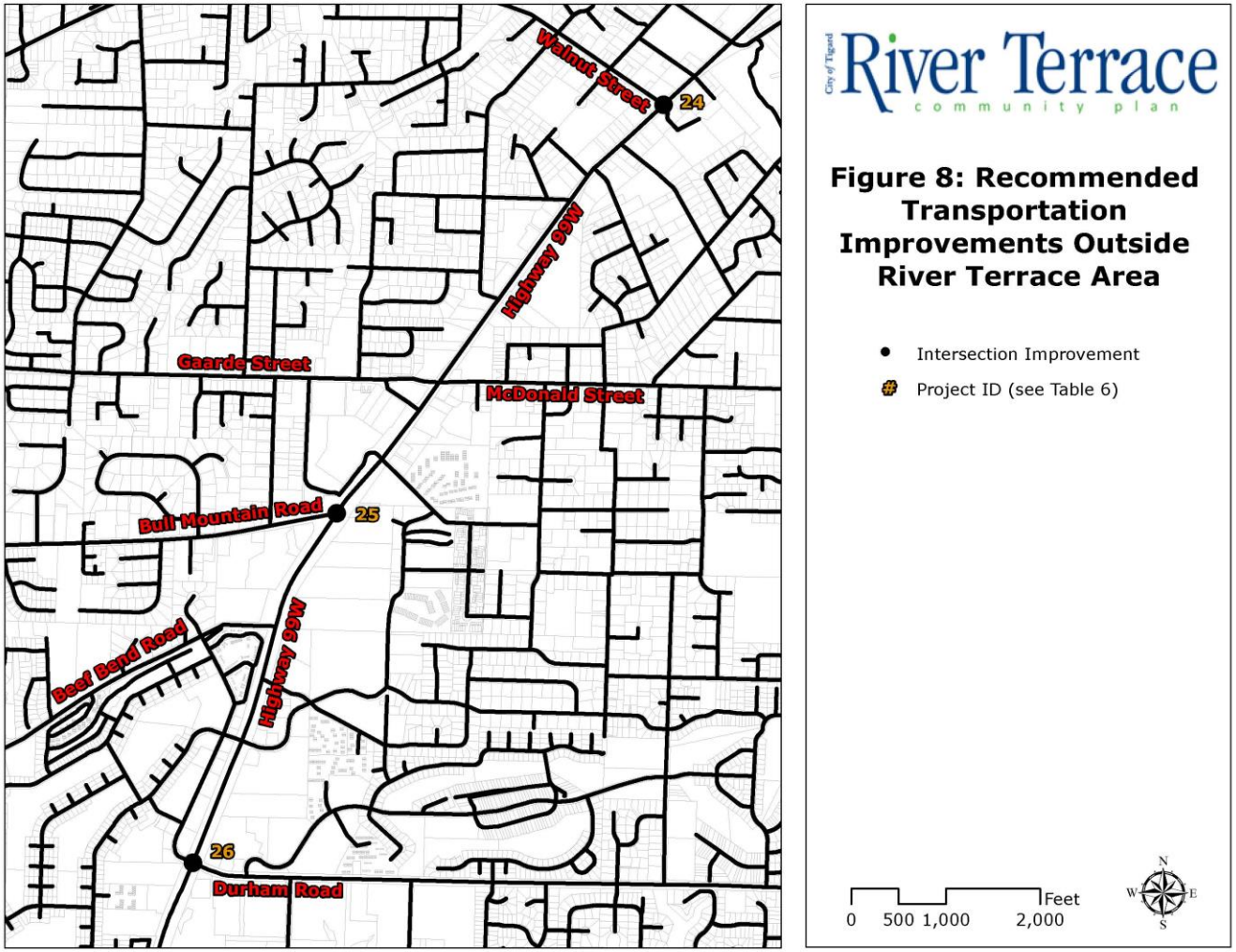


EXHIBIT B

Agenda Item:
Hearing Date: **December 16, 2014 Time: 7:30 PM**

STAFF REPORT TO THE CITY COUNCIL FOR THE CITY OF TIGARD, OREGON

120 DAYS = N/A

SECTION I. APPLICATION SUMMARY

FILE NAME: **RIVER TERRACE COMMUNITY PLAN (RTCP)**

FILE NO.: **Comprehensive Plan Amendment (CPA) 2014-00001**

PROPOSAL: A Comprehensive Plan Amendment (CPA) to adopt the River Terrace Community Plan, Comprehensive Plan Designations, Natural Resources Maps and River Terrace Addendum to the city's Transportation System Plan.

APPLICANT: City of Tigard
13125 SW Hall Boulevard
Tigard, OR 97223

OWNER: N/A

LOCATION: River Terrace Plan Area

APPLICABLE REVIEW CRITERIA:
Community Development Code Chapters 18.380.020 and 18.390.060.G; Comprehensive Plan Goals 1, 2, 5, 6, 7, 8, 10, 11, 12, 13 and 14; Statewide Planning Goals 1, 2, 5, 6, 7, 8, 10, 11, 12, 13 and 14; and Metro's Urban Growth Management Functional Plan Title 1, 3, 11, 12, 13 and 14.

SECTION II. PLANNING COMMISSION RECOMMENDATION

The Planning Commission recommends that the City Council adopt by ordinance a Comprehensive Plan Amendment that adopts the River Terrace Community Plan, related changes to the Comprehensive Plan Designations Map and Natural Resources Maps, and the River Terrace Addendum to the Transportation System Plan, as determined through the public hearing process.

SECTION III. BACKGROUND INFORMATION

Project History

Most of the land in River Terrace, approximately 440 acres, was added to the UGB in 2002, at which time it was identified as Areas 63 and 64. Washington County completed the concept plan for Areas 63 and 64 in 2010. This plan is entitled the West Bull Mountain Concept Plan (WBMCP)

and included Areas 63 and 64 and a rural subarea to the south of both areas that extended to Beef Bend Road. This rural subarea was included in the concept planning process to facilitate logical street connections and urban service extensions since Areas 63 and 64 were not contiguous to one another.

Approximately 50 acres of this rural subarea was added to the UGB in 2011, at which time it was identified as Roy Rogers West (sometimes referred to as Area 4). Collectively these three areas, i.e. Area 63, Area 64, and Roy Rogers West, comprise the River Terrace planning area. Unlike the WBMCP, the River Terrace Community Plan (RTCP) does not include the remainder of the rural subarea (which is now an Urban Reserve Area) to the south of River Terrace. The entire 490-acre area that makes up River Terrace was annexed to the City in two batches. The first annexation petition was approved in 2011, and the second was approved in 2013.

In 2012, Washington County and the City of Tigard entered into an intergovernmental agreement (IGA) whereby the County assigned and the City agreed to accept responsibility for preparing a community plan based on the concept planning efforts completed by the County in 2010. Pursuant to the IGA and in compliance with Metro Functional Plan Titles 11 and 14, the City agreed to "refine the County's West Bull Mountain Concept Plan (WBMCP) and provide a detailed land use, public infrastructure, governance, and financial planning framework for urban development of the concept planned area." In turn, the County agreed to support the City's efforts to complete the RTCP.

Proposal Description

A Comprehensive Plan Amendment (CPA) to adopt the River Terrace Community Plan, Comprehensive Plan Designations Map, Natural Resource Maps, and a River Terrace Addendum to the city's Transportation System Plan.

River Terrace Community Plan

The River Terrace Community Plan (RTCP) is a long range planning document that supplements the Tigard Comprehensive Plan. It is designed to guide development and investment in River Terrace over the next several decades as it transitions from rural to urban land use to accommodate needed housing in the region. It is the result of many years of analysis and visioning by the community, City of Tigard leadership and staff, Washington County leadership and staff, and numerous partner agencies.

The city is required to prepare and adopt comprehensive plan provisions, public facility plans and land use regulations to meet the requirements of the specific Metro ordinances that added River Terrace to the Urban Growth Boundary UGB). The city is also required by Metro Functional Plan Titles 11 and 14 and Statewide Planning Goals 11 and 14 to ensure that areas brought into the UGB are efficiently urbanized and meet long-term population and employment needs. The completion and adoption of the River Terrace Community Plan contributes to meeting all city, state, and Metro requirements for land use and public facility planning.

The city will need to take additional actions to implement the RTCP. Identified implementation actions include, but are not limited to, the following:

- Adoption of the River Terrace Zoning Districts Map
- Development and adoption of River Terrace code amendments
- Development of a new stormwater modeling tool and design standards
- Development and adoption of new fees consistent with recommendations in the River Terrace Funding Strategy

Some of these actions are being timed and coordinated with other actions. The adoption of the River Terrace Zoning Districts Map, for example, is being delayed in order to more closely align its adoption with the completion of the River Terrace Code Amendments, which are still under development. Some, but not all, of these actions will require City Council review and approval and will be presented for Council's consideration at future dates.

Updates to Tigard Comprehensive Plan Designations and Natural Resource Maps

In order to apply the city's land use regulations in River Terrace, several maps must be updated. This includes the city's:

- Comprehensive Plan Designations - This map updates the city's existing Comprehensive Plan designations for River Terrace. The city initially adopted Comprehensive Plan designations for River Terrace in 2012 based on the land use recommendations contained in the West Bull Mountain Concept Plan (WBMCP). During the River Terrace community planning process, refinements were made to the recommended WBMCP land uses in order to support a better range and mix of zoning districts and, by extension, housing types. These refinements were vetted by stakeholders, are consistent with the density assumptions and guidelines in the WBMCP, and meet Metro's required residential densities for each area.
- Natural Resource Maps - These maps update existing city maps that regulate tree groves, habitat conservation areas, and wetland and riparian areas to include the River Terrace area. Detailed inventory work was required to update each map. This work was completed during the WBMCP and RTCP planning processes.

An advisory group made up of eighteen members was formed to provide advice and guidance to the project team during the Community Plan planning process. Known as the Stakeholder Working Group, they voted on August 22, 2013 to move the Comprehensive Plan Designations forward for adoption. Since the natural resource maps are very technical in nature and were developed using existing policies and standards, the Stakeholder Working Group was not asked to recommend them for adoption. They were, however, given multiple opportunities to review and understand their implications.

River Terrace Transportation System Plan Addendum

As part of State and Metro requirements for public facility planning, the city must adopt a local transportation system plan that provides for a multi-modal system of streets, trails, and sidewalks within River Terrace with connections to adjacent urban areas and the regional transportation system. This plan is being adopted as an addendum to the city's Transportation System Plan (TSP). Because TSP amendments require a Type IV legislative process, this is the only River Terrace master plan that Council needs to adopt by Ordinance.

The TSP links expected growth with transportation needs and sets the policy framework for the city's transportation system. The proposed TSP Addendum looks to accommodate the transportation needs anticipated in River Terrace in addition to contributing to the city's broader goal of completing the RTCP.

The Stakeholder Working Group voted to cautiously move the River Terrace TSP Addendum forward for adoption on June 9, 2014. Their recommendation for caution primarily revolved around project costs and their concern that costs may be too high for the market to bear. Council was briefed on these issues and the TSP Addendum in general at a workshop meeting on June 17, 2014.

Planning Commission Recommendation

On November 17, 2014 the Tigard Planning Commission held a public hearing to consider the proposal and make a recommendation to Council. As discussed in greater detail in Section VIII of this report and in the minutes of the hearing, public testimony was received and considered by the Planning Commission as part of their deliberations. At the conclusion of their deliberations, the Planning Commission made a unanimous recommendation to the City Council that all four elements of the proposal be approved and adopted as presented to the Commission.

SECTION IV. APPLICABLE CRITERIA, FINDINGS AND CONCLUSIONS

This section contains all the applicable city, state and metro policies, provisions, and criteria that apply to the proposed comprehensive plan amendment. Each section is addressed demonstrating how each requirement is met.

APPLICABLE PROVISIONS OF THE 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

FINDING: The proposed legislative amendments are being reviewed under the Type IV legislative procedure as set forth in the chapter. This procedure requires public hearings before both the Planning Commission and City Council.

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.

FINDING: This Comprehensive Plan Amendment (CPA) to the Tigard Comprehensive Plan establishes policies to be applied generally throughout the City of Tigard. Therefore it will be reviewed under the Type IV procedure as detailed in Section 18.390.060.G. In accordance with this section, the amendment is initially being considered by the Planning Commission with City Council making the final decision.

Chapter 18.390: Decision-Making Procedures

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.**

FINDING: Findings and conclusions are provided within this report for the applicable listed factors on which the recommendation by the Commission and the decision by the Council shall be based.

CONCLUSION: Based on the findings above and below, these provisions are met.

APPLICABLE COMPREHENSIVE PLAN POLICIES

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.**

Policy 3 **The City shall establish special citizen advisory boards and committees to provide input to the City Council, Planning Commission, and City staff.**

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.**

FINDING: The River Terrace Community Plan describes how citizens, affected agencies, and other jurisdictions were given the "opportunity to participate in all phases of the planning process." Community Plan Goal 1: Public involvement lists opportunities like:

- Advisory committees – a Stakeholder Working Group (SWG), Technical Advisory Committee (TAC), and Implementation Subcommittee were formed to advise the process.
- Community meetings – Eight were held prior to the adoption process.
- Online Tools – A blog and online forum were set up for public participation
- Several public comment periods were available on different aspects of the proposal

Several opportunities for participation are also built into the Comprehensive Plan amendment process, including:

- Public Hearing notification requirements pursuant to Chapter 18.390.060 of the Tigard Community Development Code and Measure 56. Public hearing notice of the Planning Commission and City Council public hearings was sent to the interested parties list and all River Terrace property owners.
- A notice was published in the October 30, 2014 issue of The Tigard 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.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 1.1 Policies 2, 3 and 5 are met.

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 4 **The City shall ensure citizens receive a timely response from policymakers regarding recommendations made through the citizen involvement program.**

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.**

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

FINDING: The River Terrace Community Plan describes how citizens could communicate directly to the city about the project and receive information on issues in an understandable form. Community Plan Goal 1: Public involvement lists opportunities like:

- Updates to City boards and commissions
- Presentations to neighborhood and special interest groups
- River Terrace project website, blog, and interactive maps
- Printed informational material and mailings

Citizen involvement led to several key River Terrace Community Plan and infrastructure master pan refinements.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 1.2 Policies 1, 2, 4, 5 and 6 are met.

<u>Chapter 2: Land Use Planning</u>

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.**

Policy 2 **The City's land use regulations, related plans, and implementing actions shall be consistent with and implement its Comprehensive Plan.**

Policy 3 **The City shall coordinate the adoption, amendment, and implementation of its land use program with other potentially affected jurisdictions and agencies.**

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.**

FINDING: The goals and policies contained in the Tigard Comprehensive Plan provide the basis for the city's land use planning program. The River Terrace Community Plan is a product of this program and an ancillary Comprehensive Plan document. The River Terrace Community Plan addresses Tigard's Comprehensive Plan Goal 2: Land Use Planning for River Terrace and provides more detail about how the plan is meeting Metro requirements for density and the community's vision for the area.

As described in this staff report, the amendment complies with all applicable statewide planning goals, regional regulations, comprehensive plan policies, and serves the interest of the citizens. The amendment ensures that the River Terrace area is urbanized efficiently and becomes a mixed-use, walkable, community.

Potentially affected jurisdictions and agencies were given an opportunity to collaborate with staff throughout the project as members of the Technical Advisory Committee. In addition, the city sent out a request for comments 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.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 1, 2, 3 and 20 are met.

Policy 6 **The City shall promote the development and maintenance of a range of land use types which are of sufficient economic value to fund needed services and advance the community's social and fiscal stability.**

Policy 10 **The City shall institute fees and charges to ensure development pays for development related services and assumes the appropriate costs for impacts on the transportation and other public facility systems.**

FINDING: This CPA, specifically the River Terrace Community Plan and Comprehensive Plan designations, provides for a variety of land uses and

residential densities consistent with the community's desire to create a community of great neighborhoods that includes housing, neighborhood-scale commercial businesses, schools, parks and recreational opportunities.

Community Plan Chapter 1: Introduction and Background describes that a funding strategy was developed concurrently with the Community Plan pursuant to state and regional requirements. The River Terrace Funding Strategy will be presented to Council for adoption by separate action during the same meeting that the Community Plan is considered for adoption. Additionally, a Citywide Infrastructure Financing Project is currently underway and is expected to result in updates to the city's existing utility fees and System Development Charges, some of which are expected to be specific to River Terrace per the recommendations contained in the River Terrace Funding Strategy.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 6 and 10 are met.

Policy 7 **The City's regulatory land use maps and development code shall implement the Comprehensive Plan by providing for needed urban land uses including:**
A. Residential;
B. Commercial and office employment including business parks;
C. Mixed use;
D. Industrial;
E. Overlay districts where natural resource protections or special planning and regulatory tools are warranted; and
F. Public services

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

FINDING: This CPA, specifically the River Terrace Community Plan and Comprehensive Plan designations, includes primarily residential Comprehensive Plan designations that provide a mix of residential densities. This allows for a variety of housing types that meet a wide range of housing needs. Higher residential densities are planned near commercial and institutional uses and along major corridors. Lower residential densities are planned in areas with steep slopes and along the area's eastern edge to provide a buffer between existing lower density neighborhoods and future higher density neighborhoods. The commercial area is sized and zoned to provide neighborhood-scale commercial goods and services. The co-location of land uses (e.g. parks and trails), public facilities (e.g. stormwater facilities and pump stations), and natural resource areas is strongly encouraged to maximize the efficient use of land and to create opportunities for community amenities.

The River Terrace Community Plan addresses the City's Goal 5 Natural Resources for River Terrace. In addition, the city's Natural Resource maps

are being updated for the River Terrace area to ensure that these areas are protected. The city's existing protection programs for natural resources will be extended to the newly mapped areas in River Terrace.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 7 and 22 are met.

Policy 8 **The City shall require that appropriate public facilities are made available, or committed, prior to development approval and are constructed prior to, or concurrently with, development occupancy.**

Policy 9 **The City may, upon determining it is in the public interest, enter into development agreements to phase the provision of required public facilities and services and/or payment of impact fees and/or other arrangements that assure the integrity of the infrastructure system and public safety.**

Policy 13 **The City shall plan for future public facility expansion for those areas within its Urban Planning Area that can realistically be expected to be within the City limits during the planning period.**

FINDING: River Terrace Community Plan Goal: 11 Public Facilities and Services addresses public facility planning for River Terrace. The Comprehensive Plan designations proposed for adoption determined the type, number and location of residential dwelling units in River Terrace. This information was used to help determine the size and location of needed public facilities and services.

The Community Plan more fully describes future public facility expansion in the sections on Parks, Public Facilities and Transportation and in the five infrastructure master plans developed for River Terrace. The five infrastructure master plans include: water, sewer, stormwater, transportation and parks. Water, sewer and stormwater master plans have already been adopted; while the transportation and parks master plans are proposed for adoption with this CPA. The plans include a list of infrastructure improvements necessary to accommodate the River Terrace area.

Updates to the city's adequate facility requirements will be included in the upcoming River Terrace Code Amendments as part of Community Plan implementation.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policies 8, 9 and 13 are met.

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:**
A. Transportation and other public facilities and services shall be available, or committed to be made available, and of sufficient capacity to serve the land uses allowed by the proposed map designation;

B. Development of land uses allowed by the new designation shall not negatively affect existing or planned transportation or other public facilities and services;
C. The new land use designation shall fulfill a proven community need such as provision of needed commercial goods and services, employment, housing, public and community services, etc. in the particular location, versus other appropriately designated and developable properties;
D. Demonstration that there is an inadequate amount of developable, appropriately designated, land for the land uses that would be allowed by the new designation;
E. Demonstration that land uses allowed in the proposed designation could be developed in compliance with all applicable regulations and the purposes of any overlay district would be fulfilled;
F. Land uses permitted by the proposed designation would be compatible, or capable of being made compatible, with environmental conditions and surrounding land uses; and
G. Demonstration that the amendment does not detract from the viability of the City's natural systems.

FINDING: The proposed amendment to Tigard's Comprehensive Plan Map meets the following specific criteria:

- Sufficient capacity: The Community Plan describes that updates to the city's adequate facility requirements will be included in River Terrace Code Amendments as part of Community Plan implementation.
- Not negatively affecting: The Community Plan more fully describes future public facility expansion in the sections on Parks, Public Facilities and Transportation and in the five infrastructure master plans developed for River Terrace. The plans include a list of infrastructure improvements necessary to accommodate development in River Terrace.
- Fulfills a proven community need: Almost 97% of the land in River Terrace is proposed for new housing. A citywide analysis of housing needs and capacity in 2012 found that Tigard has an estimated need for just over 6,500 new housing units over the next 20 years. Over 50% of the city's overall need (3,744 housing units) could be absorbed by River Terrace development.
- Demonstration of inadequacy: A significant portion of the city's estimated capacity for needed housing is assumed to come from River Terrace.
- Demonstration of compliance: The River Terrace Community Plan utilizes the city's existing Comprehensive Plan and zoning district designations.
- Compatibility: Higher residential densities are planned near commercial and institutional uses and along major transportation corridors. Lower residential densities are planned in areas with steep slopes and along the area's eastern edge to provide a buffer between existing lower density neighborhoods and future higher density neighborhoods.

- Viability of natural systems: The city's Natural Resource maps are being updated for the River Terrace area to ensure that these areas are protected. The city's exiting protection programs for natural resources will be extended to the newly mapped areas in River Terrace.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 2.1 Policy 15 is met.

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.

Policy 4 **The City shall actively coordinate and consult with landowners, local stakeholders, and governmental jurisdictions and agencies regarding the inventory, protection, and restoration of natural resources.**

Policy 10 **The City shall complete a baseline inventory of significant natural resources and update or improve it as necessary, such as at the time of Comprehensive Plan Periodic Review, changes to Metro or State programs, or to reflect changed conditions, circumstances, and community values.**

FINDING: This CPA amends the city's Natural Resource maps to include the River Terrace plan area. The city will utilize the same natural resource protection programs as the rest of the city. Implementation of these programs will occur through the adoption of several inventories and maps that provide various levels of natural resource assessment and protection as well as development flexibility.

The River Terrace Community Plan addresses the city's Goal 5: Natural Resources and speaks to the city's coordination and inventory of significant natural resources in River Terrace.

- The Natural Resource maps proposed for adoption update existing city maps that regulate tree groves, habitat conservation areas, and wetland and riparian areas to include the River Terrace area. Detailed inventory work was required to update each map, which was completed as part of the West Bull Mountain and River Terrace planning processes.
- The SWG, TAC, community, and outside agencies had an opportunity to review each map. Since the Natural Resource maps are very technical in nature and were developed using existing policies and standards, the Stakeholder Working Group was not asked to recommend them for adoption. They were, however, given multiple opportunities to review and understand their implications.

The River Terrace Addendum to the Transportation System Plan includes the following language on protection of natural resources:

- Street alignments and intersections should avoid and/or minimize impacts to identified natural resource areas whenever possible.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 5.1 Policies 4 and 10 are met.

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.**

Policy 6 **The City shall encourage the maintenance and improvement of open spaces, natural resources, and the City's tree canopy to sustain their positive contribution to air quality.**

FINDING: The River Terrace Community Plan and maps, and the Transportation System Plan Addendum support the city's adopted environmental quality goals and policies. Specifically:

- Land use patterns: The River Terrace Community Plan and Comprehensive Plan designations will allow for more intense urban land uses that reduce the dependency on the automobile and increase opportunities for walking, biking, and public transit. The Transportation System Plan Addendum identifies several multi-modal street and intersection improvements in and around the River Terrace area. The Walking and Biking Network, Figure 6 of the TSP Addendum illustrates the potential active transportation network for the River Terrace plan area. The emphasis of this network is on connecting residents to existing and future trails, as defined in the Metro Regional Trail and Greenways Plan, as well as key destinations within and near the River Terrace Community Plan area, including the neighborhood commercial area in the north and the future school in the south.
- Open spaces, natural resources, and tree canopy: This CPA updates the city's Natural Resource maps for the River Terrace area, including the significant tree groves map. As discussed in Goal 8: Parks, Recreation, Trails and Open Space of the Community Plan, 65 acres of open space is proposed in River Terrace.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 6.1 Policies 3 and 6 are met.

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

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

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.**

Policy 10 **The City shall continue to facilitate the extension of the City's wastewater system to neighborhoods without service within the Tigard Urban Service Area, provided:**
A. properties benefiting from the extension pay their fair share of the cost; and
B. annexation occurs prior to any property receiving service.

FINDING: River Terrace Community Plan Goal 11: Public Facilities and Services addresses planned infrastructure system improvements for stormwater and wastewater in River Terrace:

- A Stormwater Master Plan was created to manage stormwater in the River Terrace area. It recommends two water quality strategies: (1) Low Impact Development Approaches (LIDA) at a variety of scales, and (2) regional water quality facilities. The River Terrace Stormwater Master Plan has already been adopted.
- A River Terrace Sanitary Sewer Master Plan Addendum was developed to address sanitary sewer management for the River Terrace plan area. The River Terrace Sanitary Sewer Master Plan Addendum has already been adopted.

In addition, the River Terrace Community Plan aims to protect natural resources and preserve their aesthetic and environmental benefits. Natural resource protection will also be achieved through the development of effective stormwater management facilities that protect the community's water supply and the health and function of stream corridors for habitat and recreation. For example, the River Terrace Stormwater Master Plan contains goals to restore and enhance vegetative corridors, protect water quality, preserve existing hydrology, preserve existing mature vegetation, and more.

This CPA also updates the city's Natural Resource maps for the River Terrace area in order to implement the city's current protection and incentive programs to retain and protect the city's natural resources.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 6.2 Policies 3, 4 and 10 are met.

<u>Chapter 7: Hazards</u>

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

Policy 3 **The City shall coordinate land use and public facility planning with**

public safety providers (law enforcement, fire safety, and emergency service providers) to ensure their capability to respond to hazard events.

FINDING: The city's public safety providers (law enforcement and Tualatin Valley Fire and Rescue) served as members of the Technical Advisory Committee for this project. The Community Plan and River Terrace Addendum to the Transportation System Plan identify future connections needed to ensure these providers are capable of responding to future hazard events. These connections are intended to provide local and emergency vehicle access within and between new and existing neighborhoods.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 7.1 Policy 3 is met.

<u>Chapter 8: Parks, Recreation, Trails, and Open Space</u>

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 3 **The City shall seek to achieve or exceed the ideal park service level standard of 11.0 acres of parkland per thousand population.**

Policy 4 **The City shall endeavor to develop neighborhood parks [or neighborhood park facilities within other parks, such as a linear park] located within a half mile of every resident to provide access to active and passive recreation opportunities for residents of all ages.**

Policy 19 **The City shall seek to establish and manage a fully functional urban forest.**

FINDING: River Terrace Community Plan Goal 8: Parks, Recreation, Trails, and Open Space supports the city's adopted park goals and policies. No new goals or policies are needed to implement the park recommendations for River Terrace.

The city's adopted Level of service (LOS) standards for parks were used in planning for the River Terrace. Community Plan Table 5-2 describes River Terrace park standards, needs, and recommendations. Overall, the city is proposing to exceed the city's (updated) core standard by over 37 acres. The full range of park types is envisioned in River Terrace to provide access for both active and passive recreation. In lieu of identifying specific park locations, parks are conceptually located within service areas to show where community and neighborhood parks would be needed to meet LOS standards and achieve the goal of having an equitable distribution of parks in the area.

Additionally, adoption of the proposed River Terrace Community Plan and Significant Tree Groves map will extend the city's urban forestry program to River Terrace. The River Terrace area has nine significant tree grove sites totaling 61 acres.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 8.1 Policies 3, 4 and 19 are met.

Goal 8.2 Create a Citywide network of interconnected on- and off-road pedestrian and bicycle trails.

Policy 1 **The City shall create an interconnected regional and local system of on- and off-road trails and paths that link together neighborhoods, parks, open spaces, major urban activity centers, and regional recreational opportunities utilizing both public property and easements on private property.**

FINDING: The River Terrace Community Plan addresses trails in two sections - Goal 8: Parks, Recreation, Trails, and Open Space and Goal 12: Transportation. As stated in the Community Plan, the River Terrace Transportation System Plan Addendum envisions a comprehensive trail system for pedestrians and cyclists that links the many existing natural resources areas, proposed parks, future schools and services, and other planned regional trails in the area. The trail system is consistent with the River Terrace Park System Master Plan Addendum, the city's Strategic Plan for walkability, and the Metro Regional Trails and Greenways Plan.

The River Terrace Community Plan shows trails more specifically located than parks. The River Terrace Trail, whose design has been uniquely integrated with the main North-South Collector Street known as River Terrace Boulevard was planned, in part, to complement Metro's Westside Trail.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 8.2 Policy 1 is met.

<u>Chapter 10: Housing</u>

Goal 10.1 Provide opportunities for a variety of housing types at a range of price levels to meet the diverse housing needs of current and future City residents.

Policy 1 **The City shall adopt and maintain land use policies, codes, and standards that provide opportunities to develop a variety of housing types that meet the needs, preferences and financial capabilities of Tigard's present and future residents.**

Policy 2 **The City's land use program shall be consistent with applicable state and federal laws.**

FINDING: The River Terrace Community Plan addresses the city's Goal 10: Housing for River Terrace. The Community Plan supports the city's adopted housing goals and policies. Almost 97% of the buildable land in River Terrace is proposed for new housing.

River Terrace stakeholders prioritized a range of residential densities to provide diverse housing types, a variety of housing choices, and integration with existing adjacent Bull Mountain neighborhoods when designing the land use framework for River Terrace. The proposed land uses meet state and Metro requirements for density and the opportunity for attached housing.

The city's existing affordable housing program will apply to River Terrace. Updates to the citywide program are expected in 2015.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 10.1 Policies 1 and 2 are met.

Goal 10.2 Maintain a high level of residential livability.

Policy 2 **The City shall seek to provide multi-modal transportation access from residential neighborhoods to transit stops, commercial services, employment, and other activity centers.**

Policy 5 **The City shall encourage housing that supports sustainable development patterns by promoting the efficient use of land, conservation of natural resources, easy access to public transit and other efficient modes of transportation, easy access to services and parks, resource efficient design and construction, and the use of renewable energy resources.**

Policy 6 **The City shall promote innovative and well-designed housing development through application of planned developments and community design standards for multi-family housing.**

Policy 7 **The City shall ensure that residential densities are appropriately related to locational characteristics and site conditions such as the presence of natural hazards and natural resources, availability of public facilities and services, and existing land use patterns.**

Policy 8 **The City shall require measures to mitigate the adverse impacts from differing, or more intense, land uses on residential living environments, such as:**
A. orderly transitions from one residential density to another;
B. protection of existing vegetation, natural resources and provision of open space areas; and
C. installation of landscaping and effective buffering and screening.

FINDING: This CPA, through the River Terrace Community Plan and TSP Addendum, proposes a multi-modal transportation system that is designed to connect River Terrace to existing and future neighborhoods, services, parks, schools

and regional destinations through a hierarchy of streets and trails that provide residents and visitors with convenient, safe and comfortable travel options. This network of multi-modal streets conforms to the rolling topography, builds upon and connects to existing streets in the area, and effectively balances safety, comfort and mobility.

The Comprehensive Plan designations place higher residential densities near commercial and institutional uses and along major corridors in order to reduce dependency on vehicles. Lower residential densities are planned in areas with steep slopes and along the area's eastern edge to provide a buffer between existing lower density neighborhoods and future higher density neighborhoods. The River Terrace Community plan encourages the co-location of land uses (e.g. parks and trails), public facilities (e.g. stormwater facilities and pump stations), and natural resource areas to maximize the efficient use of land and to create opportunities for community amenities.

The city's current development code, specifically relating to buffering and screening, will apply to the River Terrace area ensuring orderly transition of residential densities. The city's current Planned Development regulations will also apply to River Terrace. The city intends to propose changes to the Planned development code to implement the River Terrace Community Plan. These amendments are anticipated to be reviewed by Planning Commission and Council in February 2015.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 10.2 Policies 2, 5, 6, 7 and 8 are met.

Chapter 11: 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.

Policy 2 **The City shall continue to collaborate with Clean Water Services in the planning, operation, and maintenance of a comprehensive stormwater management system.**

Policy 3 **The City shall require the stormwater management system to comply with all applicable federal, state, and regional regulations and programs.**

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.

Policy 7 **The City shall encourage low impact development practices and other measures that reduce the amount of, and/or treat, stormwater runoff at the source.**

Policy 8 **The City shall develop sustainable funding mechanisms:**
A. for stormwater system maintenance;
B. to improve deficiencies within the existing system; and
C. to implement stormwater system improvements identified in the Capital Improvement Plan.

FINDING: Community Plan Goal 11: Public Facilities and Services addresses stormwater management in River Terrace. The River Terrace Stormwater Master Plan, and by extension, the River Terrace Community Plan support the city's adopted stormwater management goals and policies.

- The River Terrace Stormwater Master Plan and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11.
- The strategies recommended in the River Terrace Stormwater Master Plan are based upon Clean Water Services (CWS) Design and Construction Standards and the CWS Low Impact Development Approaches (LIDA) Handbook. In addition, it reflects the city's intention to adopt new design standards for the River Terrace area in collaboration with CWS on or before the adoption of the Community Plan.
- There are two water quality strategies recommended in River Terrace: (1) Low Impact Development Approaches (LIDA) at a variety of scales, and (2) regional water quality facilities that offer community benefits in addition to stormwater management
- The River Terrace Stormwater Master Plan has already been adopted.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.1 Policies 1, 2, 3, 6, 7 and 8 are met.

Goal 11.2 Secure a reliable, high quality, water supply to meet the existing and future needs of the community.

Policy 2 **The City shall develop and maintain a water system master plan to coordinate the improvement and expansion of Tigard Water Service Area infrastructure to serve current and projected demand.**

FINDING: Community Plan Goal 11: Public Facilities and Services addresses water supply and distribution in River Terrace. The River Terrace Water System Master Plan Addendum and, by extension, the River Terrace Community Plan support the city's adopted water supply goals and policies.

- The city's Water System Master Plan (WSMP) addresses water supply capacity needs and guides water system infrastructure improvements

in the Tigard Water Service Area.

- The River Terrace Water System Master Plan Addendum has already been adopted.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.2 Policy 2 is met.

Goal 11.3 Develop and maintain a wastewater collection system that meets the existing and future needs of the community.

Policy 1 **The City shall require that all new development:**
A. connect to the public wastewater system and pay a connection fee;
B. construct the appropriate wastewater infrastructure; and
C. comply with adopted plans and standards for wastewater management.

Policy 2 **The City shall continue to collaborate with Clean Water Services in the planning, operation, and maintenance of a comprehensive wastewater management system for current and projected Tigard residents.**

Policy 3 **The City shall require the wastewater management system to comply with all applicable federal, state, and regional regulations and programs.**

FINDING: Community Plan Goal 11: Public Facilities and Services addresses sanitary sewer management in River Terrace. The River Terrace Sanitary Sewer Master Plan Addendum and, by extension, the River Terrace Community Plan support the city's adopted sanitary sewer goals and policies.

- The River Terrace Sanitary Sewer Master Plan Addendum and the River Terrace Funding Strategy contribute to meeting the city's PFP requirement under Statewide Planning Goal 11.
- The River Terrace Sanitary Sewer Master Plan Addendum addresses sanitary sewer management for the River Terrace plan area.
- The River Terrace Sanitary Sewer Master Plan Addendum has already been adopted.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.3 Policies 1, 2 and 3 are met.

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

Policy 1 **The City shall support the provision of accessible public facilities and services through ensuring adequate administrative and general governance services.**
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Policy 5 **The City shall work in conjunction with partner agencies and districts in the planning and locating of their new facilities.**

Policy 7 **The City shall coordinate with the school districts to address capacity needs associated with population growth.**

FINDING: The River Terrace Community Plan, in conjunction with the River Terrace Funding Strategy, provides a framework for urban development through the timely, orderly and efficient provision of public facilities and services in River Terrace. The city worked with agencies including, but not limited to, Clean Water Services, Washington County, the Tigard Tualatin School District, and the City of Beaverton on planning for public facilities. This collaboration with other agencies will continue into the future as River Terrace develops.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 11.4 Policies 1, 5 and 7 are met.

Chapter 12: Transportation

Goal 12.1 *Develop mutually supportive land use and transportation plans to enhance the livability of the community.*

Policy 1 **The City shall plan for a transportation system that meets current community needs and anticipated growth and development.**

Policy 3 **The City shall maintain and enhance transportation functionality by emphasizing multi-modal travel options for all types of land uses.**

Policy 4 **The City shall promote land uses and transportation investments that promote balanced transportation options.**

Policy 5 **The City shall develop plans for major transportation corridors and provide appropriate land uses in and adjacent to those corridors.**

Policy 6 **The City shall support land use patterns that reduce greenhouse gas emissions and preserve the function of the transportation system.**

Policy 7 **The City shall strive to protect the natural environment from impacts derived from transportation facilities.**

Policy 9 **The City shall coordinate with private and public developers to provide access via a safe, efficient, and balanced transportation system.**

FINDING: River Terrace Community Plan Goal 12: Transportation addresses transportation planning for the River Terrace area. The River Terrace Transportation System Plan (TSP) Addendum and, by extension, the River Terrace Community Plan support the city's adopted transportation goals and policies.

- Land use was a key factor in development of the River Terrace TSP Addendum. The impact of the increased vehicle trip generation on

the surrounding transportation system, as a result of the recommended land uses, was evaluated through the year 2035. The highest level of potential development for the River Terrace area (2,587 households and 149 employees) was assumed. The result is a set of transportation improvements and standards that updates the Tigard TSP for the River Terrace area.

- The streets in River Terrace are designed to accommodate all modes of travel for users of all ages and abilities where possible. They are also designed to safely connect people to where they need to go, providing residents and visitors with a number of travel choices to their destinations. The streets are also envisioned to be more than just places for automobile travel, recognizing that they are also where people gather, walk, bike, access transit, and park their vehicles.
- Comprehensive Plan designations place higher residential densities near commercial and institutional uses and along major corridors to reduce dependency on vehicles.
- The TSP Addendum envisions a comprehensive trail system for pedestrians and cyclists that links the many existing natural resource areas, proposed parks, future schools and services, and other planned regional trails in the area.
- The TSP Addendum recognizes that street alignments and intersections should avoid and/or minimize impacts to identified natural resource areas wherever possible.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.1 Policies 1, 3, 4, 5, 6, 7 and 9 are met.

Goal 12.2 Develop and maintain a transportation system for the efficient movement of people and goods.

Policy 3 **The City shall design streets to encourage a reduction in trip length by improving arterial, collector, and local street connections.**

Policy 4 **The City shall design arterial routes, highway access, and adjacent land uses in ways that facilitate the efficient movement of people, goods and services.**

Policy 6 **The City shall develop and maintain an efficient arterial grid system that provides access within the City, and serves through traffic in the City.**

FINDING: The River Terrace Community Plan acknowledges that the existing major streets in and around River Terrace serve an important regional through-travel function and will benefit new residents by connecting them to regional destinations. The following streets in/near the River Terrace area are classified as arterials: Beef Bend Road, Roy Rogers Road, and Scholls Ferry Road. These streets serve the highest volume of motor vehicle traffic and are expected to be utilized for longer distance regional trips.

In addition to connecting to existing major streets, the River Terrace TSP Addendum also proposes connections to existing local streets located to the east of River Terrace in existing Bull Mountain neighborhoods. These connections are consistent with the city's existing transportation policies on connectivity for reducing trip length, providing an efficient transportation network, and maximizing the investment in the existing transportation system.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.2 Policies 3, 4 and 6 are met.

Goal 12.3 Provide and accessible, multi-modal transportation system that meets the mobility needs of the community.

Policy 4 **The City shall support and prioritize bicycle, pedestrian, and transit improvements for transportation disadvantaged populations who may be dependent on travel modes other than private automobile.**

Policy 5 **The City shall develop and maintain neighborhood and local connections to provide efficient circulation in and out of the neighborhoods.**

Policy 8 **The City shall design all projects on Tigard city streets to encourage pedestrian and bicycle travel.**

Policy 10 **The City shall require and/or facilitate the construction of off-street trails to develop pedestrian and bicycle connections that cannot be provided by a street.**

Policy 11 **The City shall require appropriate access to bicycle and pedestrian facilities for all schools, parks, public facilities, and commercial areas.**

FINDING: The River Terrace Community Plan envisions an interconnected network of multi-modal streets, one that conforms to the rolling topography and builds upon and connects with the existing streets in the area. The streets are designed to accommodate all modes of travel for users of all ages and abilities where possible. They are also designed to safely connect people to where they need to go, providing residents and visitors with a number of travel choices to their destinations. Connections to existing streets in adjacent Bull Mountain neighborhoods to the east will improve street connectivity in the area.

Residents in the River Terrace area will be able to safely and efficiently travel between destinations via any number of active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks, schools, and commercial areas—improving the overall health and livability of the neighborhood.

River Terrace has many stream corridors and the potential for many neighborhood and community parks. To best serve the needs of future

residents to travel to these scenic, natural, and recreational areas, a high quality network of low-stress pedestrian and bicycle facilities is envisioned. For pedestrians, sidewalks will be required on all future streets. For bicyclists, dedicated facilities will vary based on the street classification. Arterial and collector streets will have either bike lanes or shared use paths, with consideration for a buffered bike lane or cycle track along Roy Rogers Road.

Additionally, the pedestrian and bicycle facilities in River Terrace are planned to be fully integrated with the existing trail and bikeway network and the planned active transportation projects in the Metro Regional Trail and Greenways Plan. These measures will help ensure that future River Terrace residents will be able to access goods and services on foot and by bicycle, both within and outside of the area.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.3 Policies 4, 5, 8, 10 and 11 are met.

Goal 12.4 Maintain and improve transportation system safety.

Policy 1 **The City shall consider the intended uses of a street during the design to promote safety, efficiency, and multi-modal needs.**

Policy 2 **The City shall coordinate with appropriate agencies to provide safe, secure, connected, and desirable pedestrian, bicycle, and public transit facilities.**

FINDING: The River Terrace Community Plan and TSP Addendum state that residents in the River Terrace area will be able to safely and efficiently travel between destinations via any number of active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks, schools, and commercial areas—improving the overall health and livability of the neighborhood.

For pedestrians, sidewalks will be required on all future streets. For bicyclists, dedicated facilities will vary based on the street classification. Arterial and collector streets will have either bike lanes or shared use paths, with consideration for a buffered bike lane or cycle track along Roy Rogers Road.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.4 Policies 1 and 2 are met.

Goal 12.5 Coordinate planning, development, operation, and maintenance of the transportation system with appropriate agencies.

Policy 1 **The City shall coordinate and cooperate with adjacent agencies and service providers—including Metro, TriMet, ODOT, Washington County, and neighboring cities—when appropriate, to develop transportation projects which benefit the region as a whole, in addition**

to the City of Tigard.

FINDING: The transportation projects listed in the TSP Addendum were created with guidance from the Technical Advisory Committee (TAC). The TAC included members from Metro, Oregon Department of Transportation, the City of Beaverton, and Washington County, as well as other affected agencies and jurisdictions.

The City sent out a 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 of this Staff Report.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 12.5 Policy 1 is met.

<u>Chapter 13: Energy Conservation</u>

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.

FINDING: This CPA supports the city's adopted energy conservation goals and policies. No new goals or policies are being proposed.

The River Terrace Community Plan and TSP Addendum envision that residents in the River Terrace area will be able to safely and efficiently travel between destinations via any number of active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks, schools, and commercial areas.

The Comprehensive Plan designations place higher residential densities near commercial and institutional uses and along major corridors, potentially reducing vehicle dependency making transit a viable option in the future.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 13.1 Policy 1 is met.

<u>Chapter 14: Urbanization</u>

Goal 14.1 Provide and/or coordinate the full range of urban level services to lands and citizens within the Tigard City Limits.

Policy 1 **The City shall only approve the extension of City services:**
A. where applications for annexation for those properties have been approved; or
B. in circumstances where applicable state and county health agencies have declared a potential or imminent health hazard pursuant to ORS 431.705 to 431.760 (Health Hazard Annexation or Service District Formation); or
C. as outlined in the intergovernmental agreement regarding water provision within the Tigard Water Service Area.

Policy 3 **The City shall, as needed, coordinate and/or participate in planning activities or development decisions within the Tigard Urban Services Area.**

FINDING: Community Plan Goal 14: Urbanization addresses the city's urbanization policies for River Terrace.

- The River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively provide for the orderly and efficient transition of River Terrace from rural to urban land use. These plans are consistent with Metro Functional Plan Titles 11 and 14 and Statewide Planning Goal 14 for accommodating future population growth, ensuring the efficient use of land and creating livable communities.
- The Community Plan also meets Metro Functional Plan Title 11 and Statewide Planning Goal 11 requirements for ensuring that areas like River Terrace, which have been brought into the Urban Growth Boundary (UGB) for urban development purposes, are efficiently urbanized and developed as complete communities.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 14.1 Policies 1 and 3 are met.

Goal 14.2 ***Implement the Tigard Urban Services Agreement through all reasonable and necessary steps, including the appropriate annexation of unincorporated properties.***

Policy 6 **The City shall periodically update and/or amend its Public Facility Plan to ensure the predictable and logical provision of urban services for areas anticipated to be within the Tigard city limits.**

FINDING: This CPA updates the transportation section of the Public Facility Plan through incorporating the River Terrace TSP Addendum. The River Terrace TSP Addendum is an update to the adopted plan and ensures the most reliable, up-to-date information, is being used to plan for the community's transportation needs into the future. The River Terrace TSP Addendum also ensures compliance with Oregon Administrative Rule 660-012, which governs transportation system development in the state and requires conformance with the Regional Transportation Plan.

CONCLUSION: Based on the above findings, Tigard Comprehensive Plan Goal 14.2 Policy 6 is met.

APPLICABLE METRO REGULATIONS

Urban Growth Management Functional Plan

Title 1 **Housing Capacity - The Regional Framework Plan calls for a compact urban form and a "fair-share" approach to meeting regional housing needs. It is the purpose of Title 1 to accomplish these policies by requiring each city and county to maintain or increase its housing capacity.**

FINDING: Title 1 facilitates the efficient use of land within the Urban Growth Boundary (UGB). This Title requires cities and counties to determine their capacity for housing and adopt minimum density requirements. Title 1 also requires cities and counties to report changes in capacity annually to Metro.

This amendment (CPA2014-00001) adopts the River Terrace Community Plan, Comprehensive Plan designations, Natural Resource maps and a River Terrace Transportation System Plan Addendum, which was completed following the rules outlined in OAR 660, Division 7. The amendment sets policy related to a 20-year supply of land and does not affect compliance with Title 1.

Both Metro and Oregon Department of Land Conservation and Development staff were provided the opportunity to review and comment on all work leading up to the documents proposed for adoption as members of the Technical Advisory Committee.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 1 is met.

Title 3 **Water Quality and Flood Management - To protect the beneficial water uses and functions and values of resources within the Water Quality and Flood Management Areas by limiting or mitigating the impact on these areas from development activities and protecting life and property from dangers associated with flooding.**

FINDING: Metro's Title 3 requires that cities and counties adopt provisions that protect life and property from flooding. The Natural Resource maps proposed for adoption update existing city maps that regulate wetland and riparian areas in the River Terrace area. Detailed inventory work was required to update each map and was completed as part of the West Bull Mountain and River Terrace planning processes. By adopting wetland and riparian area maps for River Terrace and applying the city's Sensitive Lands regulations to the area, the city is ensuring that River Terrace is in compliance with Title 3.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 3 is met.

Title 11 **Planning for New Urban Areas - The Regional Framework Plan calls for long-range planning to ensure that areas brought into the UGB are urbanized efficiently and become or contribute to mixed-use, walkable, transit friendly communities. It is the purpose of Title 11 to guide such long-range planning for urban reserves and areas added to the UGB. It is also the purpose of Title 11 to provide interim protection for areas added to the UGB until city or county amendments to land use regulations to allow urbanization become applicable to the areas.**

FINDING: This CPA meets the requirements of Metro Functional Plan Title 11 for ensuring that areas like River Terrace, which have been brought into the Urban Growth Boundary (UGB) for urban development purposes, are efficiently urbanized and developed as complete communities.

The River Terrace Community Plan, River Terrace Funding Strategy and various River Terrace infrastructure master plans collectively provide for the orderly and efficient transition of River Terrace from rural to urban land use. These plans are consistent with Metro Functional Plan Titles 11 and 14 and Statewide Planning Goal 14 for accommodating future population growth, ensuring the efficient use of land and creating livable communities. They also further the city's goal of facilitating development in River Terrace in a way that results in high-quality development, natural resource protection and the provision of essential public facilities and services in a coordinated, logical and fiscally sound manner.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 11 is met.

Title 13 **Nature in Neighborhoods - The purposes of this program are to (1) 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 (2) to control and prevent water pollution for the protection of the public health and safety, and to maintain and improve water quality throughout the region.**

FINDING: By expanding the city's natural resource program to include the River Terrace area, the city is ensuring that River Terrace is in compliance with Title 13. River Terrace will utilize the same natural resource protection programs as the rest of the city. Implementation of these programs will occur through the adoption of several inventories and maps that provide various levels of natural resource assessment and protection as well as development flexibility.

The River Terrace Community Plan addresses natural resources and speaks to the city's coordination and inventory of significant natural resources in River Terrace.

- The Natural Resource maps proposed for adoption update existing city maps that regulate tree groves, habitat conservation areas, and wetland and riparian areas to include the River Terrace area. Detailed inventory work was required to update each map and completed as part of the West Bull Mountain and River Terrace planning processes.
- The SWG, TAC, community, and outside agencies had an opportunity to review each map. Since the natural resource maps are very technical in nature and were developed using existing policies and standards, the Stakeholder Working Group was not asked to recommend them for adoption. They were, however, given multiple opportunities to review and understand their implications.

CONCLUSION: Based on the above findings, Metro's Urban Growth Management Functional Plan Title 13 is met.

THE STATEWIDE PLANNING GOALS AND GUIDELINES ADOPTED UNDER OREGON REVISED STATUTES CHAPTER 197

The city's Comprehensive Plan incorporated the Statewide Planning Goals and was acknowledged by the state as being in compliance with state law; therefore, the Statewide Goals are addressed under the Comprehensive Plan Policies Sections. The following Statewide Planning Goals are applicable:

Goal 1: Citizen Involvement; Goal 2: Land Use Planning; Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces; Goal 6: Air, Water and Land Resources Quality; Goal 7: Areas subject to Natural Hazards; Goal 8: Recreational Needs; Goal 10: Housing; Goal 11: Public Facilities and Services; Goal 12: Transportation; Goal 13: Energy Conservation; Goal 14: Urbanization.

SECTION VI. ADDITIONAL CITY STAFF COMMENTS

Tigard Police Department, (Jim Wolf, 503-718-2561) had an opportunity to review this proposal and provided comments regarding the importance of connectivity. Mr. Wolf stated that street connectivity provides for efficient police travel and response times to emergencies. However, he also noted that connectivity may also provide criminals with more ways to flee the scene of a crime as well as result in increased traffic volume and unlawful speeds on certain streets.

The City of Tigard's Current Planning Division, Administrative Department, Development Services Division (Engineering), and Public Works Department had an opportunity to review this proposal and had no objections. Numerous staff from the Finance and Public Works Departments were involved throughout the entire planning process, including sitting on the project's Technical Advisory Committee.

SECTION VII. OUTSIDE AGENCY COMMENTS

The following agencies/jurisdictions had an opportunity to review this proposal and did not respond:

City of King City
Metro Land Use and Planning
Oregon Department of Environmental Quality
Oregon Department of Fish and Wildlife
Oregon Division of State Lands
Oregon Public Utilities Commission
US Army Corps of Engineers
Century Link
Clean Water Services
Comcast Cable
Metro Area Communications Commission
NW Natural
Portland General Electric
Tigard Tualatin School District #23J
Tualatin Valley Fire and Rescue
Tri-Met
Verizon

City of Beaverton had an opportunity to review this proposal and had no objections. They expressed appreciation for having the opportunity to coordinate the River Terrace and South Cooper Mountain projects.

Beaverton School District #48 had an opportunity to review this proposal and provided comments expressing support for the adoption of the River Terrace Community Plan. The District acknowledges the importance of providing safe pedestrian and vehicle access to the future high school site. The District appreciates the fact that the River Terrace transportation proposal incorporates pedestrian trails.

Washington County, Department of Land Use and Transportation had an opportunity to review this proposal and provided comments regarding the level of detail on several transportation improvements on county roads identified in the River Terrace Community Plan and River Terrace Addendum to the Transportation System Plan. Washington County agreed that it was prudent to delay the adoption of zoning districts.

Oregon Department of Land Conservation and Development had an opportunity to review this proposal and provided comments stating that the River Terrace Community Plan should address the requirements of the Metropolitan Housing Rule. In addition, it was noted that improvements or extensions to county roads outside the Urban Growth Boundary cannot be "planned." It was advised to identify these roads as "conceptual" or "recommended".

Oregon Department of Transportation, Region 1 had an opportunity to review this proposal and provided a clarification to the River Terrace Addendum to the Transportation System Plan stating that for projects listed in Table 6, ODOT is the jurisdiction that owns part of the listed intersections, but is not responsible for, and has not committed to funding the listed

improvements. ODOT also provided a few additions and clarifications to the Recommended Action Measures for Transportation (page 8-5) in the River Terrace Community Plan.

The River Terrace Community Plan and River Terrace Transportation System Plan Addendum have subsequently been modified in response to these comments.

SECTION VIII. PUBLIC COMMENTS

The Planning Commission received and considered both written and oral comments from residents and stakeholders as part of their deliberations on November 17, 2014.

Written comments were submitted by the following interested parties:

- Marc Butorac and Kelly Laustsen; Kittelson & Associates, letter dated Sep 4, 2014
- Don Hanson; Otak, letter dated Oct 31, 2014
- Jamie Stasny; Metropolitan Land Group, letter Oct 31, 2014
- Andrea Bonard, letter dated Nov 14, 2014
- Barbara and Steve Jacobson, letter dated Nov 14, 2014
- Alita Anne and Michael McCleskey, letter dated Nov 15, 2014
- Daniel and Pat Knox, email dated Nov 17, 2014
- Fred Gast; Polygon Northwest, letter dated Nov 15, 2014
- Kelly S. Hossaini; Miller Nash, LLP, letter dated Nov 17, 2014

Oral comments were submitted by the following individuals:

- Don Hanson; Otak
- Christopher Brehmer; Kittelson & Associates
- Kelly S. Hossaini; Miller Nash, LLP
- Jamie Stasny; Metropolitan Land Group
- Jim Lange; Pacific Community Design
- Barbara and Steve Jacobson; 15915 SW 150th Avenue, Tigard, OR 97224
- Alita Anne and Michael McCleskey; 15590 SW April Lane, Tigard, OR 97224

Listed below are the main highlights from the oral and written comments received. The full text of all comments can be found in the project file and Planning Commission minutes of November 17, 2014.

- River Terrace Boulevard is too expensive and too wide:
    - The design should be revised to reduce cost.
    - Design flexibility is needed along the entire length to respond to land uses, topography, and stream crossings.
    - The concept design illustration should be removed to eliminate the expectation that the full cross section will be built in all locations.
    - Minimum and standard cross sections should be developed and shown alongside the full cross section.

- The easternmost segment of the River Terrace Trail should be relocated or revised to show a less specific alignment.
- The 161st Avenue extension project should be added to the near-term TSP project list to facilitate access to the school property.
- The River Terrace Community Plan map should not show specific street alignments or intersection treatments. In the alternative, it should include the same design flexibility language as the Transportation System Plan (TSP) map.

The Planning Commission was presented copies of all written comments and heard all oral testimony before rendering four unanimous motions to recommend approval of the River Terrace Community Plan, updates to the Comprehensive Plan Designations Map and Natural Resource Maps, and the River Terrace Addendum to the city's Transportation System Plan (TSP). Commissioners supported keeping the River Terrace Boulevard illustration and the River Terrace Trail alignment in the Community Plan and TSP in part due to allowances for design and alignment flexibility already contained in the proposed amendments. Commissioners also preferred to leave the 161st Avenue extension off the TSP near-term project list, as it is atypical for a Neighborhood Route to be publicly funded. Overall, the Planning Commission found the project to meet all relevant approval criteria pertaining to the issues raised by the public.

SECTION IX. 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, the Planning Commission recommends that the City Council adopt by ordinance a Comprehensive Plan Amendment that adopts all of the following documents as determined through the public hearing process:

1. River Terrace Community Plan and associated amendments to the Comprehensive Plan Designations Map and Natural Resource Maps; and
2. River Terrace Addendum to the city's Transportation System Plan.

PREPARED BY: John Floyd
Associate Planner

December 2, 2014
DATE

APPROVED BY: Kenny Asher
Community Development Director

December 2, 2014
DATE

Agnes Kowacz

From: Marissa Grass
Sent: Thursday, October 30, 2014 3:53 PM
To: Agnes Kowacz; Susan Shanks
Cc: Tom McGuire
Subject: FW: River Terrace Comprehensive Plan - Request for Comments

---

From: Jim Wolf
Sent: Thursday, October 30, 2014 3:43 PM
To: Marissa Grass
Subject: River Terrace Comprehensive Plan - Request for Comments

Hello Marissa:

With respect to your request to provide comments relating to the River Terrace Comprehensive Plan, Tigard Police would like to weigh-in on the matter of connectivity of streets proposed for the new development. Law enforcement considers connectivity to have both positives and even negatives. Most police officers will concur that the ability to reach locations and persons in need of assistance in a timely manner is paramount. Understandably, not all requests for police assistance require immediacy. In fact, proportionately, most police calls for service are of the non-emergency type. However, when life and/or property are at risk-the time it takes to arrive at a location can be critical. For that reason, the ability to navigate along direct and continuous routes is desirable. Present software which officers utilize in their day-to-day patrol activities does not always identify dead-ends or streets which end in a cul-de-sac. In fact at times, even with the most up-to-date software; officers find themselves unable to travel to a target location only to find the roadway ends and does not continue through. Even in situations without an emergency; officers prefer easy access to and from locations. Police resources are limited; the time it takes to travel from one call to the next plays into the overall role of unproductive time. Considering the extensive number of miles driven yearly by police officers, the most efficient use of their time is essential.

When police officers consider how the lack of street connectivity may affect their ability to provide services; enforcement knows well that at times, some criminals consider how easily they may be able to remove themselves from a location. Police know that when access is limited to one-way in and out; catching the criminal may likely be more possible as opposed to paths leading quickly away from the scene of the crime. Once again, the latter does not present itself on any regular basis however for a balanced discussion it needs not be overlooked. Connectivity may also increase unwanted traffic or the hazards associated with it. Streets with limited accessibility typically do not see the volume and unlawful speeds as much as through streets.

If you have any additional questions; please feel free to contact this office. As we had also discussed earlier this week, I would like the opportunity to obtain additional feedback from the Chief and other command staff regarding the ability of Tigard Police to provide public safety services once development and the associated population increases. I will make every effort to provide the information to you as soon as possible.

Regards,

Jim Wolf

Jim Wolf
Public Information Officer
DIRECT 503-718-2561
EMAIL jim@tigard-or.gov
WEB www.tigard-or.gov

City of Tigard | POLICE DEPARTMENT
13125 SW Hall Boulevard, Tigard, OR 97223
NON-EMERGENCY 503-629-0111 | FAX 503-718-2645

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Community Development Department
Planning Division
12725 SW Millikan Way /PO Box 4755
Beaverton, OR 97076
General Information: (503) 526-2222 V/TDD
www.BeavertonOregon.gov

October 21, 2014

City of Tigard Planning Division
Attn: Susan Shanks
13125 SW Hall Boulevard
Tigard, OR 97223

RE: CPA 2014-00001 River Terrace Community Plan

Dear Ms. Shanks,

Thank you for the opportunity to provide comment on Tigard's River Terrace Community Plan. We have reviewed the plan and have no objections.

Throughout the River Terrace Community Plan you have provided many opportunities for coordination between our organizations. This coordination is evident in the River Terrace Community Plan, especially in relation to the transportation network serving the City of Tigard, the City of Beaverton, and Washington County. It is our sincere hope that this coordination continues as both of our communities develop in the coming years.

Congratulations on a well-done plan!

If you have any questions regarding this letter, please don't hesitate to ask.

Sincerely,

Steven A. Sparks, for

Cheryl Twete
Community Development Director

Cc: Steven A. Sparks, AICP, Planning Manager, City of Beaverton
Leigh M. Crabtree, Associate Planner, City of Beaverton

BEAVERTON SCHOOL DISTRICT
16550 SW Merlo Road • Beaverton, Oregon 97006
ph: 503.591.4395 • fax: 503.591.4484

Ron Porterfield
Deputy Superintendent
email: ron_porterfield@beaverton.k12.or.us
www.beaverton.k12.or.us

WE EXPECT EXCELLENCE WE INNOVATE WE EMBRACE EQUITY WE COLLABORATE

October 23, 2014

Ms. Susan Shanks, Senior Planner
City of Tigard Planning Division
13125 SW Hall Blvd.
Tigard, OR 97223

Dear Ms. Shanks,

We are in receipt of the River Terrace Community Plan, and have prepared the following comments. The Beaverton School District has been an active participant in the River Terrace and West Bull Mountain planning processes for many years. We appreciate the good work that has been done by Tigard staff and the community and support adoption of the River Terrace Community Plan.

Future Student Enrollment

The planning area is divided between Tigard-Tualatin School District and Beaverton School District. We estimate the BSD section of the planning area to be around 100 acres total. Given the potential zoning designations of the area, it appears that there will be roughly 13 acres of Low Density Residential, 59 acres of Medium Density Residential, and 17 acres of Medium-High Density Residential area. Using our standard student generation factors from new construction, we estimate the following number of students from the developments in the table, below.

Zoning	Estimated # of Elementary Students	Estimated # of Middle School Students	Estimated # of High School Students	Estimated Total Students
R-4.5	19	6	6	31
R-7	41	14	12	67
R-12	17	11	8	36
R-25	48	22	26	96
TOTALS	125	53	52	230

Currently, students from this area attend Scholls Heights Elementary, Conestoga Middle, and Southridge High School. We anticipate that with construction of new schools via our 2014 Bond program, our existing schools' boundaries will be changed to balance existing and expected enrollments. With the new schools in place, we believe that there will be sufficient capacity to accommodate new students from the River Terrace Community Plan area.

District Goal for 2010-2015: All students will show continuous progress toward their personal learning goals, developed in collaboration with teachers and parents, and will be prepared for post-secondary education and career success.

The Beaverton School District recognizes the diversity and worth of all individuals and groups. It is the policy of the Beaverton School District that there will be no discrimination or harassment of individuals or groups based on race, color, religion, gender, sexual orientation, gender identity, gender expression national origin, marital status, age, veterans' status, genetic information or disability in any educational programs, activities or employment.

BEAVERTON
SCHOOL DISTRICT
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Deputy Superintendent
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Other Comments

The District encourages local planning entities to incorporate walk/bike routes into their plans. As you know, the District is planning a new high school at the intersection of SW Scholls Ferry Road and SW 175th Avenue. As River Terrace develops we would like to work with Tigard staff to insure that safe pedestrian and vehicle access can be provided to the new high school from the south. We appreciate the fact that the River Terrace project incorporates pedestrian trails, which can aid parents and students access to the new high school.

We appreciate the opportunity to participate in the development of the River Terrace Community Plan.

Sincerely,

Ron Porterfield, Deputy Superintendent
Operations and Support Services

District Goal for 2010-2015: All students will show continuous progress toward their personal learning goals, developed in collaboration with teachers and parents, and will be prepared for post-secondary education and career success.

The Beaverton School District recognizes the diversity and worth of all individuals and groups. It is the policy of the Beaverton School District that there will be no discrimination or harassment of individuals or groups based on race, color, religion, gender, sexual orientation, gender identity, gender expression national origin, marital status, age, veterans' status, genetic information or disability in any educational programs, activities or employment.

WASHINGTON COUNTY
OREGON

October 22, 2014

Susan P. Shanks
City of Tigard Planning Division
City of Tigard Permit Center
13125 SW Hall Blvd.
Tigard, Oregon 97223

RE: River Terrace Community Plan Comments

Dear Ms. Shanks,

My staff and I have reviewed the proposed River Terrace Community Plan. We generally support the Community Plan and congratulate Tigard staff on a successful planning process. The Community Plan successfully establishes a vision for River Terrace to guide development and investment in to the future. The River Terrace Community Plan is a significant achievement not only for the City of Tigard, but for all of Washington County and the Portland metropolitan region.

Within a Community Plan it is important to identify the appropriate level of detail to inform community expectations and guide future decisions. The proposed River Terrace Community Plan identifies several transportation improvements on county roadways, where the level of detail is more specific than the county is comfortable with at this time. A couple minor adjustments to the plan are necessary to refine expectations about the future system and provide flexibility for future decision makers. These adjustments include:

- A number of new signals have been identified along county Arterials. These signals would not be implemented unless they meet signal warrants as approved by the County Engineer. We recommend the signals on county arterials be removed from the map, and the wording regarding the intersection improvements refined to provide for future flexibility.
- A roundabout has been identified on Bull Mountain Road at the intersection with the proposed North-South Collector. The design of this intersection must be approved by the County Engineer. We recommend the roundabout be removed from the map, and wording regarding the roundabout be refined to provide for flexibility for an intersection design at this location to be determined in the future.
- The first bullet on page 8-1 of the River Terrace Community Plan should be deleted or amended to clarify "...where new or existing Collector or Arterial streets..."

Department of Land Use & Transportation · Planning and Development Services
155 N First Avenue, Ste. 350 MS 14 · Hillsboro, OR 97124-3072
phone: (503) 846-3519 · fax: (503) 846-4412 · TTY: (503) 846-4598 · www.co.washington.or.us

The proposed zoning district map clearly states that the adoption of the community plan does not result in zoning designations. We agree that it is prudent to adopt the Community Plan designations before the zoning district and code amendments. We recommend adoption of zoning designations after the measures necessary to implement the Finance Strategy have been adopted by the City.

Sincerely,

Andy Back, Division Manager, Planning and Development Services
Washington County Department of Land Use and Transportation

CC: Andrew Singelakis, Kenny Asher

Agnes Kowacz

From: Debbaut, Anne <anne.debbaut@state.or.us>
Sent: Monday, October 20, 2014 4:00 PM
To: Susan Shanks
Subject: River Terrace: Plan Amendment 001-14

Hi Susan,
Just a couple of comments/reminders regarding the subject plan amendment:

1. Here is a link to the Metropolitan Housing Rule: and a couple of requirements you may want to address: http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/660_007.html

   660-0070-0030 New construction mix and
   660-0070-0035(3) Density

Best,
Anne

Anne Debbaut | Metro Regional Representative
Community Services Division
Oregon Department of Land Conservation and Development
1600 SW Fourth Ave., Suite 109 | Portland, OR 97201
Office: 503.725.2182 | Cell: 503.804.0902
anne.debbaut@state.or.us | www.oregon.gov/LCD/

Agnes Kowacz

From: Debbaut, Anne <anne.debbaut@state.or.us>
Sent: Thursday, October 23, 2014 11:35 AM
To: Susan Shanks
Subject: Draft River Terrace Community Plan

Susan,
One more comment regarding the transportation elements of your Community Plan and the addendum to your Transportation System Plan. We want to remind the city that roads outside the UGB cannot be a "planned facility" in the city's TSP or the addendum. Such a planned facility would have to be in Washington County's TSP. In that light, it would be helpful to identify the "recommended" street extensions (on both maps and project lists), that are outside the UGB, as "conceptual" or a similar term to distinguish between sections of new roads and road improvements that fall in and outside the UGB.

Here is one area with "recommends" on Goal 12 page 8-4 of the exhibits document (page 53 of the pdf):

The River Terrace TSP Addendum recommends a street extension outside River Terrace and the UGB for street connectivity and stormwater conveyance purposes. Transportation facilities located outside the UGB must address land use regulations from the Washington County Communit)r Development Code Sections 340-4.1 and 430-105.3 through 430-105.7; Oregon Revised Statute 215.275; and Oregon Administrative Rule 660-33.

There may be other locations, however I noted references on the p. 77 map, and the p. 115, Table 6 project list that also could use some clarification as noted above.

Thanks very much.
Regards,
Anne

Anne Debbaut | Metro Regional Representative
Community Services Division
Oregon Department of Land Conservation and Development
1600 SW Fourth Ave., Suite 109 | Portland, OR 97201
Office: 503.725.2182 | Cell: 503.804.0902
anne.debbaut@state.or.us | www.oregon.gov/LCD/

Agnes Kowacz

From: RAHMAN Lidwien <Lidwien.RAHMAN@odot.state.or.us>
Sent: Tuesday, October 21, 2014 3:46 PM
To: Susan Shanks
Cc: DANIELSON Marah B
Subject: FW: River Terrace Community Plan - Draft ODOT comments
Attachments: FINAL Draft River Terrace TSP Addendum.pdf

ODOT has reviewed the River Terrace Community Plan and has the following comments:

Please clarify that on the list of "Projects improving existing or proposed intersections outside River Terrace" (Table 6 of the TSP Addendum), ODOT is the jurisdiction that owns part of the listed intersections, but is not responsible for, not has ODOT committed to, funding the listed improvements. The footnote clarifies that River Terrace development will be proportionally responsible for contributing to the project costs. However, in order to meet the requirements of the TPR - 0060, the City of Tigard has a responsibility to ensure that projects # 24 through 26 are reasonably likely to occur, i.e. are in the Financially Constrained TSP and RTP.

ODOT recommends that the Recommended Action Measures for Transportation (page 8-5) be amended as follows:

1. Adopt the necessary elements of the River Terrace TSP Addendum and the River Terrace Funding Strategy into the Comprehensive Plan and TSP....., including the list of recommended system improvements inside and outside of River Terrace (Tables 5 and 6).

5. Continue to work with Washington County and ODOT on a cost sharing and implementation approach for the recommended county and State Highway improvements identified in the River Terrace TSP Addendum, ... and the intersections with Highway 99W.

8. Work with Metro to include the recommended transportation system improvements that are on the regional networks on the list of Financially Constrained RTP projects.

Please let me know if you have any questions. Actually I will be on vacation October 27 – November 11, so if you have questions during that time, you may contact Marah Danielson in our office.

Lidwien Rahman
Principal Planner
ODOT Region 1
123 NW Flanders
Portland OR 97209
Phone: (503) 731-8229

From: Susan Shanks [mailto:SusanS@tigard-or.gov]
Sent: Wednesday, October 15, 2014 11:47 AM

otak
HanmiGlobal Partner
808 sw third avenue, suite 300 | portland, oregon 97204
503.287.6825 | fax 503.415.2304
www.otak.com

October 31, 2014

Susan Shanks, Planner
(via email only)
City of Tigard
13125 SW Hall Blvd.
Tigard, OR 97223

Re: Arbor Homes Comments on the Draft River Terrace Community Plan — Otak Project No. 17280

Dear Susan:

Please provide this letter and attachment to the Planning Commission and include it as part of the public record.

On behalf of Arbor Homes we are submitting the following comments regarding the draft River Terrace Community Plan.

1. River Terrace Boulevard

We are convinced that River Terrace Blvd is over designed and way too costly given its function and how it fits into the plan. The current cost estimate, end to end, for this collector street is $50,000,000. This road was initially designated as a neighborhood route by the West Bull Mountain plan based on the forecasted traffic volumes and the fact that it would not be signalized at Scholls Ferry Road. The traffic forecast volumes have not changed and we are convinced there will not be a signal at Scholls Ferry Road.

The city is proposing the boulevard as a collector and signature road for River Terrace by widening the right-of-way from 70 feet to approximately 110 feet with extensive landscaping, a multipurpose trail and large median. We think the idea of an enhanced road with a continuous trail is good but this goes too far. The projected cost of $50,000,000 equates to about $20,000 per proposed unit in the district ($50M/2500 units). This puts development at an acute financial disadvantage compared to other adjacent districts (South Cooper Mountain). It simply won't work and is not a necessary improvement.

We have enclosed a memorandum from Kittelson & Associates, Inc. dated September 4, 2014, that evaluates the feasibility of the proposed roadway from an operation and cost standpoint.

2. Storm Water Facilities

The challenges of providing Regional Stormwater Facilities are outlined in the River Terrace Stormwater Master Plan, but specific details are not addressed in the proposed adoption of the Community Plan. Flexibility on design and implementation is required to allow phased development within a potential immediate and accelerated development schedule.

Some of the stormwater infrastructure strategies in the Stormwater Master Plan are based on the City's intention to adopt new design standards in cooperation with Clean Water Services (CWS). The timing of defining, approving, and implementing these new standards must match the projected timing for development, or the immediate development should be allowed flexibility in providing smaller scale facilities that meet current City/CWS standards.

The funding and land acquisition strategies for the Regional Stormwater Facilities are not clearly defined. This could have an impact on the timing and placement of regional facilities for the initial development phases in River Terrace. While the Stormwater Management Plan provides alternatives/flexibility for interim and smaller facilities, these interim facilities are costly and impact infrastructure and site layout planning for adjacent development.

The implementation of LIDA facilities on individual single family lots creates significant challenges for siting and sizing, operation, and on-going maintenance (Strategy Areas B and C). LIDA on single family lots was considered in the Villebois Community Plan in the City of Wilsonville but never implemented with development, mainly due to these challenges. LIDA on single family lots was not required in the Regional Facility approach for stormwater treatment in North Bethany. Alternatives to LIDA on single family lots would be to allow additional localized (by subdivision) water quality facilities, or incorporation into a regional water quality only facility.

The "excess" right-of-way located on the east side of Roy Rogers Road, south of the existing PGE facilities, should be considered for regional stormwater facilities.

3. Finance Strategy

We acknowledge that the finance plan is not under consideration by the planning commission at this time. However, the Transportation System Plan and other infrastructure systems set the framework for creating a quality community plan. These dictate the cost of development. It is difficult to adopt a specific plan without knowing how financing the improvements will work. We encourage the city to accelerate the finance plan and, at a minimum, provide cost " bookends" early on to ensure that implementation is financially feasible and somewhat in line with other districts (especially to the north).

4. Planned Development Ordinance

We understand that the city will be updating their planned development ordinance as part of the community plan process. We again encourage that this be accelerated. We believe the open space requirements in the current ordinance do not reflect the goals of the community plan. The plan

designates open space locations as a whole vs. requiring a flat percentage of site area per application. Other flexible standards of an enhanced Planned Development ordinance will further the objectives of the plan. We look forward to the opportunity to be of assistance and provide input on this important code change.

5. Timing for Applications

We would like to be able to submit development applications before the funding and finance plans are complete. This would facilitate 2015 site development (dry season). Developers should be able to submit and receive land use approvals and review of final engineering before the adoption of the finance plan. The final permits would be issued once the finance plan is adopted.

We respectfully request that the city consider our concerns raised on these matters.

Sincerely,

Otak, Incorporated

Don Hanson
Principal

Enclosures: "River Terrace Boulevard Feasibility" Memorandum dated September 4, 2014, by Kittelson & Associates, Inc.

DH; kg

Dan Grimberg, West Hills Development
Mark Butoric, Kittelson & Associates, Inc.
Mike Peebles, Otak, Inc.
Project files

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
610 SW Alder Street, Suite 700, Portland, OR 97205 P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: September 4, 2014 Project #: 11057.2

To: Dan Grimberg, West Hills Development

From: Marc Butorac, PE, PTOE; Kelly Laustsen
Project: West Bull Mountain Concept Plan Review
Subject: River Terrace Boulevard Feasibility

This memorandum provides further assessment of the proposed River Terrace Boulevard in Tigard, Oregon. The intent is to further evaluate the feasibility of the proposed roadway, both in terms of operations and cost. The first section of this memorandum analyzes operations at the intersection of River Terrace Boulevard/Scholls Ferry Road and considers when (and if) a traffic signal will be warranted in the future and if it can be accommodated from an access spacing and queue storage perspective. The analysis also evaluated the potential difference in traffic volumes associated with and without a connection to SW Luke Lane. The second section considers cross-section options for River Terrace Boulevard and estimated costs.

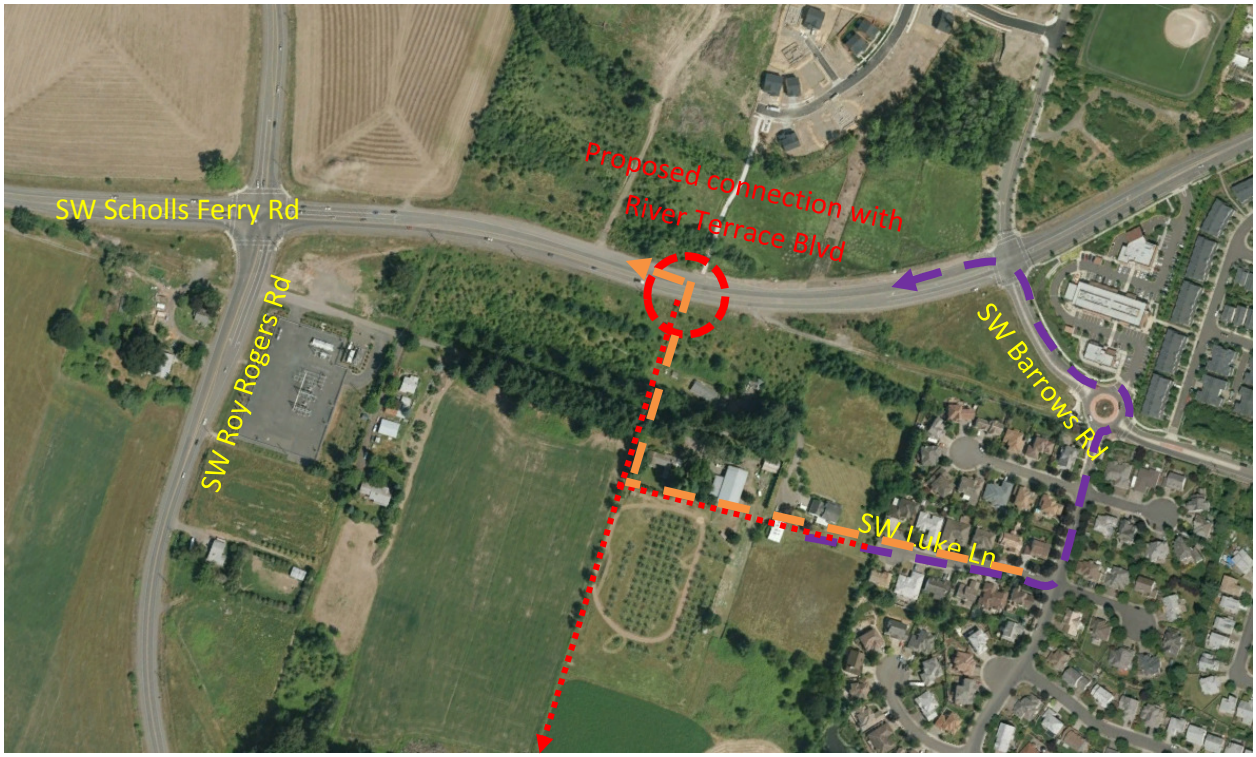
INTERSECTION OPERATIONS

The proposed River Terrace Boulevard will connect to Scholls Ferry Road as shown in Exhibit 1, and is located approximately 1,000 feet from both SW Roy Rogers Road and SW Barrows Road (centerline to centerline). The intersection was analyzed to assess operations with and without a traffic signal and to determine when (and if) a traffic signal would likely be warranted at the intersection. Based on the assessment documented in the DKS & Associates' April 9, 2014 memorandum, the primary turning movements at the River Terrace Boulevard/Scholls Ferry Road intersection are the northbound right-turn and westbound left-turn which reflect the residential nature of the recently annexed urban reserve area, the employment areas to the north, and the urban growth boundary to the west. These two primary movements can be served under two-way stop control. The upstream signal at SW Roy Rogers Road should create gaps in the eastbound traffic stream to allow vehicles destined to or originating from River Terrace Boulevard to safely transition to/from Scholls Ferry Road. Only considering left-turning vehicles from River Terrace Boulevard to Scholls Ferry Road, a traffic signal is not likely to be warranted in 2035 based on guidance provided in the *Manual of Uniform Traffic Control Devices* (MUTCD). According to signal warrant 3 in the MUTCD, 100 peak hour vehicles on the minor street approach is the lower threshold volume to warrant a traffic signal (based on a one-lane roadway

and a major street approach with a total of 1500 vehicles per hour or more). As provided in the DKS & Associates' memorandum, during the morning and evening peak hours, 85 to 90 left-turning vehicles would be anticipated on River Terrace Boulevard in 2035 if a traffic signal were installed.

As stated in the DKS & Associates memorandum, the analysis does not lead to a clear recommendation for a traffic signal. Northbound left-turn demand is not expected to be significant and vehicles can re-route to Roshak Road or Roy Rogers Road without significantly impacting operations. Westbound left-turn demand at SW Roy Rogers Road/SW Scholls Ferry Road is expected to be high with significant queues, which are expected to extend through the proposed River Terrace Boulevard/SW Scholls Ferry Road intersection. Therefore, a signal at River Terrace Boulevard could disrupt westbound operations on SW Scholls Ferry Road and would likely be impacted by queues from SW Roy Rogers Road. Given these considerations, a traffic signal is not likely to be warranted or recommended by 2035.

Exhibit 1: Proposed River Terrace Boulevard connection to SW Scholls Ferry Road



A connection to SW Luke Lane to the east of River Terrace is under consideration. The connection is likely to have a marginal change in the number of northbound left-turn movements and is not anticipated to significantly impact operations at the River Terrace Boulevard/SW Scholls Ferry Road intersection. If a signal is provided at River Terrace Boulevard/SW Scholls Ferry Road and a connection to SW Luke Lane is made, a small amount of traffic from the neighborhood may use SW Luke Lane to access the signal at SW Scholls Ferry Road (shown in Exhibit 1 with the orange dashed line). With two-way stop control at River Terrace Boulevard/SW Scholls Ferry Road and a connection to Luke Lane, some vehicles from River Terrace may re-route through the neighborhood via SW Luke Lane to reach the signal at SW Barrows Road (shown in Exhibit 1 with the purple dashed line). Either way, the re-

routing of vehicles destined westbound on Scholls Ferry Road with a SW Luke Lane connection is likely to be negligible given the low volume of vehicles that would be served by the connection. However, it should be noted that the SW Luke Lane connection will likely pull a number of eastbound oriented trips from the River Terrace that are destined to the two commercial developments (the Village on Scholls Ferry and Progress Ridge Townsquare) located on SW Barrow Road.

RIVER TERRACE BOULEVARD OPTIONS

River Terrace Boulevard has been proposed as a collector with a 112 foot right-of-way in the latest information provided by the City of Tigard (April 16, 2014 memorandum with subject "River Terrace Project Updates"). The cross-section includes additional landscaping and sidewalks to encourage slower speeds and a multimodal environment and create a gateway corridor into the River Terrace area. The purpose of this alternative concept evaluation is to determine the extent of the right-of-way impacts on potential development and the overall improvement costs to implement the new roadway. Toward this effort, two alternative concepts were developed for the roadway, compared with the original option in Table 1. Images of each additional option are provided in Exhibits 2 through 4.

Table 1. River Terrace Boulevard Alternative Cross-Section Concepts

Alternative Concepts	Exhibit	Right of Way	Cross Section Differences	Cost Estimate[1]
A. Proposed Collector	2	112'	Additional sidewalks and planter/landscape	$26.7m (Otak) $36.7m (City) $20.2m (DKS)
B. City Standard Collector	3	93'	Wider paved area	$23.4m (Otak)
C. City Neighborhood Route	4	65'	No median	$18.4m (Otak)

[1]Otak developed the cost estimates for alternatives B and C. Otak, the City, and DKS developed cost estimates for alternative A.

As seen in the table, the cost estimates for Alternative A produced by Otak, the City, and DKS & Associates differ significantly. The City assumed a higher cost for the bridge/culvert reconstruction (assuming construction of full bridges, as opposed to box culverts) and different right of way and construction costs. However, the relative cost difference between the alternatives can be seen by reviewing the cost estimates provided by Otak, which were developed using a consistent methodology for the three alternatives. The estimates show that Alternative B and Alternative C reduce the cost of the roadway by about 12% and 31%, respectively. This cost difference is largely a result of the decreased ROW needs and construction costs with the reduced cross-section.

Alternative B and Alternative C require less right of way than Alternative A, leaving additional land for development. Alternative B provides approximately 3.4 additional acres of developable area while Alternative C provides approximately 8.5 acres (both compared to Alternative A). This land could be developed, generating tax revenues and development fees.

All alternatives provide two vehicular lanes of travel, on-street vehicle parking, and some form of bicycle and pedestrian accommodations. Based on projections provided in the River Terrace Update (City of Tigard TSP Addendum), all alternatives provide sufficient vehicular capacity to serve 2035 demand. All alternatives provide sidewalk facilities separated from vehicular travel by landscaping. Alternative A provides a multi-use path to serve bicycles and pedestrians, while Alternative B provides on street bike-lanes and Alternative C assumes vehicles and bicyclists share the road.

Exhibit 2 – Proposed Collector (Alternative A)

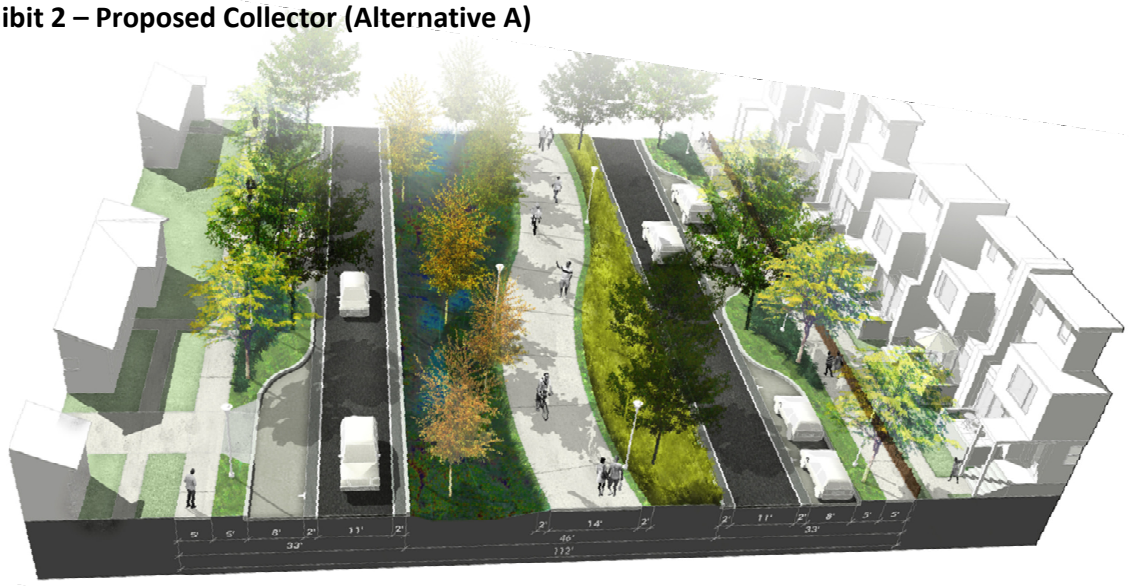


Exhibit 3 – City Collector (Alternative B):

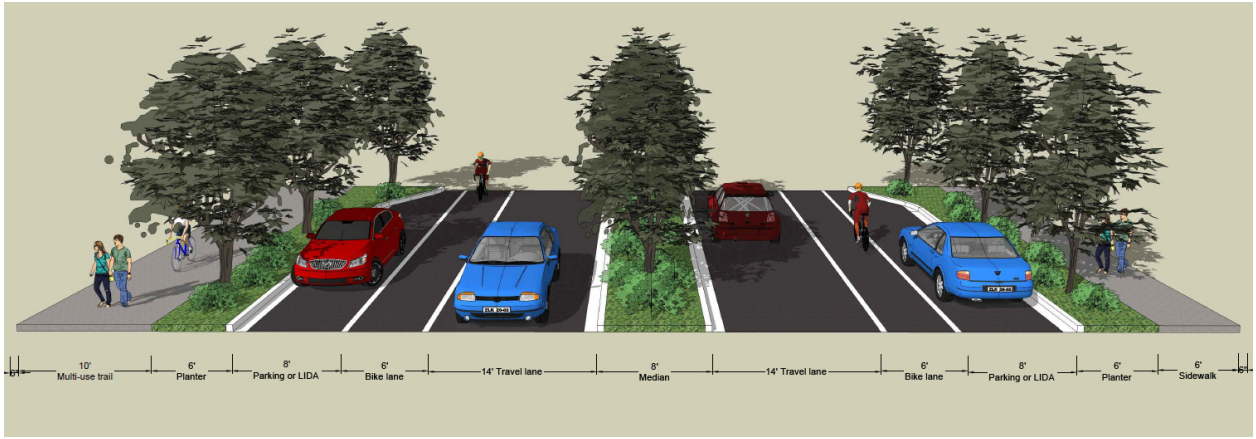
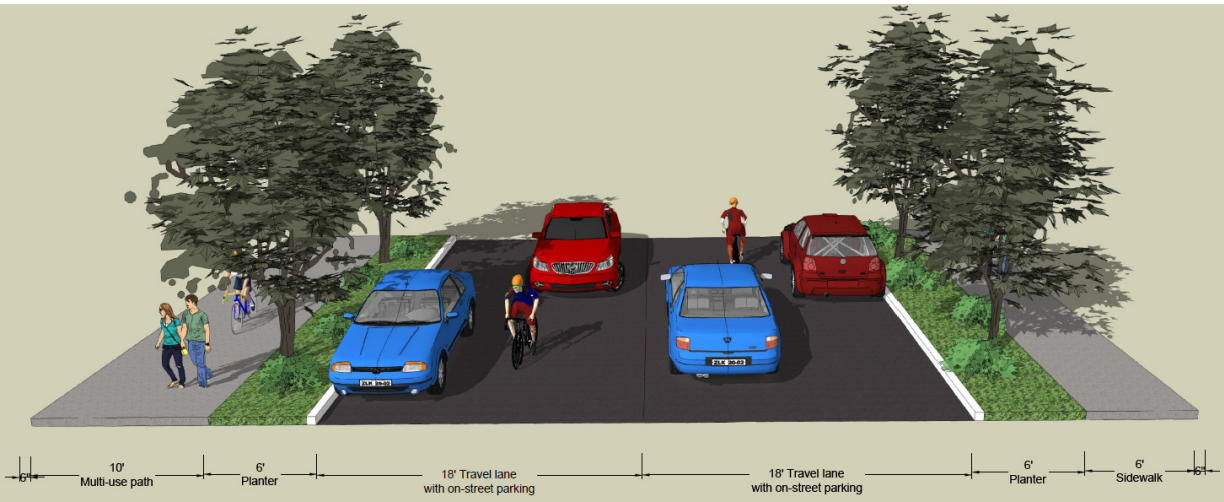


Exhibit 4 – Neighborhood Route (Alternative C)



CONCLUSIONS

As described in the sections above, the proposed River Terrace Boulevard is planned to connect to SW Scholls Ferry Road between SW Roy Rogers Road and SW Barrows Road. Given the limited demand of northbound left-turning vehicles from River Terrace Boulevard, availability of alternative routes, and storage deficiency at the SW Roy Rogers Road intersection for westbound left-turning vehicles, a traffic signal is not likely to be recommended or warranted by year 2035. The lack of or presence of the SW Luke Lane connection does not change this finding regarding the need or warrant for a signal at the River Terrace Boulevard/Scholls Ferry Road intersection.

In reviewing the proposed cross-section and right-of-way for River Terrace Boulevard (Alternative A), it was found that alternative roadway cross sections could be developed more economically and allow for additional residential development, while adequately accommodating the projected traffic volumes and pedestrian and cyclist needs from a capacity and safety perspective. Alternative B, largely based on the typical City of Tigard Collector Street standards, provides a narrower roadway without a shared multi-use path. It reduces the estimated cost by approximately $3.3m (13%) and provides 3.4-acres of additional land for development compared to the proposed Alternative A. Alternative C, based on a typical City of Tigard Neighborhood Route standard, provides sidewalks and a landscaping like the other alternatives, but assumes bicyclists and vehicles share the roadway. Alternative C reduces the estimated cost by approximately $8.3m (31%) and provides 8.5-acres of additional land for development compared to the proposed Alternative A. Thus, these alternatives should be considered if potential cost savings and/or more developable land are ultimately desired.

ACQUISITION DEVELOPMENT CONSTRUCTION

October 31st, 2014

City of Tigard
Attn: Susan Shanks, River Terrace Project Manager
13125 SW Hall Blvd.
Tigard, OR 97223

Re: Metropolitan Land Group (MLG) – River Terrace Community Plan and TSP and Park System Master Plan Comments

Dear Susan,

Please provide this letter to the Planning Commission and include it in the public record.

First, I would like to congratulate you and your team on the effort you have put forth to plan River Terrace. You have done an excellent job with a very difficult task and have produced an overall balanced proposal for the development of River Terrace. We greatly appreciate your extensive efforts and are proud to be a contributing member of the Stakeholder Work Group (SWG) and Implementation Subcommittee.

For the purpose of the record, I have attached three letters that we previously submitted to the City throughout the River Terrace planning process. Summarized below are our requests for further consideration.

River Terrace Community Plan

- **Urbanization** – We support Recommended Action Measure 5 on p. 7-4 and would like to emphasize the importance of a near-term UGB Expansion for the Urban Reserve Area south of River Terrace and north of Beef Bend Road. Exclusion of this area from the Urban Growth Boundary has made facility planning for River Terrace extremely challenging. A near-term UGB expansion would make provision of safe north/south connectivity and efficient utility connections possible. We also recommend that a CET grant be sought by the City to help pay for the associated community planning effort.

We request that the City seek a near-term UGB expansion to allow efficient planning for River Terrace south and that the City seek a CET grant from Metro to complete the required planning efforts to facilitate a UGB expansion request.

- **Sanitary** – While we are aware that the Sanitary Sewer Master Plan Addendum was previously adopted, we would like to emphasize the need for the allowance of interim solutions where feasible. The timeline for development of the River Terrace South Pump Station is years away and could be a barrier to development within River Terrace south.

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METROPOLITAN LAND GROUP MLG

- Additionally, the gravity main needed to provide service to adjacent properties is an additional challenge as it will require an additional design process and right of way acquisition.

We request that the City support our efforts to seek interim design solutions utilizing existing pump stations with the understanding that a final design solution connecting the developments to River Terrace South Pump Station be included as part of the development.

- **Water** – We strongly support Recommended Action Measure 2 on p. 7-6. We appreciate the City's willingness to explore options for a pressure valve to allow areas within the 550 Zone to utilize water from other zones until such time that funds are available to construct the 550 Zone Reservoir. Early development will generate funds to help fund the construction of the Reservoir.

We request that the City work to develop a plan to provide near-term water service to the River Terrace 550 Zone.

- **Transportation** – As we have discussed through the planning process, the street network, as shown on Map 14 within the Community Plan, is intended to show Point A to Point B connections only, and is not intended to be prescriptive regarding street design, street alignments or intersection treatments. The maps within the Transportation System Plan Addendum are reflective of this; however, Map 14 contains both intersection treatment recommendations and street alignment/treatment recommendations. Even after much time spent studying the River Terrace area, we all agree that we still have limited information about on-the-ground conditions which will dictate design considerations for road alignments and intersection treatments.

We request that the City modify Map 14 within the Community Plan document to match the maps within the TSP (p. 15, Figure 3) to include straight roads illustrating point A to point B connections and to remove intersection treatments allowing design of these features to occur through the land use and engineering processes for individual developments.

- **Transportation, River Terrace Boulevard** – We all share the desire to make River Terrace a distinctive and livable community. Though we understand and appreciate staff's efforts to develop a boulevard design that will help implement that desire, we also feel that the current recommended design as illustrated on p. 8-3 and included in the TSP amendment on p. 18 as Figure 5 is **NOT** financially feasible.

  Discussions within the Stakeholder Work Group have identified specific issues with the cross section which include excessive right of way (110') and duplicative sidewalks/trails and walkways. With a 40$ Million dollar price tag this single road makes up over half of the major street construction project list (not including Neighborhood Routes that will be the responsibility of the developers). We feel that this road design can be refined to provide a safe, beautiful and well-functioning facility that meets the community's needs while fitting within a financially feasible finance strategy.

We recognize that the Planning Commission will not be reviewing the Funding Strategy; however Recommended Action Measure 4 on page 8-5 recommends that the city "work with the development communities and other potential partners to fund River Terrace Boulevard per the recommendations in the River Terrace Funding Strategy". As discussed at the last SWG meeting on October 29th, we would like an opportunity to sit down with City staff to help refine both the Boulevard design and the project list as a whole to make changes that will allow the Transportation Network in River Terrace to become financially feasible.

We request that the City work with the development community to refine the design and cross-section for River Terrace Boulevard as well as to refine the project list to work toward a financially feasible plan.

River Terrace Parks Systems Master Plan

- **Park Land Acquisition** - With the existence of a Parks SDC in the City, we are not supportive of utilizing Canby's Mandatory Dedication of Park land model as included on p. 22 of the Parks Master Plan. Parks within River Terrace will benefit all of the City's residents including the park deficient neighborhoods in Bull Mountain (as stated within the Key Findings on p. 5-3 of the Community Plan). For this reason, park land should be purchased with funds generated by the current Parks SDC and land for parks should be acquired from willing sellers.

We request that the City utilize funds from the existing parks SDC to purchase park land within River Terrace from willing sellers.

Thank you for this opportunity to provide comments. We are encouraged with the overall direction of the plan for River Terrace and are excited to move toward implementing the vision for this area. The City's commitment to this effort is apparent and we hope that our involvement has been and continues to be helpful to the discussion.

Sincerely,

Jamie Stasny

Metropolitan Land Group

July 21st, 2014

City of Tigard
Attn: Susan Shanks, River Terrace Project Manager
13125 SW Hall Blvd.
Tigard, OR 97223

Re: Metropolitan Land Group (MLG) – Storm Water Master Plan Comments

Dear Susan,

Thank you for offering us an opportunity to provide comments on the River Terrace Stormwater Master Plan. As you know, our group has been involved in the Stakeholder Work Group and has a vested interest in seeing River Terrace develop in a timely and efficient manner.

We have a number of concerns with the River Terrace Draft Stormwater Master Plan dated July 8th, 2014 prepared by OTAK.

Regional Facility Approach

- While we appreciate the city's desire to accommodate the unique stormwater challenges of West Bull Mountain as cited on page 3 of the report, we have been frustrated by the lack of available information regarding facility sizing. One of our properties contains a proposed regional stormwater detention facility (T5_6b shown on Figure 4b). When our group met with city staff on June 3rd, 2014 we were informed that the city would be working with Clean Water Services to develop a new tool based on the Western Washington model to size facilities in the plan area, therefore no sizing information was made available to us. We were also informed that the contract for this model has not been established and that no additional information is available at this time.

  As with any new tool, this new model will take time to develop and implement, as design professionals will need time to work with the new modeling process and will certainly have questions and issues that need to be addressed prior to implementation.

  Without the understanding of how the new methodology works we are unable to support the implementation of the model because we do not have a solid understanding of the implications to our property. Additionally we are concerned that development of this new approach could further delay development.

- Throughout the planning process we have voiced our concern about using the regional facility approach. In response city staff stated that they will be open to interim solutions, but that the burden will be placed on the developer to construct and fund the interim improvement, as well as to fund and construct the connection to the ultimate facility. This approach, while solving the delayed development concern, creates "throw-away" facilities, which are costly and wasteful.

  We would ask that the city consider allowing site-specific facilities to be constructed and retained for long-term use if the regional facilities are not available at the time of project construction.

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METROPOLITAN LAND GROUP MLG

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Additionally, if specially assessed system development fees are to be applied to this area, we suggest that projects containing neighborhood facilities be deemed to have satisfied their stormwater master plan requirements upon construction of onsite facilities and that no stormwater SDC fee should be assessed.

- The regional detention facility located on our parcel is proposed to be located within a resource area. To our knowledge CWS standards allow for detention to occur within resource areas, however permitting for these facilities in resources includes a complicated and expensive permitting process due to wetland impacts that will be required to make the area function as a detention facility.

  We would like to know who will be responsible for permitting and construction of the regional facilities. If the developer constructs the facility, will they be compensated for the oversized portion of the facility? We have previously asked these questions through the implementation subcommittee but have not received a response.

  Our experience with regional stormwater plans in parcelized plan areas such as River Terrace is that they are overly expensive and extremely complicated when compared to a more traditional local approach. Ultimately, as we have expressed in the past, we would prefer a more flexible approach that looks at projects and properties on a case-by-case basis. This would allow for implementation of a regional or local solution that is dictated by the unique needs of each individual project.

<u>High Capacity Bypass Pipe</u>

- Our final issue of concern is the high flow bypass pipe that is identified to serve the Southern part of the plan area. Figure 4C indicates that a "high flow bypass pipe" will be constructed with development.

  As we expressed during the Implementation Subcommittee Meetings we are concerned about the construction of such a large and interconnected facility. In order for this system to work, the city will need to obtain right of way and permitting through an Urban Reserve area in order to make a connection with the Tualatin River as planned. Due to the unique nature of this approach, we also have very limited information on the costs to construct such a facility.

  We strongly encourage the city to explore stream restoration of the existing drainage channel in lieu of the high capacity bypass pipe as described on page 11 of the report.

We appreciate all the hard work that staff and their consultant team have put toward developing this plan and look forward to further discussion of our concerns. This City's commitment to this effort is apparent and we hope that our involvement has been and continues to be helpful to the discussion.

Sincerely,

Jamie Stasny
TriCounty Investments, LLC

ACQUISITION DEVELOPMENT CONSTRUCTION

May 1st, 2014

City of Tigard
Attn: Susan Shanks, River Terrace Project Manager
13125 SW Hall Blvd.
Tigard, OR 97223

Re: Metropolitan Land Group (MLG) –Request for a Transportation Plan Adjustment and Concerns

Dear Susan,

After our design charrette meeting last night I was left with a number of concerns regarding transportation planning in River Terrace.

The first concern I have is regarding the placement of the intersection towards the southern end of River Terrace Boulevard and the E/W collector.

- This intersection is shown on the southwest corner of our property, and is placed directly over a known resource. As per our previous discussions, this area will also contain a regional stormwater facility. Permitting this facility will be challenging without inclusion of an intersection and any associated impacts.
- Additionally this intersection is shown straddling 3 different properties in separate ownership. Implementation of an intersection design and construction is challenging when it is in singular ownership, this process would be greatly complicated when coordination between three property owners is required.

For these reasons I respectfully request that you shift the intersection to the west.

My second set of concerns stem from the concepts presented for River Terrace Boulevard.

- While I wholeheartedly agree with the idea of creating a signature street for this planning area I am troubled by the lack of financial information to support these concepts. We all share the common goal of creating a unique and livable community, however in order for these ideas to become reality the concepts must be feasible for implementation. Determination of their feasibility requires, at a minimum, a high level understanding of the financial implications and the possible funding mechanisms.
    - After our meeting last night I am left wondering what the financial impacts of this proposed boulevard design will mean for future homebuyers. Will the costs be passed along through an SDC or an LID? This is a critical factor that could affect all property owners in River Terrace.
- Federal funding would be helpful, however as Kenny mentioned last night we cannot assume that those dollars will be available, we must design a road that can be implemented without assistance.

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- As I stated at our February SWG meeting, it is very difficult for us to sign off on a plan that is rooted only in concepts with no discussion of the reality of implementation. I recommend that we begin having these financial discussions now, prior to making a recommendation for these TSP amendments to council.

At this point I think the group would be ill-advised to make a recommendation of support for a project concept that has not yet been grounded in the reality of financial feasibility. Please consider initiating the discussions of the financial implications prior to requesting a recommendation on the transportation components from the SWG.

This City's commitment to this effort is apparent and we hope that our involvement has been and continues to be helpful to the discussion.

Sincerely,

Jamie Stasny
Metropolitan Land Group

February 17th, 2014

City of Tigard
Attn: Susan Shanks, River Terrace Project Manager
13125 SW Hall Blvd.
Tigard, OR 97223

Re: Metropolitan Land Group (MLG) – Site Specific Transportation Plan Scenario Concern

Dear Susan,

It is clear that a tremendous amount of work has been done by you and your team on the planning of River Terrace. Before getting too far down the road, we wanted to voice a concern relative to our property. As you are aware, MLG owns approximately 29 within Area 63.

The following represents our primary concern with the Transportation Plan Scenario that we received for the SWG Meeting to be held on February 19th, 2014.

- **Transportation Plan**
  - We are very concerned about the "curved street" scenario proposed for the future extension of SW 161st Avenue. As we briefly discussed at the implementation subcommittee, if the road were built as shown on the updated plan, the entirety of the western portion of our property would become unbuildable.
  - Overall we would like to reiterate the importance for flexibility in alignment of future facilities
    - It is critically important to allow adequate flexibility in the future alignment of these roads. Today, we have at best an intermediate understanding of the actual on-the-ground challenges that we will face at the time of development.
    - We should identify flexible beginning and end points for the mapped transportation facilities and describe the intent of each facility between those points.
    - The establishment of a rigid street network will only impede development opportunities, especially in an area where existing grades and resource crossings will already make permitting and construction a challenge.

If this facility must be shown as a "curved street" on the map we respectfully request that the portion of road along our western property line be modified to run with the property line, instead of through the buildable portion of the property.

We are very supportive of the direction that River Terrace is headed and are excited to see some on the ground progress. This City's commitment to this effort is apparent and we hope that our involvement has been and continues to be helpful to the discussion.

Sincerely,
Jamie Stasny
Metropolitan Land Group

November 14, 2014

RE: River Terrace Community Plan

Dear Planning Commission Members,

I am writing on behalf of the residents of Sterling Park an established community of 262 homes and Churchill Forest a community of 40 homes both located in Beaverton's South Cooper Mountain. We would like to state our support of the signal at Scholls Ferry for the River Terrace Blvd and Multi-Use Trail. On November 5th we presented recommendations to the Beaverton Planning Commission Meeting to align the South Cooper Mountain east-west collector to River Terrace Boulevard. Attached is a summary of our recommendations.

The City plan collector begins at Tire Flat Road and directs traffic through the planning area, by Main Street, the new High School, and 175th, to the Barrows/Loon intersection on Scholls Ferry. This collector will connect to Loon Drive across from the Scholls Heights Elementary playground and athletic fields. Our residents are very concerned about the proximity of this connection to the school and how it will impact pedestrian access and bus routes. The residents are asking the city to veer the collector south just before the Churchill Forest Neighborhood to align with the River Terrace Blvd., creating a seamless collector and trail system for our two new communities.

If the road alignment is not approved, we are asking the City of Beaverton to at least consider aligning the River Terrace Trail with a multi-use path on the Beaverton side and a pedestrian signal at Scholls Ferry. This provides a safe and convenient pedestrian crossing, especially to facilitate travel to and from the new High School as this trail would link to Beaverton's School to School Path.

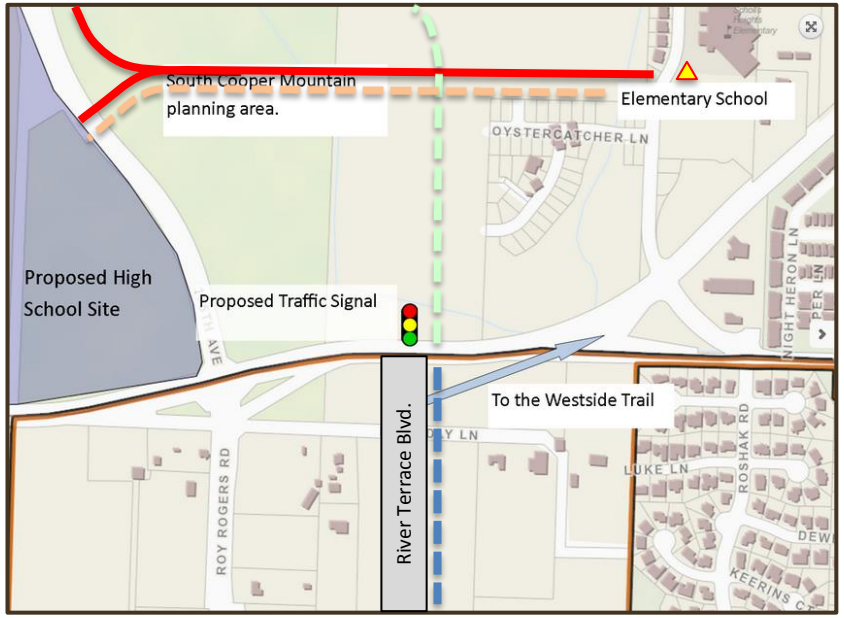
Not aligning these roads and trails would be a missed opportunity to connect our residents to schools, trails, and commercial districts. During the Planning Commission deliberations, the Commission asked staff to provide them with more information on River Terrace. They said it does not make sense to plan one side of the highway and they wanted to ensure our communities are working together.

We hope this letter helps inform Tigard of the plans on the other side of the highway and the wishes of residents to align our communities.

Sincerely,
Andrea Bonard

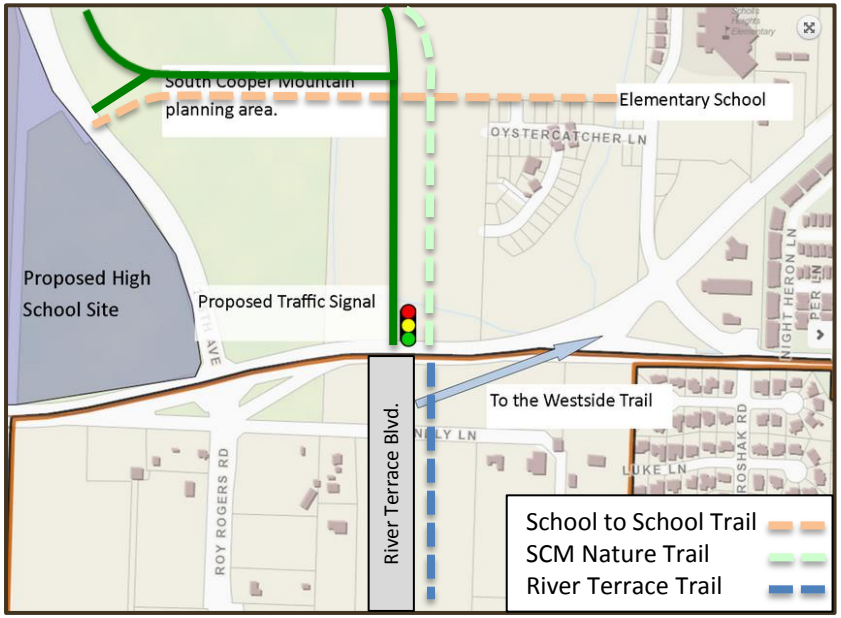
Attachment

Resident recommendations provided to the City of Beaverton Planning Commission regarding the South Cooper Mountain (SCM) East-West Collector Road.



City Plan

Create a three-lane east-west collector road directing traffic from South Cooper Mountain, starting at Tire Flat Road, crossing 175th, to Loon Drive, ending at Scholls Heights Elementary School.



Proposed Residents Solution

Create a collector road that directs traffic from SCM and 175th toward Scholls Ferry and logically connects with River Terrace Boulevard. Connect the River Terrace Trail to SCM Nature Trail, which improves connectivity to the School to School trail.

Proposed Solution Benefits

- **SAFETY**: Will not result in unsafe school crossings for Scholls Heights children or impact school bus and school traffic routes; because there will not be increased traffic directly from arterial roads and the High School.
- **SAFETY**: The proposed collector would not connect to Loon across from the fire lane at the school playground.
- **CONNECTED COMMUNITIES**: Seamless SCM and River Terrace collector and trail system.
- **MULTI-USE TRAILS:** Facilitates safe walking and biking paths to schools, shops, and restaurants. Decreases traffic and parking burden.
- **NATURAL RESOURCES**: Decreased disruption to existing stream. Enhanced trail connectivity supports pedestrian and bike transportation.
- **HOME VALUES**: No negative impact to home values on both Loon and Oystercatcher.

Canterbury Tails Horse Farm

Established 1990

November 14, 2014

Via Email and Hand Delivery

City of Tigard Planning Commission
Tigard Town Hall
13125 SW Hall Blvd.
Tigard, OR 97223

Re: River Terrace Community Plan Public Hearing

Dear Planning Commissioners:

This letter is written as a follow-up to comments already submitted on the River Terrace website in response to a request for comments on the proposed Community Plan. I believe our other impacted neighbors have also posted comments to that site and we hope that you will consider those comments during your deliberation. That being said, to be clear for the Planning Commission public hearing record, we believe the idea of including a definitive location for a regional trail at this early stage is a flawed and unnecessary inclusion in the proposed Community Plan. We hope the Planning Commissioners will consider recommending that staff take a more flexible approach to the trail location before the matter is forwarded to City Council.

Unlike parks, which the City planners have wisely identified where a variety of parks "might" be located generally but have not assigned any definitive locations at this early stage in the process, the proposed regional trail is being treated completely differently. In the proposed Plan, it has been definitely located over our property and those of four (4) adjoining neighbors, none of whom are likely to develop into subdivisions at any time, even in the distant future, and none of whom (including us) voted for this annexation. This effectively means the land use will be restricted for all of the property owners immediately upon adoption of the Community Plan (unless modified) and the question of how the land will be paid for and maintained for the next five, to ten to twenty years or more that it takes for all of those lands to be redeveloped, if ever, must also be addressed now.

We, along with our neighbors, who are also impacted property owners, are extremely concerned about the location of the proposed regional trail through our properties, especially without knowing how and when the area will be developed and without knowing how neighborhood roads will be laid out. We are all small individual parcel owners, as opposed to a developer with the land mass who could more easily accommodate such a large regional trail and could develop such a trail on a commonly owned parcel large enough to result in a connected trail sooner rather than later. As the Planning Commissioners are aware, a taking of this property must be at market value and for a legitimate public purpose. We question the legitimacy of exacting a section of trail out any one of these parcels at this time, based on the supposition, that one or more other needed segments might become available at some unidentified point in the future. The reality is that most, if not all, of the impacted parcels will not be developed for many years to come.

We are all concerned with the proposed size and scope of the proposed regional trail for safety, security and nuisance reasons, as well as the impact on our adjoining land's value, especially given that this is the view side of all of our properties. We are concerned as to how the City will address paying for the land since the amount of land proposed to be taken from each individual small acreage is not roughly proportional to the potential development impact and the City's known limited budget for both transportation and parks, not to mention ongoing maintenance. Again, if only one parcel in the middle develops so there can be no trail connectivity for many years, how will the City maintain that taken parcel for the next 20 years so it does not create a nuisance, hazard, or blight on the adjoining and nearby properties and their respective market values? There are insufficient park funds as it is to manage existing developed parks and trails. It is not reasonable for the City to restrict development of a large strip of land for years to come without paying just compensation for it at the time the restriction is imposed (which would be now if the Community Plan is approved, as written) and then properly managing, maintaining and patrolling it for years to come until it can, if ever, be developed.

There are at least three other areas shown on the map that should also be seriously considered for the location of this trail, based on what develops first and who has the land mass to better accommodate such a taking. We don't understand why the park locations can change but this regional trail location is set in stone. If the goal is to achieve a connected River Terrace Trail sooner rather than later, we suggest it would make much more sense to do the same with the trails as you are doing with the parks, and pick locations in the general area but wait to determine the actual location until the City knows better who will develop and when, and where the neighborhood street will be located. Right now the proposed regional trail would run through a swimming pool, an English garden that is home to dwarf rabbits and other woodland creatures, three large and actively used horse pastures, and an established and successful vineyard where the owner has a significant investment of time and money. Metro will certainly not take a positive view of identifying only one location for the regional trail when that location may not allow for construction of that trail for many years, if ever, assuming planners stay true to their word that the City will not condemn the land until redevelopment is ready to occur.

We have all been told repeatedly that the City will not take the property before the owners are ready to develop, nor will it be taken without just compensation. This is not, however, consistent, with the action of definitively placing the trail on these specific properties right now and telling us that this land cannot ever be developed or used by its current owners for any other development purpose. We know that our neighbors who own Horseleap Vineyard certainly have no plans to develop, and it is also highly unlikely that our other two neighbors to the east, who each already have large high end homes located on only own two and a half acre lots (each with about 20% of that acreage being proposed to be taken for this trail, not to mention additional land that will be needed for roads since all properties are currently served by one private narrow driveway), will further develop. These properties are high value estate properties and will likely remain so. Although we have no current plans to develop our property, when I asked what would happen if we wanted to develop and our neighbors did not, I was told we would need to either give an easement or a deed to the City for that piece of land needed for the proposed regional trail as a condition of development but that the planners had not determined how that land would be paid for, when it would be paid for, or how it would be managed or maintained by Tigard as an isolated island strip of a large regional trial that goes nowhere for years to come. I can't imagine many residential homeowners would want lots adjoining such an undefined use with questionable maintenance for an indeterminate amount of time.

For all of the foregoing reasons, committing the location of a large regional trail at this time on these particular properties, given they are all small acreages in different ownership that are highly unlikely to be developed together or even remotely in the same time frame, is a poor judgment call which will

create a hardship and land devaluation for each property ownership. These decisions will also likely result in a regional trail that may connect to nothing whereas the other viable locations could much more likely develop sooner and create a connected trail, as Metro would like to see, I am sure. The only reason we have been given for this location is that the prior Washington County plan showed a "trail" of undefined size and nature in this location and the Tigard planners had committed not to revise that plan to the greatest extent possible. The truth of the matter is that the planners have revised the Washington County plan in very significant ways and in numerous locations. What is also true is that the Washington County plan also showed the trail running along Beef Bend Road at one point, which is a much more achievable location if the City wants connectivity. Although we understand the planners may argue that some of the properties adjoining Beef Bend Road were excluded from the UGB, there is a strong likelihood, and a known desire on the part of the City, to bring them in sooner rather than later, and placing the trail along Beef Bend Rd. would be an incentive for Metro to do so. Additionally, there is already authority to improve an existing major roadway to meet transportation needs, which include pedestrian and bicycle modes.

Please consider the other options already depicted on your map and treat the trail location as the City is treating the parks—by waiting to identify locations until more is known as to how and when development will occur and what funding will be available for procurement and management. In addition, there is also no need for two trails off 150th Avenue that are only about a quarter mile apart, both merging into the River Terrace arterial Trail, as currently depicted in the proposed Community Plan. Thus, there already exists an identified alternative option to this trail which may be located on land better suited for earlier development, which would also create a more direct route to the River Terrace trail and school. Finally, as outlined above, a trail along Beef Bend Road, where Washington County originally placed it, could be more readily attainable and would be the most direct connection into the Tonquin Trail which, in turn, connects to River Terrace.

We urge you to recommend removal of the current firm placement of the trail on our properties and instead designate several areas for possible trail locations and then select the most appropriate option, as development moves forward, that can result in a connected usable regional trail, rather than limiting the option to one ill-conceived location that, at present, has every indication of being the wrong choice and a costly decision for all concerned.

Sincerely,

Steve and Barbara Jacobson
Property Owners
15915 SW 150th Avenue
Tigard OR 97224

Cc: Daniel & Pat Knox
Brandt & Karin Hulse
Dr. Mike & Anne McCleskey
Susan Shanks, Tigard Project Manager
Kenny Asher, Tigard Community Development Director

15590 S.W. April Lane
Tigard, Oregon 97224
November 15, 2014

City of Tigard
Planning Commission
13125 S.W. Hall Blvd.
Tigard, Oregon 97223

Dear Planning Commission:

This letter is written in response to the plan for a regional trail across the south side of Area 63.

In 1992 my wife and I bought ten acres in unincorporated Washington County where we built a home and planted a vineyard. When the vines were mature enough, we co-opted with Seufert Winery to begin making wine from the grapes grown on our property. Wine with our pinot noir label is now in several local restaurants and grocery stores. The 2014 harvest was stellar. We harvested a record 20 tons of fruit with a market value of approximately $60,000.

When Washington County began to developed plans for our area that included several roads through our land, we hired attorney John Rankin to protect our vineyard. John was able to convince the county to remove all the roads except where our part of April Lane will be included in the connector to Woodhaven. When the County turned over its plans to the city of Tigard, the only remaining part of the plan that would affect our vineyard was a walking trail along the south property line.

Now that the city of Tigard has taken over the planning of our area, a **new regional trail** has been added in place of the walking trail. The plan for this trail would cross the south areas of our three neighbors' properties to the east, then cross the lower part of our vineyard and continue through the backyard of our neighbor to the west. As we understand the plan, the trail is designed to be approximately 30 feet wide, paved, and lighted with open access to the land it crosses. An eight-foot high deer fence to keep deer and other animals from eating the grapes surrounds our vineyard. The lower part of the vineyard has enough room along the bottom of the rows to allow the tractor to turn. If the trail were to pass through our vineyard, the fence would have to be removed or moved further north. Removing the fence would allow deer, dogs and people into the vineyard. Moving the fence would result in the loss of many vines and their resulting productivity. We would expect to be compensated appropriately for the loss of vines and future revenue.

We have planned on the income from our grapes and wine as an important part of our retirement. We also love this house and land and plan to maintain it as a working vineyard until we are no longer able to do so. At that time we plan to deed the property to our children for their enjoyment and profit. We do not plan to sell to a developer. We have been a part of Tigard for over 30 years and are anxious to support the planning commission with the development of the community but not if threatens our current and future property value.

MICHAEL MCCLESKEY ALITA ANNE MCCLESKEY

SENT VIA EMAIL AND HAND DELIVERED

Agnes Kowacz

From: Knox, Daniel <DKnox@SCHWABE.com>
Sent: Monday, November 17, 2014 10:08 AM
To: Susan Shanks
Cc: 'Jacobson, Barbara'
Subject: River Terrace Planning Commission

Susan:

I ask that this note, along with the comments I posted on the River Terrace website, be included in the record for this evening's meeting of the Planning Commission. I regret that my wife and I will be unable to attend the public meeting, but we very much wish the Commission to consider our viewpoint.

My wife, Pat, and I purchased our two-plus acres off 150th (it was being used as a pasture) in 1985. It was four long years before we were able to build our home, and move our young family into the house we'd spent years dreaming about. We're in our 26th year in the home, and have spent that entire time planting trees and shrubs, roses and hedges, enjoying the view across the Tualatin Valley, and welcoming the wildlife that visits us daily. Where once our children enjoyed the freedom and quiet of our home and surroundings, it's now our grandchildren who play in the trees, and feed the apples we grow to our neighbors' horses.

We understand and appreciate that the Commission and the planning staff have a responsibility to look to the future, and to shape the development sure to occur in ways that will benefit all residents of this part of Bull Mountain. What we don't understand is why so little consideration is apparently given to those of us who already live here. The insistence that this trail will be carved only out of the lands that now bear our four homes makes little sense, not when alternatives are readily available which would work no violence to existing homes. Whether the Commission recognizes it or otherwise, adopting a plan which sets aside a significant portion of each of the four properties for a future trail is a "taking" right now. In the event any one of the four of us might wish one day to sell our homes, we'd need to disclose to prospective purchasers that the City of Tigard considers the strip along the southern side of our homes "theirs," and that at any time, the City may take it away.

None of the four residents so affected by the location of this "linear park" have any intention of developing their properties. We simply wish to continue living here, enjoying our homes, our neighbors and our views. If a trail is believed by the Commission to be a crucial part of the development of River Terrace, then please locate it where the development is sure to occur, and where there is sufficient land mass to absorb conveniently the taking as a part of the development and permitting process. Don't locate it where it works maximum disruption to the people who already live here. Please respect our existing homes, as you plan for the residents yet to come.

Most Sincerely,

Dan and Pat Knox
15955 SW 150th Ave
Tigard

To comply with IRS regulations, we are required to inform you that this message, if it

contains advice relating to federal taxes, cannot be used for the purpose of avoiding penalties that may be imposed under federal tax law. Any tax advice that is expressed in this message is limited to the tax issues addressed in this message. If advice is required that satisfies applicable IRS regulations, for a tax opinion appropriate for avoidance of federal tax law penalties, please contact a Schwabe attorney to arrange a suitable engagement for that purpose.

NOTICE: This communication (including any attachments) may contain privileged or confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this communication and/or shred the materials and any attachments and are hereby notified that any disclosure, copying or distribution of this communication, or the taking of any action based on it, is strictly prohibited. Thank you.

POLYGON NORTHWEST COMPANY

November 15, 2014

Planning Commission
c/o Kenny Asher
Community Development Director
City of Tigard
13125 SW Hall Boulevard
Tigard, Oregon 97223

RE: River Terrace

Dear Planning Commission:

We at Polygon Northwest are supportive of the City's efforts with regard to the planning of the River Terrace district in the City of Tigard. In my experience, the City has conducted one of the most extensive public outreach efforts that we have been involved in. The City's staff communication is unprecedented. They have been genuinely interested in receiving input and have been proactive in responding to concerns and technical questions. Not unlike your own responsibilities, they must balance the needs and concerns of all the members of the public, formulate balanced solutions and create sound public policy to be considered by the City Council.

The result of the public outreach and planning process thus far has resulted in a great plan for the creation of a neighborhood that will be a sustainable, vibrant and will include parks, trails, a school and significant infrastructure improvements. The River Terrace district will become a positive addition to Bull Mountain and an integral part of the City. The Community Plan has received a great deal of scrutiny at the Stakeholder and Technical Group level. One of the most heavily debated issues was River Terrace Boulevard.

One aspect of the debate over River Terrace Boulevard has been the width of the Right of way. In our Stakeholder Group meetings, the group requested that the width of the right of way allow for flexibility. We supported that notion. The Staff ensured the group that there would be flexibility. The illustrative contained in the Community Plan, in our view sets less than desirable expectations. In our view the community would be better served by removing the illustrative and showing both the minimum and standard width sections. The components of the street, including the trail and the center median, need to be explained in detail and describe how flexibility will be determined. For example, the crossings of streams will not be constructed at the standard width. I'm certain that there will be similar arguments for other sections of River Terrace Boulevard that will require flexibility.

109 East 13th Street, Vancouver, Washington 98660
(360) 695-7700 • (503) 221-1920 • Fax (360) 693-4442
www.Polygonhomes.com
CCB#163013

The cost and financing of the public infrastructure will likewise continue to be discussed. That subject will be covered in future meetings and public hearings. We are positive that those matters will be equitably resolved.

River Terrace is deserving of a signature street to help set the framework for a community of its size and stature. We are supportive of the River Terrace boulevard concept. A well designed street, like other community amenities, including parks and trails, will serve to create a strong sense of place. The sense of place will establish a brand for the neighborhood and the City. These amenities, as we have experienced in similar communities we have had a significant role in, create lasting value. We will be building a number of important segments of River Terrace Boulevard. We look forward to that opportunity.

The planning of River Terrace has been extensive, spanning approximately ten years. The result of the public outreach is a well-designed and balanced plan. Again, we are very supportive of the River Terrace Community Plan. We urge you to adopt a positive recommendation to City Council.

Thank you for the commission's efforts and consideration of the River Terrace Community Plan.

Sincerely
POLYGON NORTHWEST

Fred Gast
Senior VP-Oregon Division President

MILLER NASH LLP
ATTORNEYS AT LAW

PORTLAND, OREGON
SEATTLE, WASHINGTON
VANCOUVER, WASHINGTON
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WWW.MILLERNASH.COM

3400 U.S. BANCORP TOWER
111 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204
OFFICE 503.224.5858
FAX 503.224.0155

Kelly S. Hossaini
kelly.hossaini@millernash.com
(503) 205-2332 direct line

November 17, 2014

BY HAND DELIVERY

Planning Commission
City of Tigard
13125 S.W. Hall Boulevard
Tigard, Oregon 97223

Subject: River Terrace Community Plan

Dear Commissioners:

The purpose of this letter is to provide additional testimony on behalf of Tigard-Tualatin School District ("TTSD") regarding the draft River Terrace Community Plan. TTSD is grateful to have been a part of the planning process for the Community Plan and would like to commend staff on a job well done. TTSD was part of the concept planning process at the county level for this area and believes that the City has done a good job carrying forward the substantial work that went into the West Bull Mountain Concept Plan.

As you probably know, TTSD owns 20 acres in River Terrace, which it plans to use as a school site in the future to serve the needs of River Terrace and surrounding areas. TTSD is currently engaged in a facilities planning process that will last through this school year and will help TTSD better plan for future district needs, including identifying facilities that may be required on its River Terrace property. The need for a new school on TTSD's River Terrace property will be mainly driven by growth in the River Terrace area. At this point, Alberta Rider Elementary and Deer Creek Elementary are more or less at capacity and as new homes are built in River Terrace and new families move into the area, TTSD will have to be able to respond quickly to provide additional school capacity. TTSD is concerned that it will not be able to provide the new school facilities that will be necessary to serve this new development in a timely manner, because basic transportation infrastructure may not be in place to serve the school site when it's needed.

At this time, TTSD's property can only be accessed by a private easement, Taylor Lane, from Beef Bend Road. TTSD has always envisioned that S.W. 161st Street

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would be extended from its current terminus at Hazeltine Lane to Beef Bend Road. The current draft of the Community Plan is consistent with that assumption. The school property, then, would take its primary access off of the extended S.W. 161st Street. The issue for TTSD is that it is not clear when S.W. 161st Street will be extended and TTSD is concerned that the need for a school on the property will become acute before there is adequate access to that property.

Although extending S.W. 161st Street to Beef Bend Road would be optimal, TTSD understands that there are financial and other constraints that may make this full extension unrealistic in the short term. Therefore, TTSD is asking that an extension of S.W. 161st Street to the school property be added to the list of Recommended Transportation System Improvements, Table 5, in the Transportation System Plan Addendum. The extension does not have to include the cost of a fully built-out street section. The extension could simply be of adequate width for two travel lanes, with the remainder of the street section being constructed as adjacent properties develop. The extension of sewer and water would also have to be coordinated with the road extension.

TTSD understands that there are constrained financial resources for infrastructure, but TTSD has an important public service to provide to the new development in River Terrace. TTSD cannot provide that service if all of the resources are directed only to providing infrastructure that opens the door for new development in the northern and western areas of River Terrace, thereby creating the need for the new school facilities, with the hope that somehow uncoordinated, ad hoc development in the eastern portion of the area will allow for a timely provision of those school facilities.

TTSD appreciates this opportunity to provide these comments, and stands ready to work with the City to ensure that school facilities can be provided to River Terrace when they are needed.

Very truly yours,

Kelly S. Hossaini

cc: Mr. Ernie Brown

City *of* Tigard Respect and Care | Do the Right Thing | Get it Done

River Terrace Community Plan

Public Hearing
Tigard City Council

December 16, 2014

City *of* Tigard

Proposal

1. Community Plan
2. Comp Plan Designations Map
3. Natural Resources Maps (x3)
4. Transportation System Plan (TSP)
5. Park System Master Plan
6. Funding Strategy

City *of* Tigard

Adoption Action

1. Community Plan — ORDINANCE x2
2. Comp Plan Designations Map
3. Natural Resources Maps (x3)
4. Transportation System Plan (TSP)
5. Park System Master Plan
6. Funding Strategy — RESOLUTION x2

City *of* Tigard

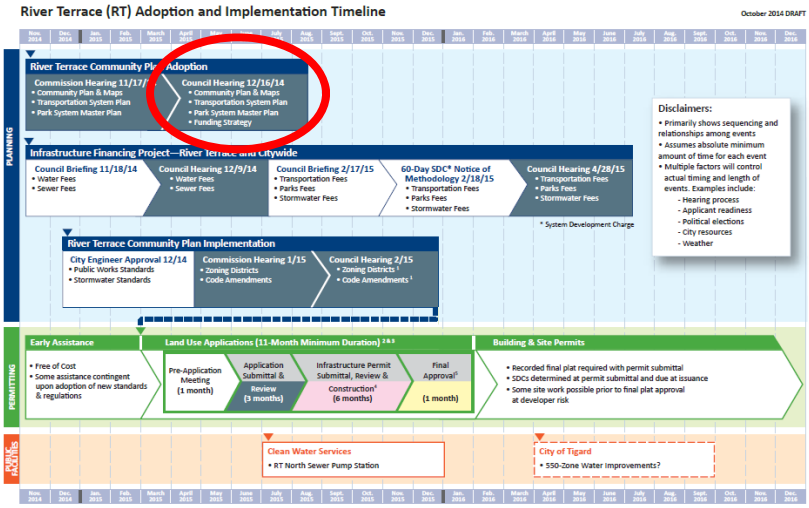
Adoption Documents

Document	Adoption Status	Adoption Mechanism	Decision Maker
I. RIVER TERRACE INFRASTRUCTURE MASTER PLANS			
Water	ADOPTED	Resolution	Council
Sewer	ADOPTED	Resolution	Council
Stormwater	ADOPTED	Resolution	Council
Parks[1]	Target: Dec 2014	Resolution	Council
Transportation	Target: Dec 2014	Ordinance	(Planning Commission) Council
II. RIVER TERRACE COMMUNITY PLAN & MAPS			
River Terrace Community Plan	Target: Dec 2014	Ordinance	(Planning Commission) Council
Comprehensive Plan Designations Map	Target: Dec 2014	Ordinance	(Planning Commission) Council
Natural Resource Maps	Target: Dec 2014	Ordinance	(Planning Commission) Council
III. IMPLEMENTATION DOCUMENTS			
River Terrace Funding Strategy	Target: Dec 2014	Resolution	Council
River Terrace Public Improvement Design Standards	Target: Dec 2014	Administrative Staff Review	City Engineer
Citywide Stormwater Model and Standards	Target: Dec 2014	Administrative Staff Review	City Engineer
River Terrace Code Amendments	Target: Feb 2015	Ordinance	(Planning Commission) Council
Citywide Infrastructure Financing Project[2]	Target: Jul 2015	Resolution & Ordinance	Council
IV. RIVER TERRACE ZONING DISTRICTS			
Zoning Districts Map	Target: Feb 2015	Ordinance	(Planning Commission) Council

Tonight's Hearing

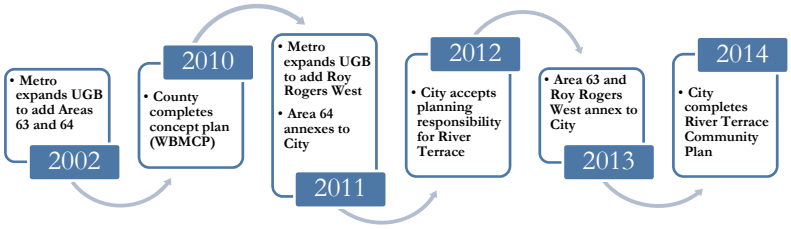
City *of* Tigard

Adoption Timeline



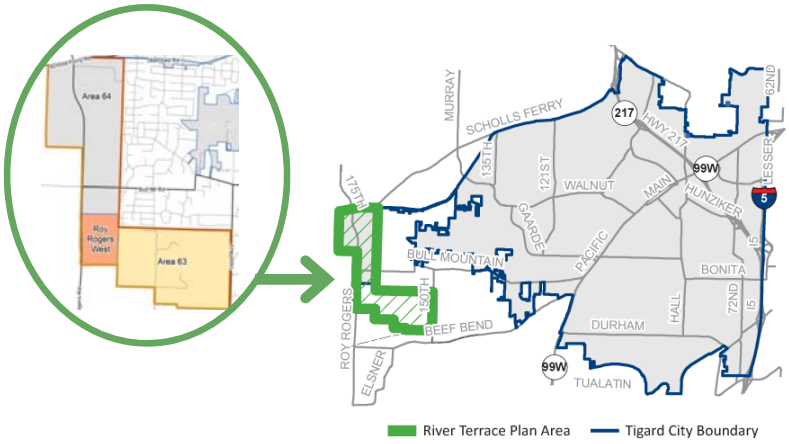
City *of* Tigard

River Terrace



City *of* Tigard

River Terrace



City *of* Tigard

Long Range Plan

Opportunity to create complete community

Balances diverse interests

- Bull Mountain neighbors
- River Terrace property owners
- River Terrace developers
- **Future River Terrace residents?**

Consistent with plans

- Comprehensive Plan
- Strategic Plan
- Regional Master Plans

City *of* Tigard

Plan Elements

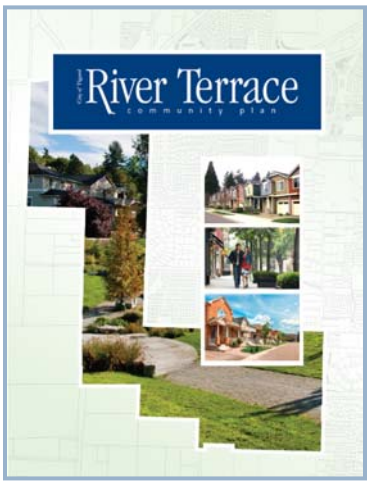
Community Vision	Metro and State Requirements

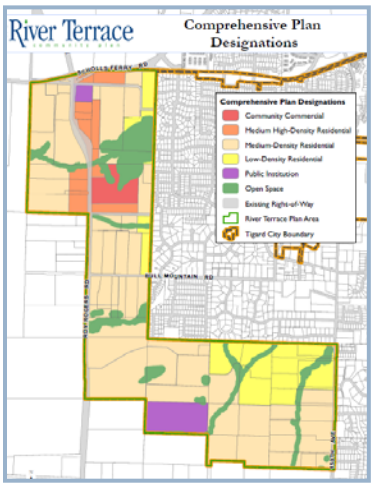
Variety of residential densities & housing options
Neighborhood commercial center
Multi-modal transportation system
Natural resource protection

Recreational opportunities
Stormwater management
Efficient provision of public utilities

City *of* Tigard

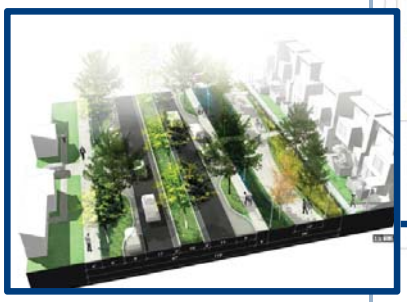
Plan Elements



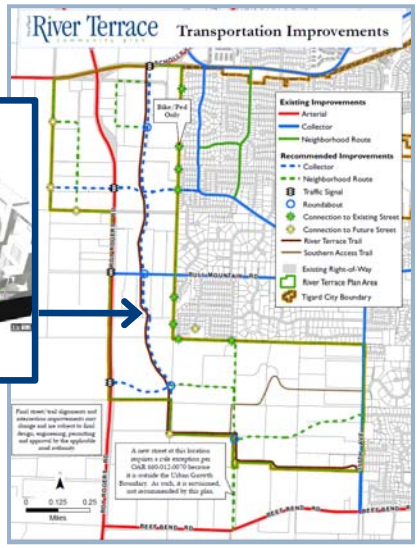


City *of* Tigard

Plan Elements

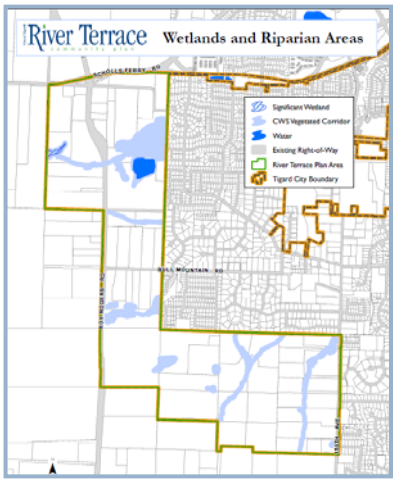


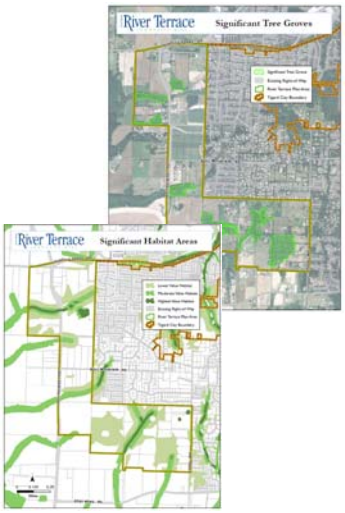
River Terrace Blvd



City *of* Tigard

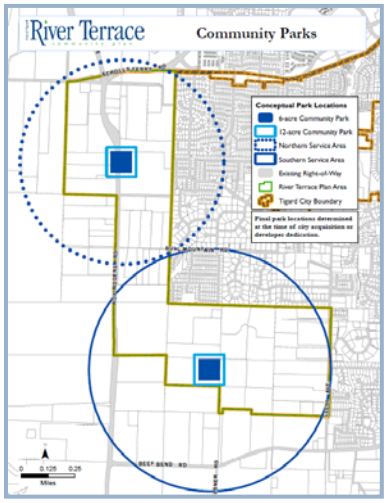
Plan Elements

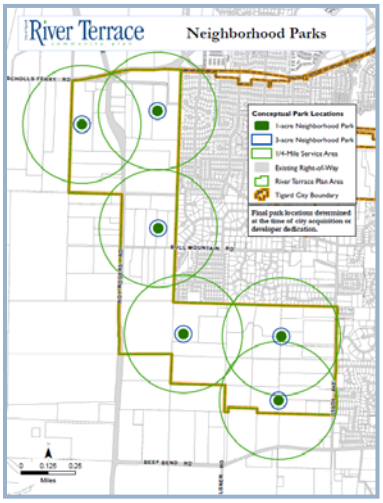




City *of* Tigard

Plan Elements



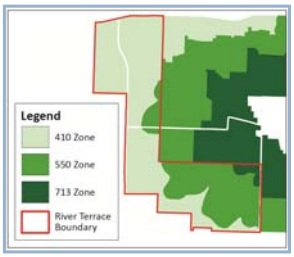


City *of* Tigard

Plan Elements

Stormwater

Sewer



Water

City *of* Tigard

WBMCP

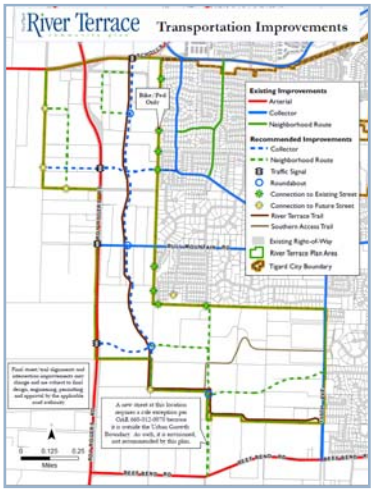
Plan Refinements

- City LOS standards applied to parks & trails
- Stormwater conveyed to Tualatin River
- River Terrace Trail integrated with River Terrace Blvd
- Arterial greenway trails eliminated
- Signal recommended at Scholls Ferry Rd
- Street connections retained w/modifications

City *of* Tigard

Public Comments

- River Terrace Blvd
- River Terrace Trail
- Street alignments
- Intersection treatments
- Scholls Ferry signal
- 161st Ave Extension



City *of* Tigard

Staff Response

- River Terrace Blvd….**Cost estimate revised & Language added**
- River Terrace Trail…….**Language added**
- Street alignments……... **Language added**
- Intersection treatments……..**Language added**
- Scholls Ferry signal……**No change**
- 161st Ave Extension……...**No change**

City *of* Tigard

Recommendation

Planning Commission

1. Community Plan
2. Comp Plan Designations Map
3. Natural Resources Maps (x3)
4. Transportation System Plan

NOV 17 RECOMMENDED APPROVAL WITH NO CHANGES

City *of* Tigard

Recommendation

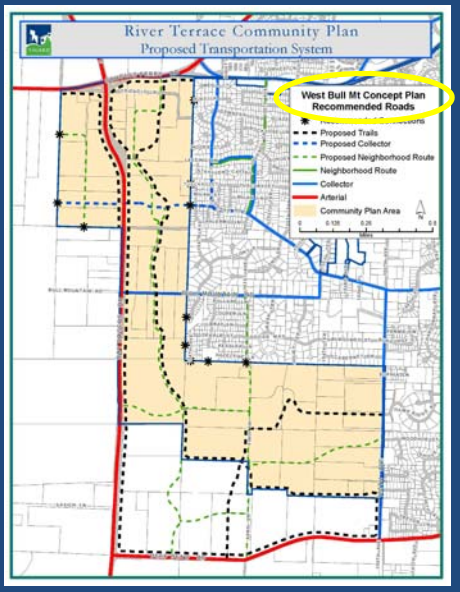
Project Team & SWG

1. Community Plan
2. Comp Plan Designations Map
3. Natural Resources Maps (x3)
4. Transportation System Plan
   (SWG recommended approval w/ caution)

RECOMMEND APPROVAL

ADDITIONAL INFO

River Terrace Blvd



Starting Point

(WBMCP)

Final Proposal

(RTCP)

River Terrace Blvd

Plan Refinements

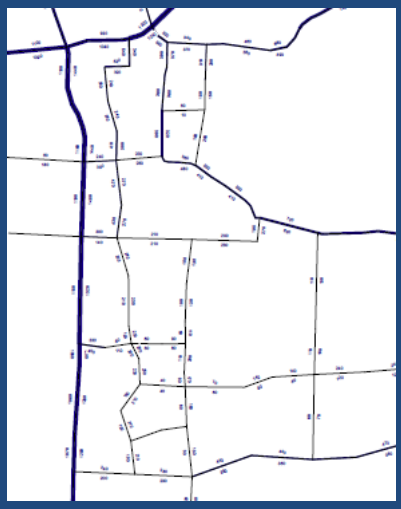
- Reclassified (warranted by traffic volumes)
- Straightened (significant tree grove protection)
- Retained Trail (SWG preferred over Arterial Greenway Trail)
- Integrated Trail (land & cost efficient)

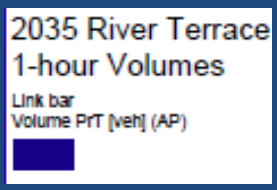
Signal at Scholls Ferry Rd (separate but related issue)

- Reduces impacts to existing neighborhoods
- Reduces out-of-direction travel
- Facilitates ped/bike connectivity and safe crossings

Potential Site Design

Trip Projections in River Terrace





RT Blvd PM Hour:
880 trips (north end)
420 trips (south end)

RT Blvd Daily Range:
4200 – 8800 trips

Street Classifications in Tigard

Functional Classification	Avg Daily Trips
Arterial	Over 6,000
Collector	1,500 to 10,000
Neighborhood Route	500 to 3,000
Local Street	Less than 1,500

River Terrace Blvd Avg Daily Trips:
4200 – 8800 trips

Other Collector Streets in Tigard

Street	From	To	Vehicles per Day
Oak St	Hall Blvd	87th Ave	1934
Oak St	71st Ave	72nd Ave	2072
69th Ave	Hwy 99W	Pine St	3174
Scoffins St	Ash Ave	Main St	3394
Locust St	Lincoln St	Greenburg Rd	4471
135th Ave	Morning Hill Dr	Feiring Ln	4584
135th Ave	Summerwood Dr	Hawksbeard St	5576
68th Ave	Beveland St	Franklin St	4820
Pfaffle St	79th Ave	81st Ave	5678
Cascade Ave	Greenburg Rd	Scholls Ferry Rd	5902
Hunziker St	72nd Ave	77th Pl	6714
Main St	Commercial St (W)	Commercial St (E)	6817
Tiedeman Ave	Meadow St	Tigard St	7577
Tiedeman Ave	Tigard St	Greenburg Rd	9966
121st Ave	Gaarde St	Quail Creek Ln	4891
121st Ave	Manzanita Ct	Springwood Dr	10246

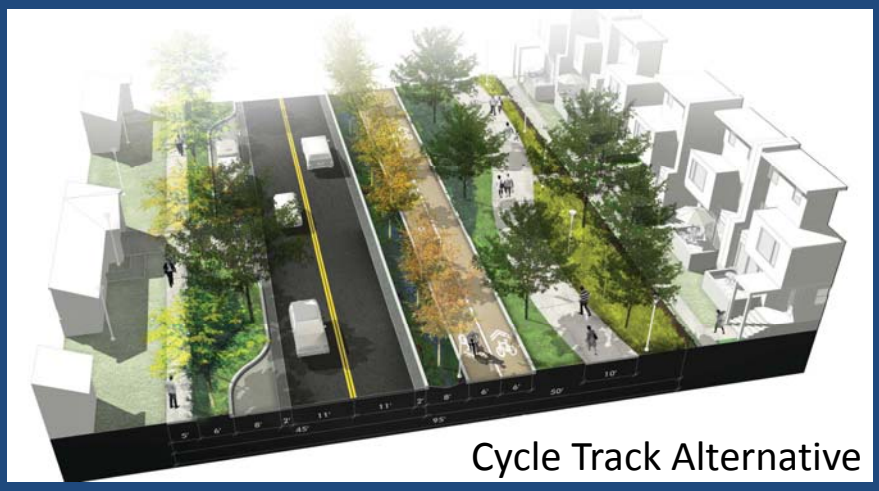
Final Design Concept

Alternative Design Concepts

Alternative Design Concepts

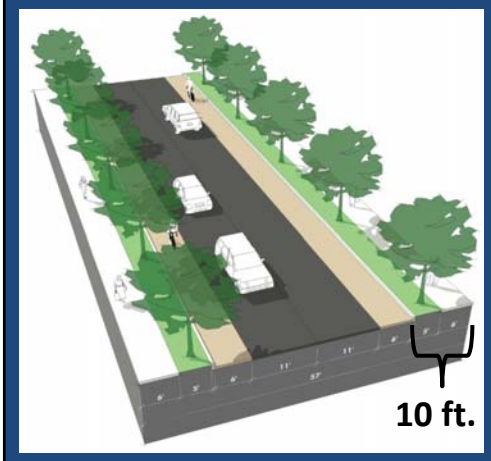
No Median Alternative

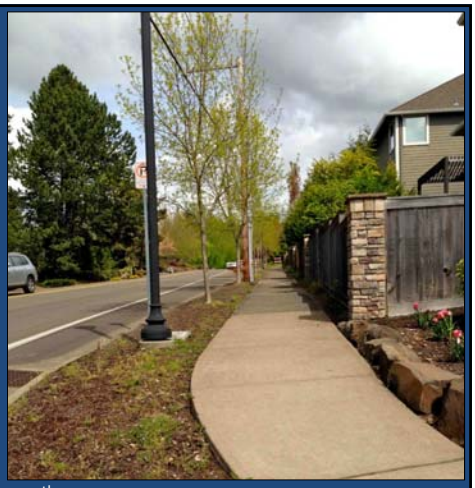
Alternative Design Concepts



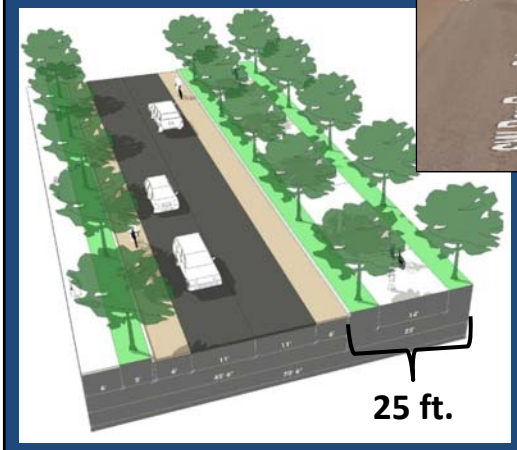
Cycle Track Alternative

Alternative Trail Corridor Widths

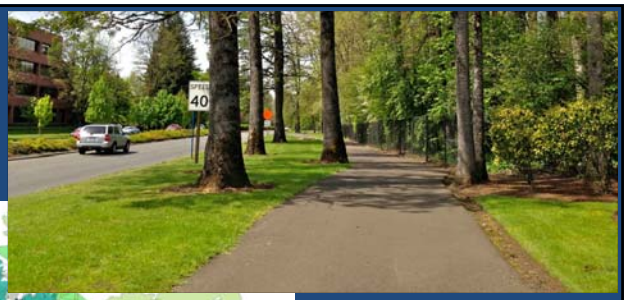


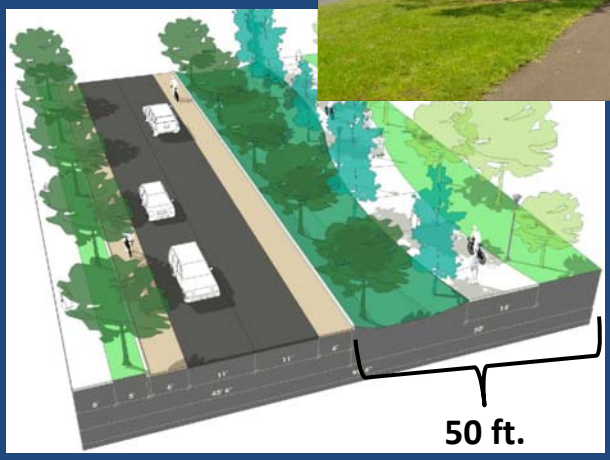


150th @ Fr. Prairie Estates



Roy Rogers @ Sherwood

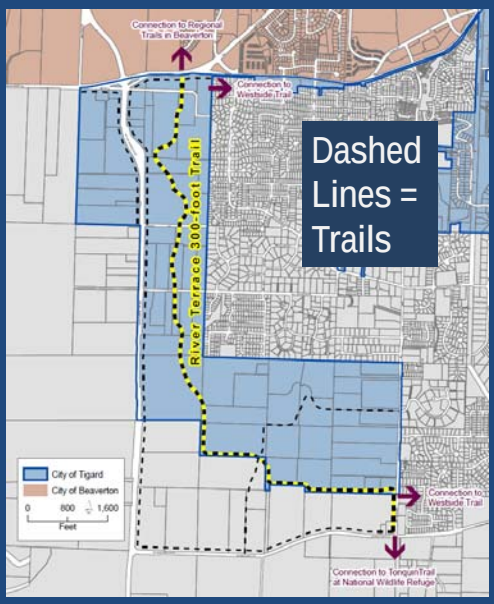




Kruze Wy @ West Lake

River Terrace Trail

(formerly 300-Foot Trail)



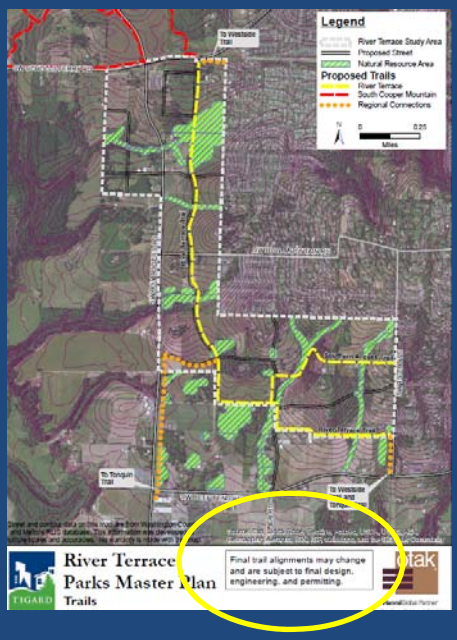
Starting Point

(WBMCP)

300-Foot Trail

WBMCP Description

- Generally follows the 300-foot contour elevation (beginning at 150th Ave in the southeast quadrant of Area 63 and ending at Scholls Ferry Road)
- Is generally flat and easy to walk and/or bike
- Connects the entire planning area
- Consists of off-street and on-street pathways
- Provides access to several community focal points (including the future school and commercial center)

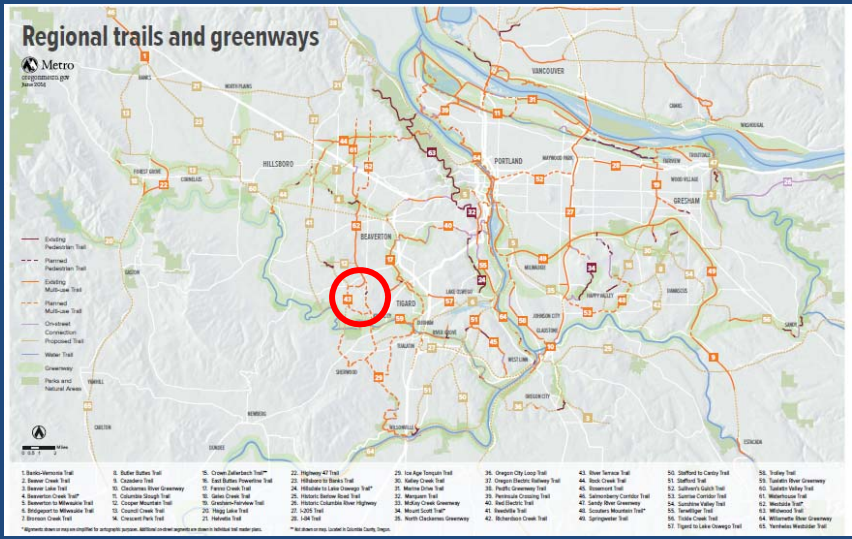


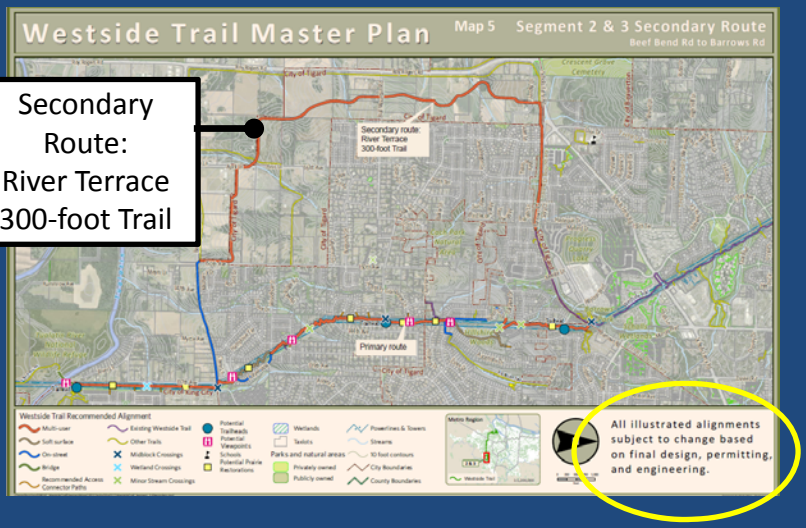
Final Proposal

(RTCP)

South Cooper Mountain Community Plan

River Terrace Trail Connection to Nature Trail in South Cooper Mountain





Secondary Route: River Terrace 300-foot Trail

Westside Trail Secondary Route: River Terrace 300-foot Trail

Different from a local or neighborhood trail, a regional trail:

- is typically separated from roadways with curbs, plantings, or other barriers
- crosses neighborhood lines to connect cities, parks, and other trails
- can be a destination itself

Source: Metro Regional Trail Plan

Greenway Trail

Scholls Ferry Rd →

Greenway Trail
(dashed line along all arterial streets)

Roy Rogers Rd →

Beef Bend Rd →

Greenway Trail (WBMCP)

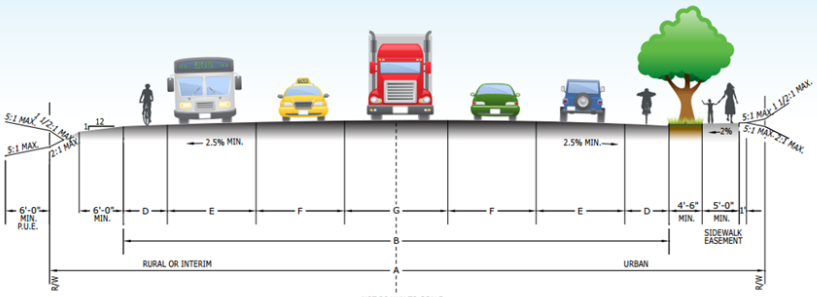
The Linear Greenway consists of a **linear multi-use pathway** and, when appropriate, linear stormwater facilities. This amenity will provide opportunities for pedestrians and bicyclists to travel completely around the planning area and extend their travels (east along Scholls Ferry and Beef Bend Roads) to existing and future regional trail opportunities, such as the Westside Trail. For concept planning purposes, the greenway is shown as a **50 foot-wide corridor**; however the actual width of this feature and placement of the pathway may vary.

Source: West Bull Mountain Concept Plan

Greenway Trail Analysis

Factors Considered	Details
WA County position	Not included in Scholls Ferry widening project. Not in future Roy Rogers ROW.
Stormwater facilities	Nodular not linear.
Trail needs	Proposal exceeds standard by 1.34 miles w/o greenway trails.
Linear park needs	Greenways total 14 acres, which is 6 acres more than what's needed for entire area.
Cost-benefit analysis	Cost of purchasing/developing land for greenways /trails outweighs benefits. • Uses up all linear park "budget" • Duplicates River Terrace Trail • Not centrally located in River Terrace

Arterial Road Section



DESIGN SPEED 45 MILES PER HOUR

Road Classification	Washington County Designation	Right of Way (Feet)	Paved Width (Feet)	Number of Lanes	Bike Lane / Paved Shoulder	Curb Travel Lane	Travel Lane(s)	Center Turn Lane	Parking Allowed
		A	B		D	E	F	G	
Arterials	A-1	122	98	7	6	12 + 12	12	14	NONE
	A-2	98	74	5	6	12	12	14	NONE
	A-3	90	60 *‡	4	6	12	12	0	NONE
	A-4	90	50 *	3	6	0	12	14	NONE

*GRAVEL SHOULDERS AND DITCHES ALLOWED FOR THESE WIDTH ONLY. STANDARD INTERIM SECTION
‡ P.U.E.'S REQUIRED OUTSIDE OF R/W IF SHOULDERS AND DITCHES ARE USED.

The applied "Washington County Designation" is determined by the county's transportation plan and the land use decision. See Appendices A and B for maps of County arterial roads.

Arterial Road Section
Washington County Exhibit# : 1
Effective Date:

Washington County
Department of Land Use
& Transportation
Engineering Section

STEP 1 **USER PREFERENCE, TRAVEL SPEED AND VOLUME**

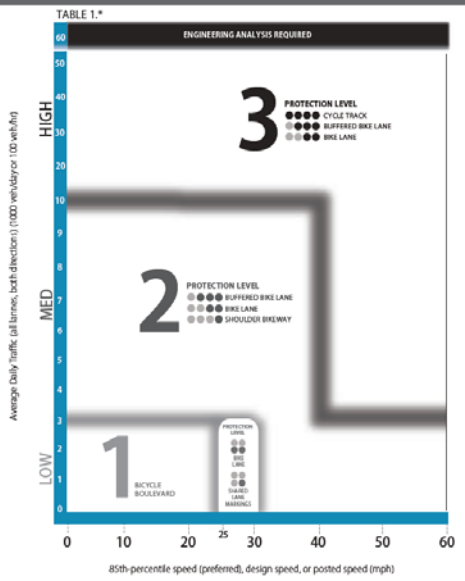
PAGE

Washington County Bicycle Facility Design Toolkit

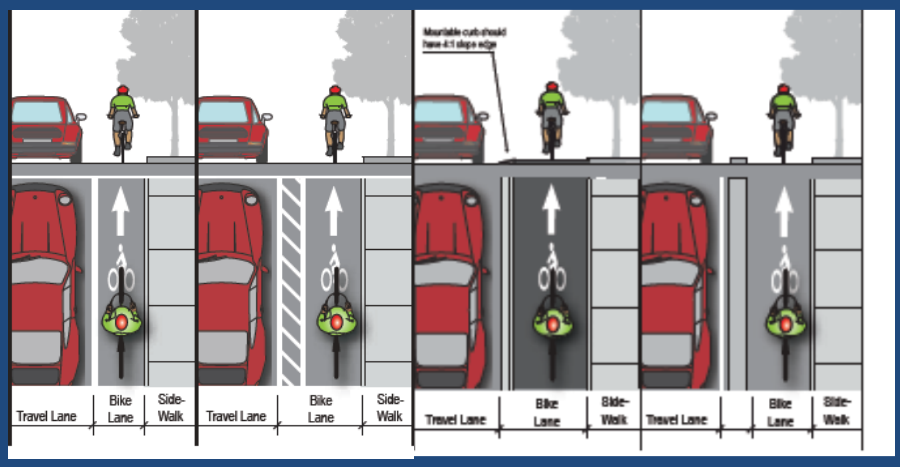
There is a significant impact on cycling comfort when the speed differential between bicyclists and motor vehicle traffic is high and motor vehicle traffic volumes are high. To narrow the range of facilities appropriate for a given roadway use Table 1. Applicable to both the rural and urban setting, Table 1 illustrates the appropriate facilities that may be considered at various speed/volume thresholds. To use this table, identify the daily traffic volume on the *y*-axis and travel speed on the *x*-axis for the existing or proposed roadway. Depending on the inputs, the roadway context will fit into one of three categories, 1, 2, or 3. Within each category the available facility types have been ranked in order of their level of protection. Select the facility with the highest protection level and proceed to STEP 2 where potential roadway modifications are identified to accommodate this type of bikeway.

*Speed and volume thresholds based on the London Cycling Design Standards, ODOT Bicycle and Pedestrian Design Guide (2011) and the NACTO Urban Bikeway Design Guide

TABLE 1.*



Bike Lane | Buffered Bike Lane | Cycle Track (w/pkg) | Cycle Track (w/curb)



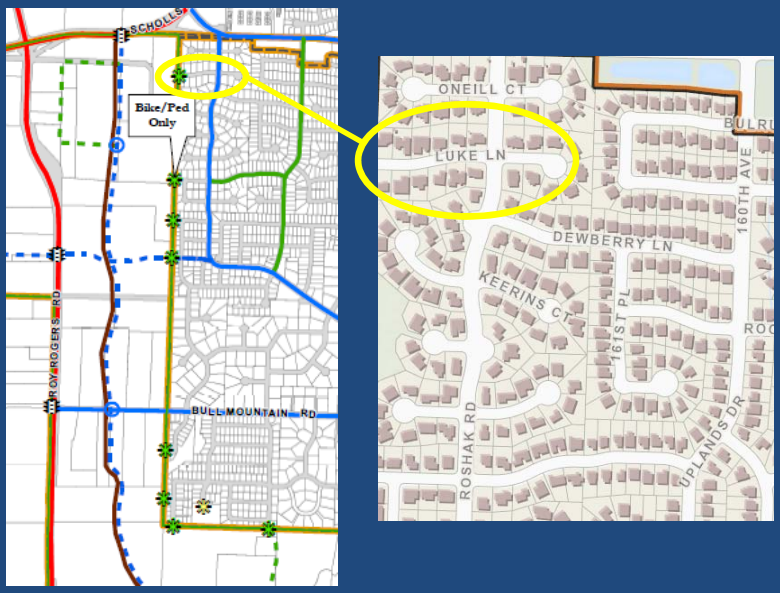
This raised and colored cycle track in Bend, Oregon vertically separates bicyclists and motorists

A raised cycle track in Corvallis, Oregon allows bicyclists to transition seamlessly into the travel lane when necessary

Final Proposal

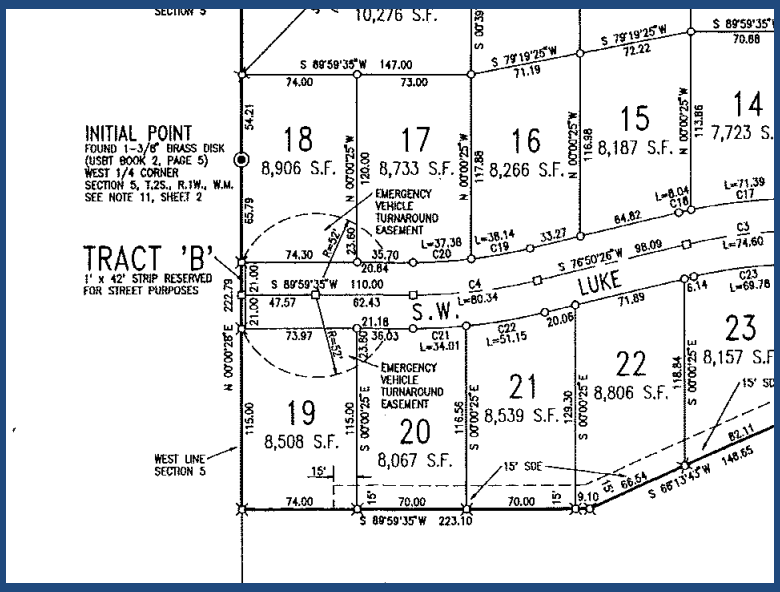
- Elimination of Greenway Trail in favor of River Terrace Trail
- Recommendation for buffered bike lane or cycle track along Roy Rogers Rd for highest level of bicyclist protection
- Recommendation for high-quality edge treatment along Roy Rogers Rd to unify and define River Terrace

Luke Lane Connection

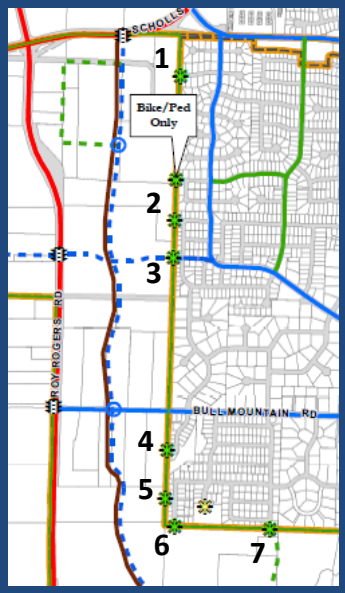

SCHOLLS
Bike/Ped Only
ROGERS RD
BULL MOUNTAIN RD
ONEILL CT
LUKE LN
DEWBERRY LN
KEERINS CT
161ST PL
160TH AVE
ROSHAK RD
UPLANDS DR

FRIENDSHIP
LUKE LN
CROMWELL CT
ROSHAK RD

LUKE LN
Feet
0 31


INITIAL POINT
FOUND 1-3/8" BRASS DISK
(USBT BOOK 2, PAGE 5)
WEST 1/4 CORNER
SECTION 5, T.25., R.1W., W.M.
SEE NOTE 11, SHEET 2
TRACT 'B'
1' x 42' STRIP RESERVED
FOR STREET PURPOSES
WEST LINE
SECTION 5
EMERGENCY
VEHICLE
TURNAROUND
EASEMENT
LUKE
S.W.
18
8,906 S.F.
17
8,733 S.F.
16
8,266 S.F.
15
8,187 S.F.
14
7,723 S.
19
8,508 S.F.
20
8,067 S.F.
21
8,539 S.F.
22
8,806 S.F.
23
8,157 S.F.
10,276 S.F.
S 89°59'35"W 147.00
S 79°19'25"W
S 89°59'35"W 223.10
S 66°13'43"W 148.65

2100 feet (0.4 miles)



1: Pavement = 28’
ROW= 42’

2: Pavement = 32’
ROW= 44’

3: Pavement = 32’
ROW= 44’

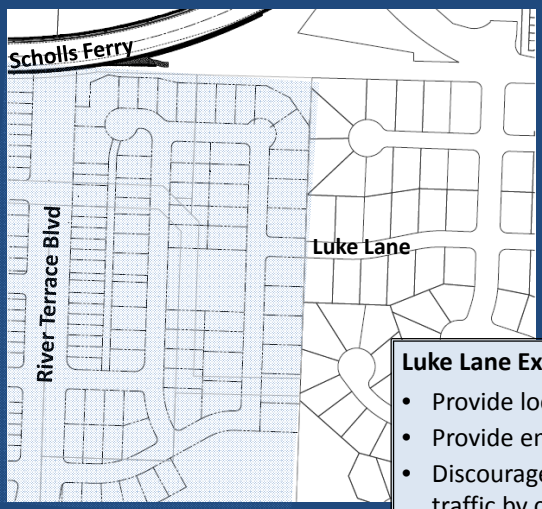
4: Pavement = 24’
ROW= 46’

5: Pavement = 30’
ROW= 46’

6: Pavement = 28’
ROW= 50’

7: Pavement = 32’
ROW= 46’

(Average = 29.4’ & 45.4’)



Sample street layout

Luke Lane Extension

- Provide local connection
- Provide emergency access
- Discourage cut-through traffic by circuitous routing and recommended signal at RTB/Scholls

AIS-1907			**7.**
Business Meeting			
Meeting Date:	12/16/2014		
Length (in minutes):	25 Minutes		
Agenda Title:	Resolution Adopting the Park System Master Plan Addendum for River Terrace		
Prepared For:	Susan Shanks		
Submitted By:	Debbie Smith-Wagar Financial and Information Services		
Item Type:	Resolution	**Meeting Type:**	Council Business Meeting - Main
Public Hearing Newspaper Legal Ad Required?:	No		
Public Hearing Publication Date in Newspaper:			

Information

ISSUE

Shall the City Council approve the attached resolution that adopts the River Terrace Park System Master Plan Addendum, thereby updating the city's Park System Master Plan?

STAFF RECOMMENDATION / ACTION REQUEST

Staff recommends approval of the attached resolution adopting the River Terrace Park System Master Plan Addendum.

KEY FACTS AND INFORMATION SUMMARY

The city last updated its Park System Master Plan (PSMP) in 2009. The PSMP guides park, open space, and trail development throughout Tigard. The River Terrace PSMP Addendum updates the PSMP specific to the River Terrace area. It stays true to the West Bull Mountain Concept Plan (WBMCP) vision by providing local and regional trails, protected open space, and a robust neighborhood and community park system.

Unlike the WBMCP, however, the PSMP Addendum utilizes the city's existing level of service (LOS) standards for park, open space, and trail facilities. In lieu of identifying specific park locations, parks are conceptually located within service areas to show where community and neighborhood parks are envisioned to meet LOS standards and achieve the goal of having an equitable distribution of parks in the area.

Trails, unlike parks, are more specifically located because trails need a continuous trail corridor across many properties in order to function as intended. Of note is the River Terrace Trail, whose design is uniquely integrated into the River Terrace Boulevard cross section. Its alignment roughly follows the 300-foot elevation contour in order to provide a relatively flat travel experience for trail users. It also complements Metro's Westside Trail over Bull Mountain, as it gives trail users the option of going around, rather than up and over, the mountain.

As a reminder, the PSMP Addendum includes a list of park and trail projects and planning level cost estimates. It does not, however, recommend a specific funding strategy. The River Terrace Funding Strategy is being presented to Council for adoption under separate cover. It includes a comprehensive funding strategy for park, transportation, stormwater, water, and sewer facilities.

The city needs to adopt a Park System Master Plan Addendum for River Terrace in order to meet the requirements of Metro Functional Plan Title 11 for infrastructure planning. Adoption of the Addendum also contributes to the city's broader goal of completing the River Terrace community planning process.

OTHER ALTERNATIVES

Council could choose to not approve the resolution and not update the city's Park System Master Plan.

COUNCIL OR CCDA GOALS, POLICIES, MASTER PLANS

River Terrace Park System Master Plan Addendum
River Terrace Community Plan

DATES OF PREVIOUS CONSIDERATION

Council approved the contract for the River Terrace Community Plan (which includes the River Terrace Park System Master Plan Addendum) on June 25, 2013. The project team presented the River Terrace Park System Master Plan Addendum to Council on June 17, 2014

Fiscal Impact

Cost:	$27,431,000
Budgeted (yes or no):	No
Where Budgeted (department/program):	NA

Additional Fiscal Notes:

The River Terrace Funding Strategy contains a strategy for funding River Terrace trail and park projects over the next 20 years.

Attachments

CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 14-

A RESOLUTION TO AMEND THE PARK SYSTEM MASTER PLAN TO INCLUDE PROJECTS NECESSARY TO MEET THE CITY'S LEVEL OF SERVICE STANDARDS IN RIVER TERRACE

WHEREAS, the City of Tigard annexed the River Terrace area west of Bull Mountain in 2011 and 2012; and

WHEREAS, the City of Tigard has an existing Park System Master Plan that does not include the River Terrace area, and

WHEREAS, the City of Tigard has completed a Park System Master Plan Addendum specific to the River Terrace area, contributing to the city's broader goal of completing the River Terrace Community Plan and meeting Metro requirements for public facility planning, and

WHEREAS, public park and trail projects have been identified as part of the Park System Master Plan Addendum consistent with the city's level of service standards, and

WHEREAS, these projects are appropriate and necessary additions to the City of Tigard Park System Master Plan, and

WHEREAS, the City of Tigard may desire to use park system development charges to fund part or all of these projects, and

WHEREAS, the City of Tigard may desire to adopt additional fees and/or charges to fund part or all of these projects, and

WHEREAS, a comprehensive funding strategy for all public facility projects in River Terrace will be developed as part of the River Terrace Community Plan. This strategy will include a list of projects to complete in the near term and recommended funding sources.

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

SECTION 1: The River Terrace Park System Master Plan Addendum (Exhibit A) is hereby adopted as part of the City of Tigard Park System Master Plan.

SECTION 2: The projects identified in the River Terrace Park System Master Plan Addendum shall be eligible for funding from park system development charges (SDCs) as allowed under Section 3.24.060 of the Tigard Municipal Code.

SECTION 3: This resolution is effective immediately upon passage.

PASSED: This _____ day of _____ 2014.

Mayor - City of Tigard

ATTEST:

City Recorder - City of Tigard

City *of* Tigard

DECEMBER 2014

River Terrace

Park System Master Plan Addendum

City of Tigard
Park System
Master Plan Addendum

December 2014

ACKNOWLEDGEMENTS

We would like to thank the many citizens, staff, and community groups who provided extensive input into the development of this Plan. Special thanks are due to the members of the River Terrace Technical Advisory Committee and Stakeholder Working Group.

CITY STAFF

Kenny Asher, Community Development Director
Tom McGuire, Assistant Community Development Director
Susan P Shanks, Project Manager and Senior Planner
Steve Martin, Parks and Facilities Manager
Michael Stone, City Engineer
Marissa Grass, Associate Planner

This addendum was completed by Otak, Inc. of Portland OR, Project Manager – Derek Chisholm

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I I I. PUBLIC INVOLVEMENT 2

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Level of Service 4

V. RECOMMENDATIONS 6

Park System Plan 6

Park Locations 8

Park Design Guidelines 12

Cost Estimates 13

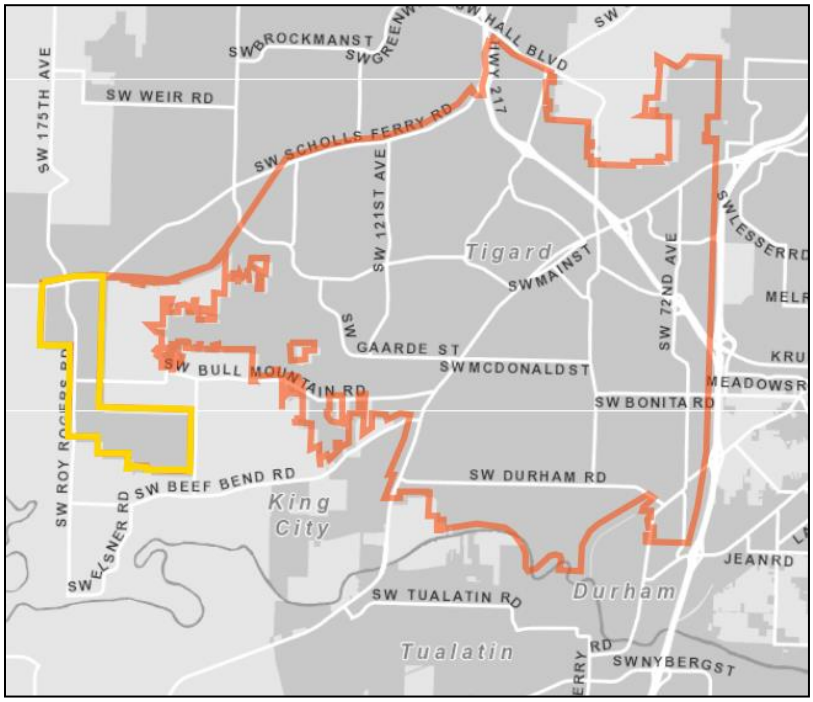
Potential Strategies for Acquiring and Developing Parks 19

I. INTRODUCTION

In 2008 and 2009, the City of Tigard updated the community's Park System Master Plan, hereafter referred to as the Park Plan. The Park Plan is the document that guides park, recreation, open space, and trail development in the city. It was presented to the Park and Recreation Advisory Board and the Tigard City Council in June of 2009. The City Council adopted it on July 14, 2009.

Since the adoption of the Park Plan in 2009, the West Bull Mountain Concept Plan (WBMCP) was completed and adopted by Washington County and the city. The area now known as River Terrace (and formerly known as West Bull Mountain) was also annexed to the city. This addendum provides an update to the Park Plan specific to the River Terrace study area and contributes to the city's broader goal of completing a River Terrace Community Plan.

Figure 1: River Terrace Study Area (outlined in yellow)



The WBMCP included a parks and open space framework that provides the basis for parks planning in River Terrace. This addendum refines the WBMCP framework while staying true to the original vision by providing local and regional trails, protected open space, and a robust neighborhood and community park system. The 300 Foot Trail in the WBMCP is now referred to as the River Terrace Trail.

I I. EXISTING PARK SYSTEM

The Park Plan outlines the need to acquire and construct new parks, preserve open spaces, enhance water quality, and provide recreational opportunities. A full inventory of city facilities and future projects may be found in the Park Plan.

On November 2, 2010, Tigard voters passed a $17 million general obligation bond to fund the purchase of real property for parks and to fund a limited amount of park improvements. Most of the bond proceeds have been used to buy park land and open space. In the summer of 2013 alone, the city broke ground on four projects that were funded in full or in part by revenue from the parks bond.

Projects included:

- A new section of the Fanno Creek Trail (Main St. to Grant Ave.)
- Improvements at East Butte Heritage Park, including a playground, shelter, restroom, walking paths and a sidewalk along 103rd Ave.
- A new bridge in Jack Park, connecting a newly purchased property adjacent to the existing park.
- Parking, bike racks and landscaping at the Fanno Creek House on Hall Blvd.

In 2013, the city also completed the design for Dirksen Nature Park. This park project was identified as a high priority in the Parks Plan and in the Notice of City Measure Election provided to voters regarding the parks bond. The existing ball field will be re-oriented with a soccer field overlay. A restroom, interpretive shelter, and restoration plantings will also be installed.

Additionally, the Sunrise property, located near the River Terrace study area, was purchased as a future community park. This currently undeveloped parcel is located on the north side of Bull Mountain, at 150th Avenue and Sunrise Lane. The Sunrise Conceptual Master Plan—based on community meetings, stakeholder discussions and detailed site analysis—includes a soccer field, t-ball field, sports court, playground, restroom, shelter, overlook, pathways and parking for approximately 30 cars. The design will provide connections to Mistletoe Drive Trail to the north and the Cach Natural Area to the west. The 20-acre Sunrise property purchase marks one of the larger acquisitions made possible through the passage of the parks bond.

I I I. PUBLIC INVOLVEMENT

Throughout the development of this Park Plan addendum, the city worked to create a plan for River Terrace that reflects community values and has community support. A variety of public involvement opportunities were made available to encourage participation in the decision making process, including several community open houses and monthly stakeholder working group and technical advisory committee meetings. The city sent out email notices for meetings and updates on milestones, and also maintained a webpage on the project, which included all meeting materials.

I V. NEEDS ANALYSIS

This section describes the types of parks included in the Park Plan. It also includes an assessment of park needs in the River Terrace study area, with the understanding that individual sites will require site-specific studies and designs to determine what will ultimately meet the community's needs and address individual site opportunities and constraints.

Types of Parks

Community Parks

Community parks provide a variety of active and passive recreational opportunities for all age groups and are generally larger in size and serve a wider base of residents than neighborhood parks. Community parks often include facilities for organized individual, family, and group activities. Community parks also provide opportunities for environmental education and community social activities.

Tigard's existing community parks are the 75-acre Cook Park and the 30-acre Summerlake Park. Community parks are the signature facilities in Tigard that promote community identity while also providing local park services to nearby residents.

Neighborhood Parks

Neighborhood parks are the foundation of the parks and recreation system, as they provide accessible recreation and social opportunities for nearby residents. When developed to meet neighborhood recreation needs, school sites may serve as neighborhood parks.

Tigard's existing neighborhood parks are Jack Park, Elizabeth Price Park, Bonita Park, Northview Park, and Woodard Park.

Tot Lots/Pocket Parks

Pocket parks provide recreation opportunities for residents in areas not adequately served by neighborhood parks, such as town centers or areas of high density development.

Tigard's existing pocket parks are Liberty Park and Main Street Park. These sites do not contain any park amenities, but they do provide green space and help to beautify the Tigard town center.

Linear Parks

Linear parks offer opportunities for trail-oriented outdoor recreation along built or natural corridors. They can also connect residents to major community destinations and provide active and passive recreation facilities to meet neighborhood needs. This is especially important in areas not adequately served by traditional neighborhood parks. Linear parks can vary greatly in width and length, with size often depending upon the intended uses and any adjacent natural resource areas that may require protection.

Tigard's existing linear parks are Commercial Park, Englewood Park, and Fanno Creek.

Trails
Trails provide outdoor recreation along built or natural corridors. They also provide circulation and access through Tigard. They connect streets, reducing out-of-direction travel for pedestrians, bicyclists, and other non-motorized users. They are also used to get to schools, parks, employment, and shopping. Trails provide connections at varying levels from connecting neighborhoods to accessing the regional trail system.

Tigard has an extensive network of existing trails including sections of the Fanno Creek Trail, Tualatin River Trail, Summer Creek Trail, and Pathfinder Genesis Trail.

Open Space
Open space land is publicly or privately-owned, undeveloped or minimally developed, and intended for either active or passive outdoor recreation. Open space land may include facilities that support nature- and trail-oriented recreation. It may also be undeveloped and primarily set aside for the protection of natural resources, such as fish and wildlife habitat. This type of land often includes wetlands or steep hillsides as well as land intentionally left undeveloped to protect surrounding land uses or manage stormwater. Open space land is sometimes referred to as greenspace or a greenway. Greenways are often linear in nature. There are many greenways along streams and drainageways in Tigard.

Level of Service

During the WBMCP planning process, the City of Tigard, Washington County, and Tualatin Hills Park & Recreation District (THPRD) were all considered potential park and recreation providers.

As a result, the WBMCP created a hybrid standard using Level of Service (LOS) standards from both Tigard and THPRD.

Table 1 shows the WBMCP hybrid standards and the city's current standards. For this Park Plan addendum, the city's current standards will be used to assess park and recreation needs in River Terrace since it is within Tigard's city limits and the city applies these standards on a citywide basis.

Table 1: Comparison of Park Standards

Park Type	WBMCP Hybrid Standard	City of Tigard Standard
Community	3.0 acres / 1,000	3.0 acres / 1,000
Neighborhood	2.0 acres / 1,000	1.5 acre / 1,000
Tot Lot/Pocket	0.5 acre / 1,000[1]	No standard
Linear	Contributes to Core Standard 10 acres / 1,000	1.25 acre / 1,000
Trail	No Standard	0.26 miles / 1,000[2]
Open Space	No Standard	4.25 / 1,000

[1] Standards formatted as number of acres per thousand residents.
[2] From the 2012 Tigard Park System Development Charge (SDC) update.

Table 2 shows the total number of households and new residents anticipated in River Terrace once it is fully built out. These estimates are used to determine the park and recreation needs for River Terrace upon build out. This addendum does not identify park or recreation needs elsewhere in the city.

Table 2: Build-out Assumptions for River Terrace

Land Use Zone	Number of Households
R-4.5	218
R-7	1,225
R-12	674
R-25	470
Total Households	**2,587**
Total Population[1]	**6,415**

[1] Based on assumed 2.48 persons per household.

As shown in Table 2 above, 2,587 households are anticipated based on the number of dwelling units allowed by zoning, which equates to roughly 6,415 new residents. Table 3 shows the estimated needs for new parks and trails based on these estimates. The largest acreage demand is for Community Parks (19.25 acres).

Table 3: Park Needs for River Terrace

Park Type	City Standard	Park Need
Community	3.0 acres / 1,000	19.25 acres
Neighborhood	1.5 acre / 1,000	9.62 acres
Tot Lot/Pocket	No standard	NA
Linear	1.25 acre / 1,000	8.02 acres
Trail	0.26 miles / 1,000	1.67 miles
Open Space	4.25 / 1,000	27.26 acres
Core Standard[1]	10.0 acres / 1,000	64.2 acres

[1] All park types, with the exception of trails, contribute toward meeting the core park standard of 10 acres per 1,000 residents regardless of whether they have their own standard or not.

As shown in Table 3 above, the city's core standard is 10 acres of park land for every 1,000 residents. This standard provides an overall measure of park and recreation levels of service, regardless of the mix of facility types. This standard is met when the total of all parks, including those that have no specific standard (e.g. tot lots, pocket parks, and open space areas), meets or exceeds 10 acres per 1,000. Trails not otherwise located within other park types, such as linear parks, do not count toward meeting the core park standard as they are measured by length, not area.

V. RECOMMENDATIONS

This section includes a recommended park system plan for the River Terrace study area, including a framework for siting parks and trails throughout the area. It also includes design guidelines, park amenity descriptions, cost estimates, and implementation strategies related to land acquisition and park development.

Park System Plan

The city is committed to meeting all adopted park and trail standards within the River Terrace study area. The following recommendations provide a starting point for describing and showing how these standards can be met. However, given that these standards can be met in many different ways, it is expected that the size and number of parks that are eventually built in River Terrace may vary from what is presented in this addendum.

The parks envisioned for River Terrace include the following:

Community Parks

River Terrace shall be served by at least two Community Parks, one in the north and one in the south, as shown on Figure 2. The combined size of the recommended Community Parks is 19.25 acres, which meets the city standard.

Neighborhood Parks

River Terrace shall include approximately six Neighborhood Parks, distributed evenly with one for each of the six neighborhood areas that were identified in the WBMCP as shown on Figure 3. Each neighborhood area is roughly one-half mile across and about 85 acres in size. The combined size of the recommended Neighborhood Parks is 9.62 acres, which meets the city standard.

Tot Lots/Pocket Parks

Tot lots and/or pocket parks may be provided in association with private development.

Linear Parks

River Terrace shall include linear parks in appropriate areas to an extent that meets the city standard. Linear parks shall be co-located with all planned trails where practicable.

Trails

River Terrace shall include a major trail system designed to connect to nearby regional trails, such as the Westside Trail, and to South Copper Mountain trails in the north. The proposed River Terrace Trail shall extend through the heart of River Terrace from Scholls Ferry Road in the north to 150th Avenue in the southeast corner of the study area in the south. River Terrace shall also include connecting trails in the south, one connecting with the Tonquin Trail in Sherwood and the other connecting the school site with 150th Avenue. Figure 4 shows the recommended River Terrace trail system. The combined length of these trails is 3.01 miles, which exceeds the city's standard by 1.34 miles.

Open Space

In addition to parks and trails, an additional 65 acres of open space, largely along stream corridors and wetlands, shall be protected from development. These areas provide open space that contributes to meeting the city's Core Standard.

Core Standard

By providing the parks and trails as recommended above, the city will meet and/or exceed its standards for specific park types and trails as well as the Core Standard of 10 acres/1,000 residents. Table 4 below provides a summary of these recommendations.

Table 4: Park Recommendations for River Terrace

Park Type	Park Need	Recommendation
Community	19.25 acres	19.25 acres minimum (Locations and exact sizes TBD)
Neighborhood	9.62 acres	9.62 acres minimum (Locations and exact sizes TBD)
Tot Lot/Pocket	No Standard	May be provided by development
Linear	8.02 acres	8.02 acres minimum (Locations and exact sizes TBD)
Trail	1.67 miles	3.01 miles proposed
Open Space	27.26 acres	65 acres under natural resource protection
Core Standard[1]	65.82 acres	101.89 acres

[1] All park types, with the exception of trails, contribute toward meeting the core park standard of 10 acres per 1,000 residents regardless of whether they have their own standard or not.

Park Locations

Unlike the WBMCP, this addendum does not provide specific locations for community and neighborhood parks, as it is problematic to identify specific properties as park sites in advance of acquisition. Owners of such properties may not wish to sell and/or their asking price may be too high. As a result, park locations for River Terrace will be determined at the time of development or at the time of acquisition by the city.

Due to the amount of acreage needed for the community parks, securing the land for these parks is a priority. However, the city will not be able to make any potential community park sites public until purchase agreements have been finalized. As for other parks and trails, it is expected that the location and development of neighborhood parks, linear parks and trails will be done through negotiations with landowners and developers on an ongoing basis as development occurs. It is envisioned that Neighborhood Parks will be evenly distributed throughout River Terrace with at least one park for each of the neighborhoods identified in the WBMCP planning process.

Figure 2: River Terrace Community Parks

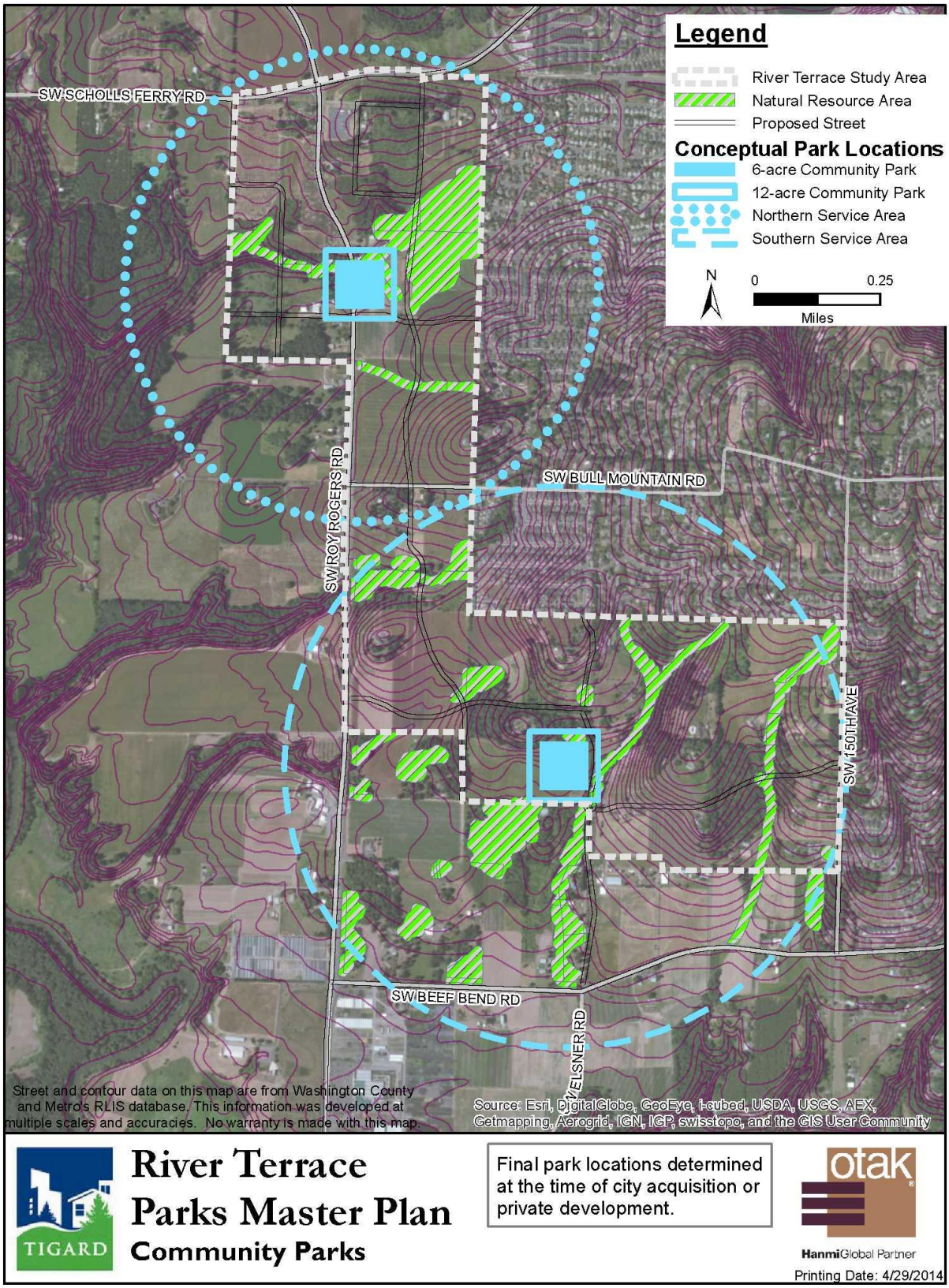


Figure 3: River Terrace Neighborhood Parks

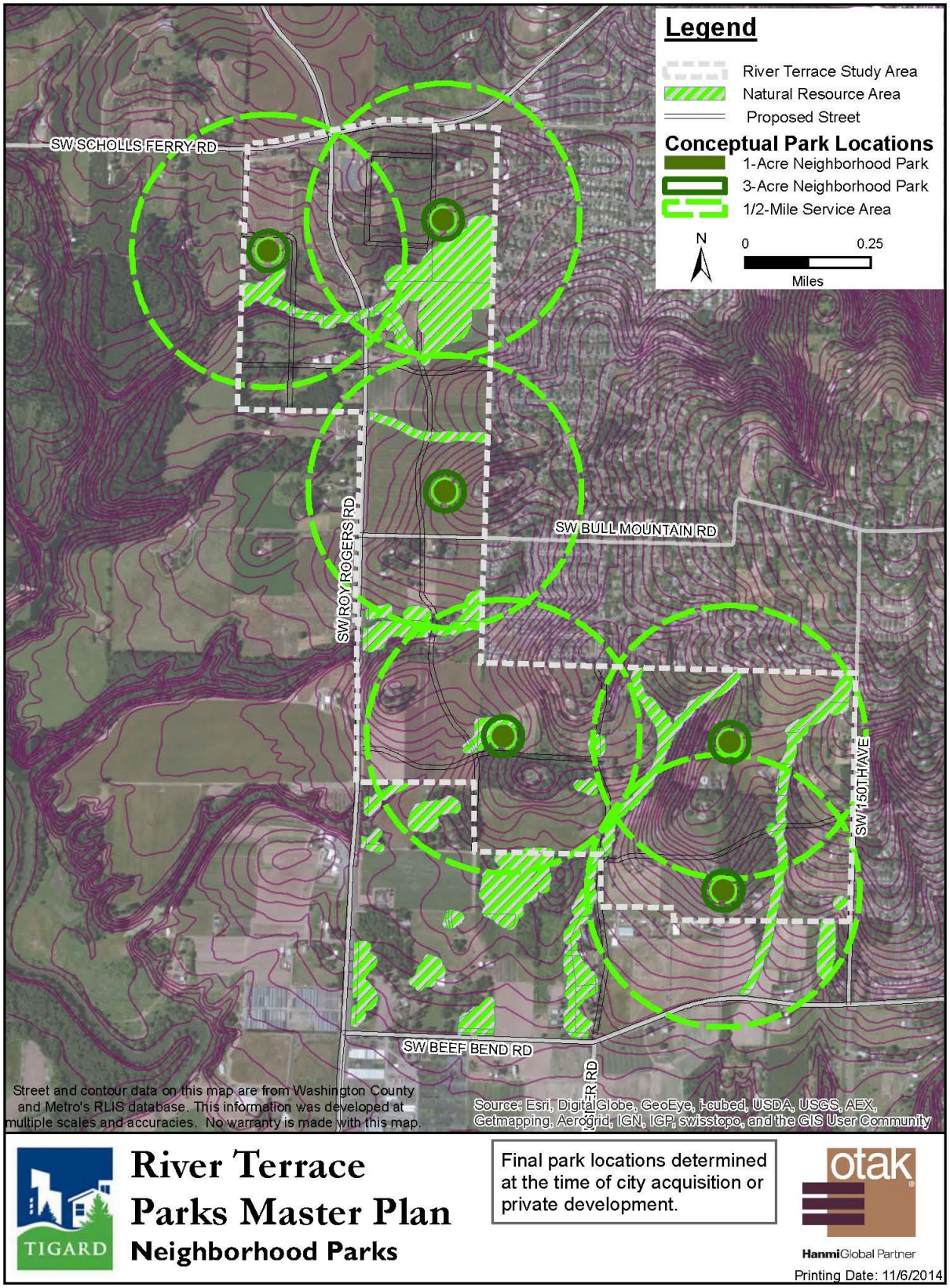
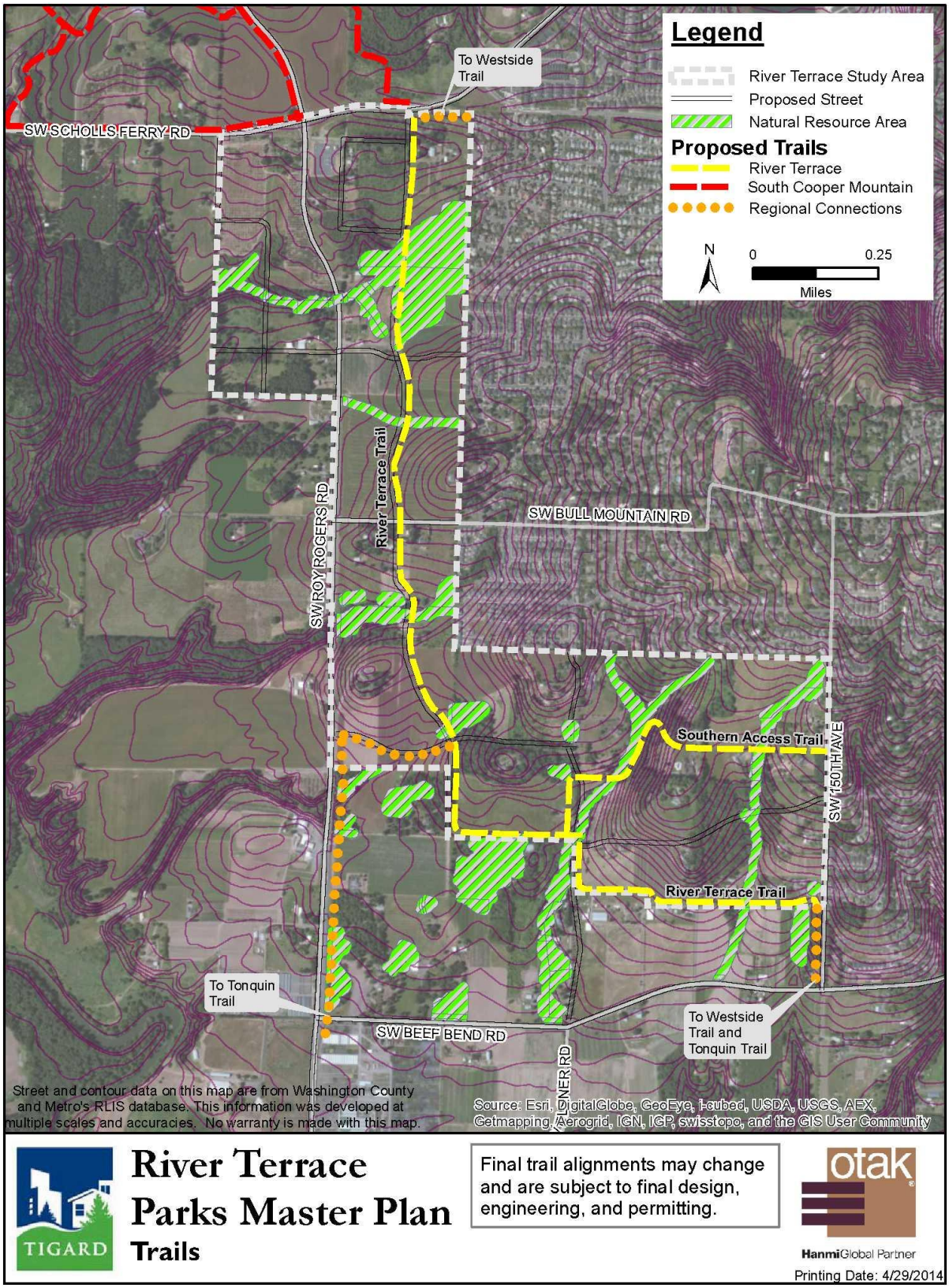


Figure 4: River Terrace Trails



Park Design Guidelines

The city's design guidelines address development for each park type in Tigard. The guidelines provide direction regarding the types of amenities and facilities that should be provided in parks, as well as other supporting facilities to be considered. They are located in Appendix B of the Park Plan, and are not repeated here.

The following design recommendations supplement the adopted design guidelines of the city. These were developed during the WBMCP process and have been confirmed in the River Terrace community planning process.

Trails

- Coordinate and design the River Terrace Trail to seamlessly integrate with the main N-S Collector Street while maintaining its identity as a trail.
- Coordinate and design the River Terrace Trail to connect with the Westside Trail. This regional trail is east of River Terrace and aligned along an electric transmission corridor owned by PGE and BPA.
- Provide trail connections between individual developments, park land, and the citywide trail system whenever possible.
- Ensure safe roadway crossings where trails intersect with roadways. Ensure safe trail travel where trails cross driveways.
- Coordinate trail development with roadway development where appropriate.
- Develop trail access standards as needed.
- Where trails are proposed on land not owned by the city, work with property developers and owners to provide access for the public through easements or other dedications of land.
- Develop a trail signage plan and implement new signs throughout the system. The signage plan should include standards for kiosks with system maps, trailhead signs indicating distance and difficulty and trail signs posted along the route.

Parks

- Ensure safe roadway crossings where residents will access parks.
- Look for opportunities to create an off-leash dog area.
- Consider use of some park types in combination with protected natural areas, stormwater quality/quantity facilities and pump station locations. There are many examples in nearby communities.
    - At Winkelman Park in Beaverton, there are stormwater swales at the south end of the soccer field slope and also near the dog park.
    - In Clackamas County, the design for Sunnyside Village Green Park includes a stormwater detention pond. During the summer months, the dry depression area formed by the pond serves as an open grass play area and amphitheater. In extreme storm events in the winter, water slowly fills the depression providing needed storage. To create interest during the winter, berms are also designed into the depression. These berms in the bottom turn into islands as the water level rises. The staggered elevations results in one island being submerged as another island appears.

These design guidelines are not created with the intent to apply a cookie-cutter approach to park planning and design. All parks, trails, and open spaces should be developed to respond to the unique needs and character of the park/trail environment and nearby residents. A strong community involvement process, involving neighbors, special interest and cultural groups and maintenance staff, will help to determine the best design for a particular park.

Cost Estimates

Below are the assumptions used to develop cost estimates for park and trail development in River Terrace.

- Estimates include typical park programs and facilities. Individual park master plans to be developed in the future to reflect the desires of the community and specific site opportunities and constraints.
- The cost estimate for the River Terrace Trail is not included in the parks cost estimate. The costs associated with this trail are included in the River Terrace Transportation System Plan Addendum.
- Costs for trails located within parks are part of the costs shown for those parks.
- Costs for stream crossings by trails have been factored into the trail estimates.
- Costs for site grading, site preparation, planning, designing, permitting, and project administration have been factored into all trail and park estimates.
- Costs for frontage improvements have been factored into the community park construction estimates.
- Costs for irrigation have been included for some parks and include the materials and installation for a minimal irrigation system designed to irrigate large areas of open space with the minimal number of irrigation heads.
- Acquisition for areas required for stormwater management within park facilities to be negotiated in the future by Clean Water Services (CWS) and/or the City of Tigard.
- Tot lots and pocket parks are typically considered a developer responsibility and are not included in the parks cost estimate.

Table 5 shows the cost estimates for the recommended River Terrace park and trail system plan. They are primarily derived from cost estimates and assumptions contained in the 2009 West Bull Mountain Parks Cost Estimate and from the information provided in Table 6 for specific park elements. They have been updated, as appropriate, based on recent data from park purchases and development in the City of Tigard.

Table 5: Park Cost Estimates for River Terrace

Park Type	Total Acreage/ Mileage	Land Acquisition Costs	Construction Costs	Planning, Design, Permitting, Admin (35%)	TOTAL COSTS
Community	19.25 acres	$7,508,000	$6,212,000	$2,174,000	**$15,894,000**
Neighborhood	9.62 acres	$3,752,000	$2,204,000	$771,000	**$6,727,000**
Linear	8.02 acres	$3,128,000	$169,000	$59,000	**$3,356,000**
Trail	0.73 miles[1]	$690,000	$566,000	$198,000	**$1,454,000**
TOTAL COSTS		$15,078,000	$9,151,000	$3,202,000	**$27,431,000**

[1] There are 3.01 miles of recommended trails in River Terrace, but only 0.73 miles of trail are included in this table for cost estimating purposes. The costs associated with the River Terrace Trail, which accounts for the remaining 2.28 miles of recommended trail, are included in the River Terrace Transportation System Plan Addendum

Table 6: Park Element Cost Estimates for River Terrace

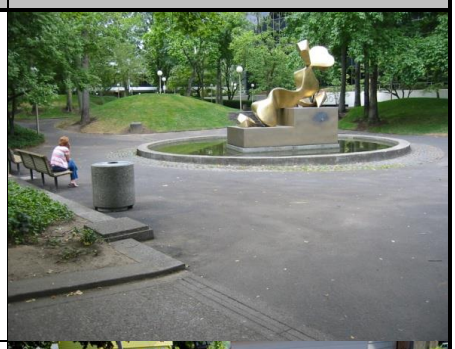
Park Element	Description	Cost Estimate	Supporting Images
Parking Lot	Dedicated, off street, 20 stalls per ball field, $3,000 per stall	$100,000	
Restroom	Two unisex stalls, concrete	$150,000	

Park Element	Description	Cost Estimate	Supporting Images
Paved Path	8' wide asphalt	$30,000/ acre or $36.00/ linear foot	
Play Elements	Equipment, swing sets, seating, safety surfacing	Small - $25,000 Medium - $60,000 Large - $100,000	
Site Furnishing	Bench and setting[1]	$1,000	
Picnic Shelter	Areas and structures with pre-fabricated construction	Small - $25,000 Medium - $60,000 Large - $100,000	

[1] For the WBMCP cost estimating, the cost for benches was shown as $2,000 in the list of assumptions, but only $500 per bench when the costs for specific parks were calculated.

Park Element	Description	Cost Estimate	Supporting Images
Off-leash Dog Area	1-2 acre, minimal improvements, fenced	$80,000/ acre non-irrigated	
Basketball Court	40’ x 70’ asphalt	$35,000	
Tennis Court	Standard doubles, with fencing	$50,000	
Sports Fields	Min. 2 acres, buffers, & under-drain. Soccer - 200’ x 335’ Football - 160’ x 360’ Softball - 270’ x 270’ Baseball - 350’ x 350’	Soccer - $250,000 Football - $200,000 Softball - $300,000 Baseball - $450,000	

Park Element	Description	Cost Estimate	Supporting Images
Water Feature		Small - $150,000 Medium - $500,000 Large - $1,000,000	
Amphi-theater		Small - $200,000 Medium - $500,000 Large - $1,000,000	
Interpretive Signage	4' x 8' with graphics	$5,000/ sign	
Non-paved Path	8' wide gravel or similar	$20,000/ acre or $24/ linear foot	
Trailheads	500 sq. ft. seating, signage, small shelter	$50,000	

Park Element	Description	Cost Estimate	Supporting Images
Community Commons/ View Points	Paved Plaza – 10,000 sq. ft.	$150,000	
Community Garden	10' x 10' plots, 4' chain link fence, hose bibs	$75,000/ acre	
Natural Vegetation Buffer	50' wide, includes new plantings	$100/ linear foot (Restore- $45,000/ acre)	
Unstructured Open Space	Grading, drainage, planting areas	$75,000 /acre – irrigated $35,000/ acre – non-irrigated	

Potential Strategies for Acquiring and Developing Parks

With more than 452 acres of parks, greenways and natural areas, the City of Tigard provides a variety of options for recreation, while protecting the area's natural beauty and providing valuable wildlife habitat. River Terrace, on the other hand, currently has no parks, nor does it have any land dedicated to park use. City standards dictate the types of facilities needed (e.g. neighborhood park, community park, etc.), but the city currently does not have the kinds of regulatory tools or incentives in place to ensure the development of the trail and park system envisioned in River Terrace.

This section explores implementation mechanisms for the acquisition of park land and the development of park and recreation facilities. In general, there are two primary means of park land acquisition: outright purchase of land by local government and code provisions that require dedication of land by development. Additional means are discussed in Table 7 below.

Table 7: Comparison of Park Land Acquisition Approaches

Approach	Description	Pros	Cons
Fee Simple Acquisition of Undeveloped Land	City purchases land from current owners.	Straightforward, local control of land selection.	Can have high costs. May not occur before platting of land. Requires funds "in hand."
Mandatory Dedication of Land	Code requires developer to set aside land.	Little to no cost to city.	Developer selects park site. Challenges in determining what is proportionate.
Fee-in-Lieu (of Mandatory Dedication)	Code allows developer to pay fee-in-lieu of setting aside land.	Allows city to select sites using funds from development projects.	Need to collect funds first or establish borrowing mechanism. Still requires a means for the city to protect a portion of private property for later park development.

Approach	Description	Pros	Cons
Developer Provides Turnkey Park	Developer plans, designs, and constructs park.	No cost to city.	Requires coordination and development of a new approval process. May not be supported by development community and may be legal issues.
Purchase of Easements	City does not purchase land, only an easement. Often used for trails.	Less expensive than fee-simple acquisition.	Limited applicability and limited benefit for land owner. Possible management requirements related to monitoring.
Purchase of Development Rights	City preserves land by restricting future development while continuing existing use. Often used for farms and forestry.		Often voluntary only. Can have high costs.
Outright Donation	Property owners donate land to the city. Often undevelopable land.	Little to no cost to city.	Unlikely to occur in the necessary locations and sizes.
Transfer of Development Rights	Transfers development allowance away from lands planned for parks.	Resources can be protected without huge capital expenditures. Can be built into Planned Development process.	Can be complicated program to establish. No worthy precedents in region. Not permitted in current zoning districts.

In addition to the park land acquisition approaches described above, the following approaches to acquiring and developing parks may be appropriate in River Terrace. Peter Harnik directs the Trust for Public Land's Center for City Park Excellence and is the author of *Urban Green: Innovative Parks for Resurgent Cities*. In his book, Harnik describes 14 ways to provide innovative parks. Of these 14 ways, the following three are applicable to River Terrace:

1. Make double use of stormwater facilities. Stormwater facilities can be well designed and integrated with open space plans. With significant need for stormwater management in River Terrace, this approach may be applicable. During the WBMCP, it was assumed that parks and storm facilities would be co-located. Harnik cites High Point in Seattle as a good example.

2. Use urban renewal. This is more a funding mechanism than an instrument to acquire property. However, within an urban renewal area, creative land banking, parcel aggregation, and other changes can help to ensure adequate park land. Portland's Pearl District is cited as an example of this method.

3. Benefit from boulevards. Harnik points out how wide boulevards with landscaped centers and edges can provide many of the same benefits as a park. Boston's Commonwealth Avenue is a great example of this. The River Terrace Trail could use design concepts such as this.

In the next section, two case studies explore how other jurisdictions are acquiring park land and developing parks. The first case is from Portland, and is meant to provide some guidance on the procedures related to land acquisition. The second case is from Canby, and focuses on their Parkland Dedication Ordinance.

Case Study: City of Portland

Fee Simple Acquisition

In 1903, John Charles Olmsted delivered the *Report of the Park Board, Portland, Oregon*. Olmsted urged the integration of natural areas in a comprehensive park system. He recommended acquisition of the wooded hills west of the Willamette River for a park with a wild, woodland character. In 1948, 4,200 acres were formally dedicated as Forest Park.

In more recent years, natural area acquisition has been guided by Metro's Greenspaces Master Plan, other Metro and city plans, and local target area acquisition plans. Between 1990 and 2005, Portland Parks and Recreation added 750 acres of natural area to its management portfolio, primarily from its 1995 bond measure. Currently, the City of Portland utilizes a Capital Project Request Criteria and Rating System. This rating system enables the city to fairly evaluate recommended park purchases. The criteria are as follows:

- Legal Compliance — Max 5 points
- ADA Compliance — Max 10 points
- Public Support — Max 10 points
- Conforms to city or PP&R Plans — Max 10 points
- Improves Level of Service — Max 10 points
- Equity — Max 15 points
- Human Health and Safety — Max 15 points
- Protects Capital Assets or Facilities — Max 15 points
- Environmental Quality — Max 10 points

- Project Financing/ Business Opportunity Max 10 points
- Maintenance Financing Max 5 points
- Effect on Operating Budget Max 10 points

Once Portland has evaluated the merits of a specific purchase, it funds these purchases with instruments similar to those employed in Tigard. These include: the city's general fund, system development charges, special levies, grants, donations, and funds from partners such as the Portland Development Commission.

Case Study: City of Canby

Mandatory Dedication

Chapter 3 of Canby's 2002 Park and Open Space Acquisition Plan contains an *Acquisition Framework*. This framework for land acquisition establishes priorities for future acquisition of park land in Canby. It also provides direction for the evaluation and acquisition of land. The City of Canby has also adopted a Dedication Ordinance, which enables them to provide park land through the development review process. Canby's *Parkland Dedication Ordinance* allows for land exactions from development projects and the payment of fee-in-lieu. The main parks acquired through the ordinance are neighborhood parks.

Canby Municipal Code

16.120.020 Minimum standard for park, open space and recreation land

A. Parkland Dedication: All new residential, commercial and industrial developments shall be required to provide park, open space and recreation sites to serve existing and future residents and employees of those developments….

3. Calculation of Land Required: The total requirement of park, open space and recreational land shall be 0.01 of an acre per person based on the city standard of 10 acres of land per 1,000 residents. This standard represents the land-to- population ratio the City of Canby requires for city parks, and may be adjusted periodically through amendments to the Parks and Recreation Master Plan….

Canby added this tool to its previous capital project and acquisition approach, which is similar to what is used today in Tigard. Mandatory dedications and fee-in-lieu of dedications have greatly improved Canby's ability to acquire park land and protect open space. The dedication ordinance sets forth specific criteria to help the City of Canby decide whether to accept a specific site.

Canby requires an environmental assessment of the proposed land prior to any park land dedication. If the land is deemed to be unsuitable, the developer pays a fee-in-lieu of dedication. Fees gathered in this manner are later used to acquire park land through outright purchase. Fee-in-lieu of dedication is a common way for communities to acquire park and open space and have stood up to court challenge. The courts generally accept fee-in-lieu of dedication if the fee is deemed not to put an undue burden on the developer.

Canby also allows partial credit for land dedicated to trails within the 100-year floodplain.

AIS-1908			**8.**
Business Meeting			
Meeting Date:	12/16/2014		
Length (in minutes):	75 Minutes		
Agenda Title:	Resolution Adopting the River Terrace Infrastructure Funding Strategy		
Prepared For:	Susan Shanks		
Submitted By:	Debbie Smith-Wagar Financial and Information Services		
Item Type:	Motion Requested Resolution	**Meeting Type:**	Council Business Meeting - Main
Public Hearing Newspaper Legal Ad Required?:	No		
Public Hearing Publication Date in Newspaper:			

Information

ISSUE

The Funding Strategy is part of the River Terrace Community Plan. This plan needs to be adopted by resolution.

STAFF RECOMMENDATION / ACTION REQUEST

Staff recommends adopting the Funding Strategy.

KEY FACTS AND INFORMATION SUMMARY

City staff and project consultants have been working with developers and the community on a funding strategy for the River Terrace Community Plan. The funding strategy uses information from the River Terrace infrastructure master plans for water, sewer, transportation, parks and stormwater and was developed after extensive analysis of the city's existing fund balances and revenue sources. Key components of the draft River Terrace Funding Strategy are as follows:

- It includes a funding recommendation for each infrastructure system.
- It identifies at least one and sometimes several viable funding packages for each system and then scores them using evaluation criteria to demonstrate, for example, how equitable or financially sustainable a particular funding package is relative to another funding package.
- It identifies which projects are likely to be needed in the near-term (0 – 6 years) and

long-term (7 - 20 years). The near term project list was developed by staff through a series of workshops using available information about each system and future development patterns. This list and the assumptions upon which it was based was then vetted by developers and other service providers.

The adopted funding strategy will not be binding. It will be a tool that guides how needed projects will be funded over time. It will also provide a work plan for staff to bring implementation tasks forward for Council consideration as needed.

OTHER ALTERNATIVES

Council could give direction to staff to change the Funding Strategy, or could decline to adopt a Funding Strategy. If the Funding Strategy is changed it would delay adoption of the Community Plan. Since a Funding Strategy is required as part of the Community Plan, declining to adopt a Funding Strategy would stop the Community Plan from moving forward.

COUNCIL OR CCDA GOALS, POLICIES, MASTER PLANS

Successfully complete River Terrace Community Plan Growth and Annexation

DATES OF PREVIOUS CONSIDERATION

- Council approved the contract for the River Terrace Community Plan (which includes the funding strategies) on June 25, 2013.
- The project team presented Council with the stormwater master plan and funding strategies on July 22, 2014.
- The project team presented Council with the parks and transportation master plan addenda and funding strategies on June 17, 2014.
- Council approved the sewer master plan addendum on June 10, 2014 and the water master plan addendum on June 24, 2014.
- The project team presented Council with the water and sewer master plan addenda and funding strategies on May 20, 2014.
- The project team updated Council on the project on January 21, 2014.
- Council considered the Draft River Terrace Funding Strategy document on September 23, 2014.
- Council received an additional briefing on the Draft River Terrace Funding Strategy document on October 21, 2014.

Attachments

Resolution
Exhibit A

CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 14-

A RESOLUTION TO AMEND THE RIVER TERRACE FUNDING STRATEGY

WHEREAS, the City of Tigard annexed the River Terrace area west of Bull Mountain in 2011 and 2012; and

WHEREAS, the City of Tigard has adopted an amendment to the Tigard Comprehensive Plan to include the River Terrace Community Plan, and

WHEREAS, the City of Tigard has amended the Tigard Comprehensive Plan Designations Map to include the River Terrace Community Plan, and

WHEREAS, the City of Tigard has completed planning for the public facilities necessary for the implementation of these amendments related to River Terrace, and

WHEREAS, the City of Tigard has adopted the master plan addenda for the water, sewer, stormwater, parks and transportation systems, and

WHEREAS, these projects are appropriate to be added to the City of Tigard Master Plans,

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

SECTION 1: The River Terrace Funding Strategy (Exhibit A) is hereby approved as the master funding strategy for River Terrace.

SECTION 2: The projects on this master lists shall be funded based on the funding strategy unless changes are made to this resolution by Council.

SECTION 3: Staff will bring forward all financing mechanisms contained in the strategy for Council consideration in a public hearing.

SECTION 4: This resolution is effective immediately upon passage.

PASSED: This _____ day of _____ 2014.

_____
Mayor - City of Tigard

ATTEST:

_____
City Recorder - City of Tigard

City of Tigard

RIVER TERRACE FUNDING STRATEGY

December, 2014

FCS GROUP
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EXECUTIVE SUMMARY

In 2012, the City of Tigard ("city") annexed more than 500 acres of territory known as River Terrace. At build-out, up to 2,587 dwellings, a commercial center of 40,000 gross square feet, and at least one new public school are expected to be located in River Terrace. As the long-term owner of public facilities (including local roads, water reservoirs, pump stations, local transmission lines for water and sewer, parks, trails and stormwater facilities), the city must consider how to fund the capital and operating costs of these facilities.

FCS GROUP worked with the city to develop and analyze funding options for water, sewer, parks, stormwater, and transportation. The output of our analysis is a recommended funding strategy for these five systems. The subsections below briefly describe the recommended funding strategy. A detailed analysis of the funding options for each system—including the criteria by which they were evaluated—can be found in the body of this report.

This Funding Strategy provides a course of action as of the date of its adoption. Given its long-term nature, however, elements of it could change as the development of River Terrace moves forward. Potential changes include the rate of development absorption, number and scope of projects, and the cost of those projects. In addition, new funding sources could become available and/or existing funding sources could become limited. The city should re-evaluate and revise this Funding Strategy every five years in order to ensure that it remains relevant and useful in guiding public investment in River Terrace over the next two decades.

Water

The recommended funding strategy for water infrastructure shown in **Exhibit i** is generally consistent with the city's existing funding sources. This includes utility fees, citywide system development charges (SDCs), and developer dedications of local transmission lines. Both the utility fee and SDCs will likely be adjusted in January of 2015 because of a new study.

Exhibit i: Water Funding Strategy

Funding Mechanism	Payment Base	Rate	Near Term Funding	Long Term Funding	Total Revenue	New?	If existing fee, does it increase?
Utility Fees	Customers	Avg. monthly water rates = $38 per account	$ 5,295,000	$ -	$ 5,295,000	☐	Yes, through planned utility increases
SDC	Developers	Water SDCs = $7,580 per SFD	2,000,000	10,278,500	12,278,500	☐	Yes, through planned utility increases
Total			$ 7,295,000	$ 10,278,500	$ 17,573,500		

Source: FCS GROUP.

Sewer

The recommended funding strategy for sanitary sewer infrastructure shown in **Exhibit ii** utilizes funding sources already used by the city and Clean Water Services (CWS). This includes CWS capital funds, SDCs, developer dedications of local gravity feeds, and a new citywide utility fee surcharge. The city is enacting the surcharge regardless of River Terrace development.

Exhibit ii: Sewer Funding Strategy

Funding Mechanism	Payment Base	Rate	Near Term Funding	Long Term Funding	Total Revenue	New?	If existing fee, does it increase?
CWS	Customers		$ 10,130,300	$ -	$ 10,130,300	☐	N/A
Utility Fee Surcharge	Customers		609,150	494,000	1,103,150	☑	
SDC	Developers	Sewer SDCs = $4,900 per SFD	609,150	-	609,150	☐	No
Total			$ 11,348,600	$ 494,000	$ 11,842,600		

Source: FCS GROUP.

Parks

The recommended funding strategy for parks shown in **Exhibit iii** includes several new funding sources for River Terrace infrastructure, such as an SDC overlay for River Terrace and a citywide utility fee surcharge. In addition, this strategy relies on General Fund monies, existing citywide SDCs, a new general obligation bond, and grants.

Exhibit iii: Parks Funding Strategy

Funding Mechanism	Payment Base	Rate	Near Term Funding	Long Term Funding	Total Revenue	New?	If existing fee, does it increase?
City General Fund	Citizens		$ 250,000	$ -	$ 250,000	☐	N/A
SDC - Citywide	Developers	Parks SDCs = $1,800 per SFD (est. avg.)	2,000,000	1,142,800	3,142,800	☐	No
SDC - RT	Developers	Parks SDCs = $4,700 per SFD (est. avg.)	-	10,942,000	10,942,000	☑	
Utility Fee	Customers	+/-$1.11 per month (est. avg.)	-	3,000,000	3,000,000	☑	
G.O. Bond	Citizens	Bond costs $63/year for $311,100 median home	-	9,100,000	9,100,000	☑	
Grants	Other entities		-	996,000	996,000	☑	
Total			$ 2,250,000	$ 25,180,800	$ 27,430,800		

Source: FCS GROUP.

Stormwater

The recommended funding strategy for stormwater shown in **Exhibit iv** includes existing General Fund monies, utility fees, SDC revenue from across the city, and developer contributions. The General Fund is not a new source of funding for the city; however, it is a new source of monies for stormwater capital projects. New funding mechanisms include a River Terrace utility fee surcharge and a River Terrace reimbursement district.

Exhibit iv: Stormwater Funding Strategy

Funding Mechanism	Payment Base	Rate	Near Term Funding	Long Term Funding	Total Revenue	New?	If existing fee, does it increase?
General Fund	Citizens	Avg. of $42,000 per year	$ 250,000	$ 832,500	$ 1,082,500	☐	N/A
Utility Fees	Customers	Current fee of $500 per dwelling	250,000	832,500	1,082,500	☐	Existing SDCs may be adjusted
SDC	Developers	Avg. monthly storm utility rates = $8.75	200,000	-	200,000	☐	Existing rates may be adjusted
Utility Fee Surcharge	River Terrace Customers	$12/month surcharge	750,000	5,750,000	6,500,000	☑	
Reimbursement Districts	Developers	Assumes $1-2M per district (every 6 years)	500,000	1,665,000	2,165,000	☑	
Developers	Developers		-	-	11,022,000*	☐	N/A
Total			$ 1,950,000	$ 9,080,000	$ 22,052,000		

* Developer funded stormwater improvements are uncertain timing.
Source: FCS GROUP.

Transportation

The recommended funding strategy for transportation shown in **Exhibit v** includes the following existing funding sources:

- Fund transfers,
- Transportation Development Tax (TDT) revenue,
- Developer dedications,
- Washington County cost sharing, and
- ODOT/Metro grants.

The new funding mechanisms for transportation include a citywide SDC, an SDC overlay for River Terrace, and a River Terrace utility fee surcharge.

Exhibit v: Transportation Funding Strategy

Funding Mechanism	Payment Base	Rate	Near Term Funding	Long Term Funding	Total Revenue	New?	If existing fee, does it increase?
Fund Transfers	Citizens	Avg. $150,000 a year contributions	$ 1,000,000	$ 2,000,000	$ 3,000,000	☐	N/A
TDT Revenue**	Developers	TDT = $6,323 per dwelling (avg)	-	96,000	96,000	☐	No
SDC - Citywide	Developers	$5,000 per dwelling (avg)	1,485,000	4,917,000	6,402,000	☑	
SDC - RT	Developers	Subdistrict Transportaion SDCs = $1,531 per dwelling (avg)	827,000	2,738,000	3,565,000	☑	
Transportation Utility Fee Surcharge	Citizens within RT	$15/month surcharge	290,000	3,900,000	4,190,000	☑	
Private Cost***	Developers		3,700,000	13,820,000	17,520,000	☐	N/A
Developers****	Developers		4,000,000	4,000,000	8,000,000	☐	N/A
WA County (cost share)	County property owners/citizens	Rate to be determined	-	-	-	☐	N/A
ODOT/Metro grants (cost share)	State/Metro Citizens		-	900,000	900,000	☐	N/A
Total			$ 11,302,000	$ 32,371,000	$ 43,673,000		

** Net after credits
*** Non-credit eligible: excludes Roy Rogers Road improvements
**** Includes TDT credits for Roy Rogers Road improvements
Source: FCS GROUP.

Infrastructure Totals

Overall, the infrastructure funding strategy in River Terrace addresses revenue requirements of $34,145,600 in the near term and $77,404,300 in the long term, as shown in **Exhibit vi**.

Exhibit vi: Funding Strategy Summary

Funding Mechanism	Near Term Funding	Long Term Funding	Total Revenue
Water	$ 7,295,000	$ 10,278,500	$ 17,573,500
Sewer	11,348,600	494,000	11,842,600
Parks	2,250,000	25,180,800	27,430,800
Stormwater	1,950,000	9,080,000	22,052,000
Transportation	11,302,000	32,371,000	43,673,000
Total	**$ 34,145,600**	**$ 77,404,300**	**$ 122,571,900**

Source: FCS GROUP.

ACKNOWLEDGEMENTS

This project was made possible through funding provided by the City of Tigard, a Metro Construction Excise Tax grant, and Washington County. The findings and conclusions of this report were formulated by the consultant team using input from City staff, River Terrace Stakeholder Workgroup members, Technical Advisory Committee members, and the Tigard City Council. We sincerely appreciate the time and energy devoted by all that participated in the: River Terrace Community Plan; River Terrace public facility master plans for water, sewer, parks, stormwater and transportation; and the River Terrace Funding Strategy.

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[1] Councilor Buehner recused herself from River Terrace work sessions and decisions citing a potential conflict of interest.

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John Weathers, Neighborhood Representative

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I. INTRODUCTION

The City of Tigard (population 49,135) is currently the 12th largest city in Oregon (third largest in Washington County). In 2002, the Metro Council approved a 500+ acre urban growth boundary (UGB) expansion and authorized conceptual planning for the area now named River Terrace (RT) along with adjacent rural lands. The West Bull Mountain Concept Plan was developed from about 2005 to 2010 by Washington County in partnership with Metro. In 2011, the Metro Council voted to add the 49-acre "Roy Rogers West" area into the UGB.

In 2012, the City of Tigard ("city") annexed these areas and initiated development of the River Terrace Community Plan to implement the West Bull Mountain Concept Plan. At build-out, the River Terrace area will be zoned to accommodate up to 2,587 dwellings, a commercial center of 40,000 gross square feet, and at least one new public school. As part of the Community Plan, the city has responsibility for:

- Establishing land-use designations, regulations and design standards.
- Applying natural resource protections and abiding by the environmental standards of Clean Water Services, Washington County, Metro, state government, and federal government. These include new standards for stormwater quantity and quality.
- Ensuring that the city's master plans and regulatory maps are updated to address River Terrace infrastructure requirements including:
  - Parks, recreation and trails
  - Storm/surface water quality
  - Water
  - Sanitary sewer
  - Transportation
- Preparing a River Terrace funding strategy to comply with Metro Title 11 Functional Plan that requires areas added to the UGB to include "provision(s) for financing of local and state public facilities and services."

The City of Tigard selected FCS GROUP in 2013 (as subcontractor to Otak, Inc.) to prepare the River Terrace Funding Strategy. This effort included coordinating with city staff, SWG and TAC members, and the Tigard City Council to evaluate and select a preferred funding strategy for the required public facilities. This report is a plan for funding major capital facilities in the River Terrace Community Plan area over defined periods of six years (near-term) and build-out (long-term).

This plan provides a course of action as of the date of this document. Given its long term nature, however, elements of this plan could change as the development of River Terrace moves forward. Some things that could change include the rate of development absorption, number and scope of projects, and the cost of those projects. In addition, new funding sources could become available and/or existing funding sources could become limited.

II. METHODOLOGY

A collaborative approach was used to identify and evaluate funding sources for the major capital facility improvements required to serve future development within River Terrace. As the long-term owner of public facilities (including local roads, water reservoirs, pump stations, local transmission lines for water and sewer, parks, trails and stormwater facilities), the city must consider how to fund capital costs (including design, permitting, land acquisition and facility construction) and operating/maintenance (O&M) costs in all areas of the city. While this Funding Strategy is primarily focused on funding for capital improvements, FCS GROUP also worked with city finance staff to prepare 10-year forecasts for related O&M costs, and included the findings in the recommendations (see the **Appendix**).

A. PROCESS AND APPROACH

The process used to develop this Funding Strategy involved consultants, city staff, regional and state service providers, private property owners, and developers. The city formed a Stakeholder Working Group (SWG), a Technical Advisory Committee (TAC), conducted open public community meetings, and held on-line forums to obtain feedback on interim findings for the funding strategy and public facility master plan updates.

As part of this process, FCS GROUP initially prepared a series of technical memoranda to discuss and identify funding options related to key facilities and issues of importance. These memoranda were provided in November and December 2013 and were made available on the River Terrace website:

- Funding Considerations for River Terrace in Comparison with North Bethany
- Parks, Trails, and Open Space Funding Options for River Terrace
- Stormwater Funding Options for River Terrace
- Transportation Funding Options for River Terrace
- Wastewater Funding Options for River Terrace
- Water Funding Options for River Terrace

In addition to these technical memoranda, city staff prepared informational documents regarding funding strategy policy options to inform the community about how various groups (i.e., existing city residents, future residents in River Terrace, developers, and property owners in River Terrace) could help pay for essential public infrastructure.

In the spring and summer of 2014 FCS GROUP, city staff, and other consultant team members presented draft public facility master plan addenda and preliminary funding strategies to the Tigard City Council during work sessions open to the public. Input received at these meetings and subsequent meetings with the TAC and SWG was used to finalize the master plan addenda for adoption by the Tigard City Council and to provide feedback regarding the assumptions contained in the funding strategy. Additional public and stakeholder meetings were conducted in fall 2014 to discuss and refine the recommended funding strategies that are contained in this document.

Underlying the alternatives and recommendations in this report is the assumption that the city desires and intends to develop River Terrace in the manner that it has planned. This report is not a cost-benefit analysis and it provides no evaluation of the city's net fiscal impacts from development in River Terrace.

B. FUNDING SOURCES

There is a hierarchy of public facilities needed to serve new developing areas. Local infrastructure facilities such as: neighborhood streets, sidewalks, water and sewer line connections to the trunk system, and storm drainage systems may be required as a condition of development approval, included in a development agreement or funded as part of adopted system development charges (SDCs) that must be paid by developers in lieu of constructing a facility.

Development agreements between developers and local service providers are often used to advance or expedite the financing for specific public facility improvements. In addition to specifying the capital projects to be constructed, development agreements help clarify project delivery timelines, funding responsibilities, and developer investment reimbursement levels.

If the required public facilities are included as a "qualified public improvement" per Oregon Revised Statute (ORS) 223.309, then the local government must have an ordinance or resolution that establishes or modifies an improvement fee to provide credit against such fee for the construction of a qualified public improvement.

Capital improvements to major public facilities are often constructed by local governments or utility service providers through some form of debt financing or "pay-as-you-go" fund allocations for capital projects that are included in the city's Capital Improvement Plan (CIP).

When capital improvements are funded or financed by the local jurisdiction(s), service provider(s) or through development agreement(s), the funding options that are used in Washington County include:

- System Development Charges (SDC)
- Transportation Development Tax (TDT)
- Local Improvement Districts (LID)
- Reimbursement Districts
- Utility Rates
- Urban Renewal Districts (Tax Increment Financing)
- Special Taxing Districts
- Bonds
- Loans and Grants
- General Funds (with a mix of funding sources)
- Developer Dedications

A summary of these local options techniques is provided below.

B.1 System Development Charges

ORS 223.297 – 223.314 provides "a uniform framework for the imposition of system development charges by governmental units" and establishes "that the charges may be used only for capital improvements." An SDC can be formulated to include one or both of the following components: (1) a reimbursement fee, intended to recover an equitable share of the cost of facilities already constructed

or under construction; and (2) an improvement fee, intended to recover a fair share of future, planned, capital improvements needed to increase the capacity of the system. SDCs may include an improvement fee for new facilities and a reimbursement fee associated with capital improvements already constructed. SDCs cannot be used for operation or routine maintenance. ORS 223.299 defines "capital improvements" as facilities or assets used for:

- Water supply, treatment and distribution;
- Waste water collection, transmission, treatment and disposal;
- Drainage and flood control;
- Transportation; and
- Parks and recreation.

The city currently collects SDCs for sanitary sewer, stormwater, and parks facilities and is updating these SDCs. The city is also considering a new local SDC for transportation.

In addition to the SDCs that can be imposed by local governments, school districts can impose local construction taxes under the provisions of ORS 320.170 to 320.189. These taxes play no role in the funding of city facilities and are not addressed further in this report.

B.2 Local Transportation System Development Charges

The city is in the process of considering a local Transportation SDC for transportation facilities (including streets, transit facilities, pedestrian and bicycle facilities) that would be in addition to the existing Washington County TDT. The local transportation SDC would represent an impact fee on new development and could be considered citywide or within defined sub-districts within the city.

B.3 Transportation Development Tax (TDT)

Approved by Washington County voters on November 4, 2008 (Measure No. 34-164), the TDT replaced the previous tax, known as the Traffic Impact Fee. The TDT went into effect on July 1, 2009 and is levied countywide in all cities.

Since River Terrace is located within Washington County, the city may decide to use Washington County Transportation Development Tax (TDT) revenues for roadway improvements that add capacity, such as improvements to Roy Rogers Road, Bull Mountain Road, and other eligible collector and arterial facilities.

B.4 Local Improvement Districts (LID)

Cities in Oregon have the statutory authority to establish local improvement districts and levy special assessments on the benefited property to pay for improvements. These are payable in annual installments for up to 30 years. LIDs are generally used for capital improvement projects that benefit numerous large tenants and/or private property owners.

The primary advantage of LIDs from the city's perspective is the ability to attain a consistent level of revenue generation early in the development process. Financial intermediaries such as banks now view LIDs as a more reliable funding source than others (such as SDCs) and are more apt to provide loans based on future LID revenue streams. However, the financing terms for "raw land" LIDs have become far more stringent since the 2007 financial crisis and are now far less favorable than financing terms given to municipal bond issues or state infrastructure loans.

B.5 Reimbursement Districts

Similar to LIDs, cities can negotiate public/private advance financing arrangements with developers where a developer agrees to front capital improvements/investment within a designated zone of benefit. The developer is then partially reimbursed as new land use development approvals are granted within the reimbursement district over a period that usually extends 10-15 years. While reimbursement districts have been successfully utilized in the city in the past, there is no guarantee that future revenues will be steady and reliable as with the LID or property tax assessments.

B.6 Utility Rates

Utility rates are a common way to raise local revenues to pay for required infrastructure facilities and operations. However, they require approval and adoption by the city or service district and must meet state and local regulations. Utility fees are paid for by customers within the service area and typically are included in monthly or bi-monthly utility bills for streets, water, sewer, stormwater, and parks. Tigard currently charges utility fees for water, sewer, transportation, and stormwater.

B.7 Urban Renewal District (URD)

The city currently has a Downtown urban renewal district (URD) in place, and there may be an opportunity for to utilize funding from the creation of a new River Terrace URD. In many cases, URD funds are combined with other local funding sources, (e.g., SDCs) to leverage non-local grants or loans.

B.7.a URD Requirements

The requirements for preparing an urban renewal plan and establishing an URD are contained in ORS 457. In general, the most pertinent elements of the legal requirements of ORS 457 include:

- Does the area within the proposed boundary contain blighting conditions as defined in ORS 457? (this includes “inadequate streets and other rights of way, open space and utilities” among other factors that seem to exist in River Terrace)
- Does the area (along with other URDs in the city) constitute less than 25% of the city’s acreage and assessed valuation level? (this seems to be the case when considering River Terrace and the current Downtown URD area)
- Do the proposed urban renewal plan and project activities address and help treat blighting conditions?
- Are the proposed project activities eligible as urban renewal activities?
- Have urban renewal project costs and revenues been estimated?

B.7.b Maximum Indebtedness Requirements

After the passage of House Bill 3056 (passed by the Oregon Legislature in 2009), urban renewal agencies have new limits on the amounts of maximum indebtedness (MI) allowed in urban renewal plans adopted after January 1, 2010.

- If the total “frozen tax base” is $50 million or less (as is the case in River Terrace), the total MI may not exceed $50 million.

B.7.c Revenue Sharing Possibilities

There are also new possibilities for revenue sharing with overlapping districts for plans adopted or substantially amended to increase MI after January 1, 2010.

- Revenue sharing among overlapping tax districts begins in the 11th year after the initial plan was adopted, or when Tax Increment Financing (TIF) collections equal or exceed 10% of the initial MI.
- For any year when TIF collections equal or exceed 10% of the initial MI, but are less than 12.5% of the initial MI, the urban renewal agency receives the 10%, plus 25% of the tax increment between 10% and 12.5%. Overlapping tax districts receive 75% of the tax increment between 10% and 12.5%.
- For any year when TIF collections equal or exceed 12.5% of the initial MI, the UR agency receives the 12.5% tax increment, and any tax increment collections greater than 12.5% are distributed to overlapping taxing districts.

B.7.d Concurrence Waivers

Variations in the MI requirements and the revenue sharing provisions can occur if the municipality obtains the written concurrence of the overlapping tax districts that impose at least 75% of the taxes imposed under the permanent rate limits in the URD.

In light of these and other URD provisions, the city may consider the creation of a new district. Revenue generation potential from urban renewal tax increment collections within a district that coincides with River Terrace is further analyzed in the next section.

B.8 Special Taxing Districts

Special districts with taxing authority may be formed by voters within the district for specific purposes, such as providing sanitary service, water improvements, or surface water control.[2] For example, a Water Control District (ORS Chapter 553) may be formed to construct, improve, operate, and maintain surface water control works that improve public health, welfare, and safety as well as enhance pollution control and increase water quality. The district would have a separate board of directors and may levy taxes, fees, and assessments. If the district levies a property tax, the tax rate is limited to a portion of the real market value of all taxable property in the district.

B.9 Bonds

Cities may finance public facilities using several types of debt known as bonds or certificates of participation.

B.9.a General Obligation Bonds

In Oregon, general obligation (G.O.) bonds must be approved by voters. G.O. bonds provide their own debt service in the form of a property tax levy that is exempt from the Measure 5 (compression) limits. G.O. bonds offer slightly lower interest rates than revenue bonds, being backed by the city's tax base. From the investor's perspective, tax backed debt is more secure. These bonds also carry no additional coverage requirement, allowing the city to collect revenues necessary to meet annual debt service with no additional financial consequences. G.O. bonds can be politically unpalatable if the municipality's constituency doesn't support the intended purpose of the bond funds.

[2] Special districts in Oregon may be formed by local governments without a vote if the district foregoes the ability to levy a property tax.

B.9.b Revenue Bonds

Revenue Bonds are, by definition, backed by the revenue of a utility or enterprise fund, or some other dedicated revenue source. Because the payment stream is less secured than tax backed bonds, revenue bonds carry higher interest rates than G.O. bonds. This differential, however, may be minimal.

Revenue bonds are perhaps the most common source of funding for construction of major public facility or utility projects. To issue revenue bonds the city must commit to certain security conditions related to repayment, specifically reserve and coverage requirements for annual rate revenues. These conditions are included in the bond resolution to be adopted by the city and essentially impose certain conservative financial practices on the city as a way of making the bonds more secure.

Revenue bond coverage is a contractual requirement binding a utility to demonstrate that annual revenues exceed expenses by a multiple of the debt service payment. This factor is usually at least 1.25 and is higher for agencies with unrated bonds or low bond ratings. Revenue bond coverage requirements can result in higher utility rates than would otherwise be necessary to meet the cash needs of the utility.

B.9.c Full Faith and Credit Obligations (FFCOs)

This last type is a hybrid of the first two. Like revenue bonds, FFCOs require no vote, and they trigger no property tax levy. Like general obligation bonds, FFCO's do not figure into debt coverage ratio calculations for municipalities that have outstanding revenue bonds. Like G.O. bonds, which are issued against the taxing authority of the city, these bonds may be repaid by other dedicated revenues. This arrangement takes advantage of the more favorable terms, while still requiring system users to repay the debt. The General Fund would ultimately remain responsible for debt repayment should rate revenues prove insufficient. Debt limits for public borrowing through the use of FFCOs and G.O. Bonds is described in ORS chapter 287.A.

B.10 Loans and Grants

Federal and state grant programs, once readily available for financial assistance, have been mostly eliminated or replaced by low-cost loan programs. Remaining grant programs are generally limited in application, lightly funded, and heavily subscribed. Nonetheless, the economic benefit of grants and low-interest loans can make the effort of applying worthwhile.

B.10.a Bank and State Loans

The city may utilize private bank loans or state loans to make strategic capital facility upgrades. State loan funds available from Business Oregon currently include the Special Public Works Fund and the Oregon Bond Bank. Special Public Works funds are available on a competitive basis to public jurisdictions and can fund projects up to $3 million in size, but require well-secured loan guarantees from the applicants. Oregon Bond Bank or Oregon Infrastructure Finance Authority loan funds may be available if the project is well secured and other funding alternatives are not available.

B.10.b Grants and Low-Interest Financing

Grants offer some potential for the capital improvement projects and initiatives that the city is considering. The city may be able to leverage non-local dollars using dedicated local funding. There are several regional, state and federal grant and loan programs that may be available for transportation, water, sewer, and stormwater improvements. Please refer to Metro and Business Oregon contacts for current grant and loan funding opportunities.

B.11 General Fund

The General Fund includes revenues (primarily property tax revenues and franchise fee revenues) the city receives that are not associated with enterprise funds and can be used to fund activities or projects associated with local governance. As part of the annual budgeting process, Tigard City Council has the discretion to allocate a portion of General Funds to enterprise activities or other dedicated purposes. Since General Funds are relied upon to fund essential city administrative services (including police services), they do not represent a very reliable funding source for funding public infrastructure. However, General Funds can serve as an important credit mechanism for issuing bonds, as noted above.

B.12 Developer Dedications

Jurisdictions can require developers to dedicate rights-of-way and/or build public improvements as a condition of development approval if those public facilities are identified in an adopted subarea development plan, transportation system plan or public facility plan, and the value of the real estate and improvements is commensurate with the level of impact generated by the proposed development. In cases where dedicated public facilities are eligible for SDC or TDT credits, the developer may be entitled to an amount of credit based on the amount of the improvement charge and the value of the land and/or capital facility provided based on the credit terms/methods adopted per local ordinance.

C. FUNDING SOURCE EVALUATION CRITERIA

An evaluation of funding options for each public facility type was conducted to ascertain the relative potential for implementing the potential funding measures identified above. FCS GROUP worked with city staff to identify potential "bundles" of funding based on the status quo (existing practice within the City of Tigard) and scenarios that would entail new funding sources. Each funding "bundle" or scenario was then evaluated using the evaluation criteria below.

C.1 Equity

Equity is defined herein as the equitable distribution of cost/risk among three categories: existing city residents, new residents within River Terrace, and River Terrace developers/property owners.

A score was assigned to each funding scenario ranging from low cost/risk (1) to high cost/risk (5). The overall equity score for each funding scenario was determined based upon the relative standard deviation from uniform equity (which represents a case where each group shares costs/risks equally). A relatively low equity score depicts a large standard deviation, and a relatively high score depicts a small standard deviation from uniform equity.

C.2 Reliability of Funds

Reliability of funds is an important consideration, especially if debt is used to advance funding for improvements. Funding sources, such as SDCs, Reimbursement Districts, and General Fund allocations do not generate revenue in a predictable manner, and have poor reliability. In comparison, G.O. Bonds, special districts, and LIDs tend to be far more reliable and less risky to the agency that takes on debt. A score of 1 (low) to 5 (high) was assigned to each funding scenario based on how reliable the funds were in each scenario.

C.3 Facilitates Development

Adequate public facilities must be provided (and funded) before major private development can occur in River Terrace. The ability for the public or private sector to fund necessary infrastructure to

accommodate new private development is an important consideration and should be viewed from each of their perspectives. If there is an over reliance on private developers/property owners within River Terrace to fund all necessary public infrastructure, the development costs per unit of net development (housing units or commercial floor area) may drive up costs to a level that exceeds supportable market prices (e.g. lot or home sales prices). On the other hand, if new public facilities are to be funded primarily using SDCs or General Funds, then it is likely that the city would not invest in these facilities until adequate capital reserves are established which could take many years. A score of 1 (low) to 5 (high) was assigned to each funding scenario, based on the relative potential it would have to facility development within the near-term (next six years).

C.4 Ease of Implementation

Ease of Implementation refers to the process that is required to adopt or implement the funding sources identified within each funding scenario. Some funding sources, such as utility rates and SDCs do not require public votes to enact and therefore are relatively easier to implement (these are not without inherent political or market risks) than funding sources that require a public vote or legal formation steps (such as Urban Renewal Districts, Local Improvement Districts, Reimbursement Districts, and Special Taxing Districts). A score of 1 (low) to 5 (high) was assigned to each funding scenario, based on the relative ease of implementation to enact the relevant funding options.

C.5 Ability to Address Near-Term Costs

Using the adopted facility master plans and CIP, city staff was able to identify a preliminary list of facility improvements necessary to get development underway in River Terrace. Each improvement entails additional capital costs that are to be incurred by the city, other major service providers (e.g. CWS, Washington County, etc.), or developers. A score of 1 (low) to 5 (high) was assigned to each funding scenario, based on the anticipated level of funds it would generate in comparison to the expected near-term capital cost requirements.

C.6 Ability to Address Long-Term Costs

The adopted public facility plans for River Terrace were used to identify specific facility improvements necessary to serve River Terrace (and the surrounding area) at build-out. Each improvement entails additional capital costs that are to be incurred by the city, or other major service providers (e.g. CWS, Washington County, etc.), or developers. A score of 1 (low) to 5 (high) was assigned to each funding scenario, based on the anticipated level of funds it would generate in comparison to the expected long-term capital cost requirements.

C.7 Total Evaluation Score

A total score was computed for each funding scenario using the overall equity score, and the scores assigned for the ability to: facilitate development; implement the funding scenario; address near-term cost; and address long-term cost. The total score was then used to rank each funding scenario. The scenarios with the highest scores are identified as the preferred funding scenario for each public facility type.

D. DEVELOPMENT ABSORPTION FORECAST

City staff and consultants worked with SWG/TAC members to estimate available public facility infrastructure capacity and the timing of near-term improvements and developments within River Terrace. The development absorption forecast takes into account land uses planned as part of the adopted River Terrace Community Plan. To keep the funding revenue forecasts conservative, it is

assumed that the fees generated will occur approximately one year after development approvals are granted by the city. It is also assumed that the amount of total net new development realized in River Terrace will be 10% less than the zoned capacity and no commercial or school development is counted in the city's revenue forecast. The near-term and long-term development absorption assumptions are provided in **Exhibit 1**.

Exhibit 1: River Terrace Development Absorption Forecast (Dwelling Units)

Absorption Scenario	Near Term*	Long Term	Total	Years Until Build-out
Low	440	1,888	2,328	24
Medium	540	1,788	2,328	20
High	640	1,688	2,328	18

* Near term is assumed to extend from FYE 2015 to FYE 2021. FYE = fiscal year ending.
Note: this assumes 10% under-build factor.
Excludes: 40,000 sq. commercial and school developments.

III. FUNDING STRATEGY

FCS GROUP relied upon the River Terrace master plan addenda and the current adopted Tigard five-year CIP to identify specific improvements and their associated capital costs for public facilities related to River Terrace. This section highlights the overall findings, public facility capital costs, near-term project assumptions, funding scenario evaluation, and preliminary preferred scenarios for each infrastructure type if River Terrace develops as planned. Funding revenue forecasts are based on the medium absorption forecast depicted in the preceding table.

A. WATER

A.1 Overall Findings

The service provider for water in River Terrace is the City of Tigard.

The City of Tigard's Water Fund is being programmed to make major investments per the Lake Oswego-Tigard Water Partnership. Prior and planned rate increases should adequately address local revenue requirements and enable the city to proactively construct capital projects that benefit existing and future customers, including those in River Terrace. Development Agreements could be utilized to allow private (developer) construction of water lines eligible for SDC credits.

There are three zones in River Terrace with different water pressures in the water system: a 410 zone, a 550 zone, and a 713 zone. Adequate water capacity is currently available to serve future River Terrace development within the 410 and 713 zones. However, there is a city-wide need for additional water storage capacity in the 550 zone. City staff estimates that only 72 additional homes can be built in River Terrace within the 550 zone before the new 3.0 million gallon per day (gpd) Cach Reservoir is constructed.

A.2 Public Facility Costs

Near-term water facility improvements include capacity-related facilities in the 410 and 550 zones. The 410 zone will require two transmission mains and a water pressure reducing valve (PRV), the only upgrade required in the near term. The new Cach Reservoir and a new pump station and transmission main are planned in the near-term to serve city-wide needs within the 550 zone. See **Exhibit 2** for details.

Exhibit 2: Water Infrastructure Needs

Facilities by Pressure Zone	Capital Cost	Near Term	Potential Funding Source
410 Zone:			
18-inch Transmission Mains	$1,398,500	☐	Funding primarily through water rates and SDCs (credit eligible)
20-inch Transmission Mains	$6,080,000	☐	Funding primarily through water rates and SDCs (credit eligible)
550 Zone to 410 Zone PRV	$200,000	☑	Funding primarily through water rates and SDCs
713 Zone:			
None	-		
550 Zone:			
16-inch Transmission Mains through River Terrace	$2,800,000	☐	Funding primarily through water rates and SDCs (credit eligible)
3.0 mgd Cach Reservoir	$5,400,000	☑	Funding primarily through water rates and SDCs
16-inch Transmission from Reservoir to 550B	$595,000	☑	Funding primarily through water rates and SDCs
1,400 gpm (firm capacity) Pump Station	$1,100,000	☑	Funding primarily through water rates and SDCs
Total Cost	**$17,573,500**		

Source: River Terrace Water System Master Plan Addendum June 2014, compiled by FCS Group

A.3 Funding Scenarios

There is one funding scenario for water infrastructure, and it is generally consistent with the existing funding sources utilized by the City of Tigard. This includes utility fees, citywide SDCs, and developer dedications of local transmission lines (**Exhibit 3**).

Exhibit 3: Water Funding Scenario

	Scenario	
Funding Source	**A (status quo)**	**Notes**
Utility Fee (existing)	☑	Existing city-wide water rates may be increased to address costs
SDC (City wide)	☑	Existing city-wide water SDCs should be sufficient to address costs
Developer	☑	Developers to provide/construct local water system connections
Preliminary Ranking	**1**	

A.4 Evaluation

Overall, the water funding scenario received a total score of 26 points (out of a possible 30 points). The scenario has good marks for equity, reliability, ability to facilitate development, and can be implemented without the need to establish new revenue sources **(Exhibit 4).**

Exhibit 4: Water Funding Evaluation Criteria

Evaluation of Cost Burdens and Implementation Criteria	
Equity (1: lower cost burden - 5: higher cost burden)	**A (status quo)**
Citywide Resident Cost Burden	
Citizens in Subdistrict Cost Burden	
Developer/Property Owner Cost Burden	
Evaluation Criteria (1: worst - 5: best)	
Cost Equity *	
Reliability of Funds	
Facilitates Development	
Ease of Implementation	
Ability to Address Near-Term Costs	
Ability to Address Long-Term Costs	
Total Score (sum of Evaluation Criteria)	**26**

* denotes relative variance from "uniform" equity (wherein developers, future residents, and existing residents would split costs equally)

A.5 Analysis of Preferred Funding Scenario

Total water system infrastructure costs, excluding local connections to main transmission lines, are estimated at $17.6 million. Estimated near-term costs for water infrastructure total $7,295,000 (FYE 2014 dollars), most of which will be paid for using rate revenues from the water fund. The rest of the near term and long term funding will be paid through SDC and water rate revenue (see **Exhibit 5**). Developers will be responsible for constructing local connections, the cost of which is not listed.

The recommended funding strategy for water systems (see **Exhibit 6**) relies upon existing funding mechanisms already being used by the City of Tigard, including utility fees (water rates) and SDCs.

Exhibit 5: Water Funding Strategy, Scenario A

Scenario A				
Funding Mechanism	**New Funding Source?**	**Near Term Funding**	**Long Term Funding**	**Notes**
Utility Fees (Water Fund)	☐	$5,295,000	-	Reflects portion of Water Fund Balance by FYE 2021
SDC (City wide, Water SDC Fund)	☐	$2,000,000	$10,278,500	Existing SDCs (after inflation adjustment), $7,580 per SFD
Total Revenue		**$7,295,000**	**$10,278,500**	
Total Capital Cost		**$7,295,000**	**$10,278,500**	

Exhibit 6: Recommended Water Funding Strategy, Scenario A

Funding Mechanism	New Funding Source?	Who Pays?	How Much $?	Notes
Utility Fees (Water Fund)	☐	Customers	Avg. monthly water utility rates = $38	Planned water utility rate increases
SDC (City wide, Water SDC Fund)	☐	Developers	Water SDCs = $7,580 per SFD*	Developers pay SDCs and provide local water lines

* these rates/SDCs are to be adjusted as part of citywide rate/SDC analysis for water by Jan. 2015.

B. SANITARY SEWER

B.1 Overall Findings

Clean Water Services (CWS) is the sanitary sewer service provider for the River Terrace area and the city has responsibility for maintaining gravity lines below 12 inches in diameter.

The city's Sanitary Sewer Fund is financially challenged regardless of River Terrace and a local city-wide sewer surcharge is recommended. Most areas within River Terrace will require new pump stations before development can occur unless CWS allows for interim facilities for sewer. The North Pump Station is scheduled for construction in summer 2015 and completion in January 2016. The South Pump Station is scheduled for construction in summer 2018 and completion in January 2019.

The city will need to coordinate with CWS to ensure that planned pump stations and force mains serving River Terrace are constructed in a timely manner. The city's limited financial resources may be focused on coordination with CWS and review of developer engineering designs of gravity main lines. Development Agreements can be utilized to allow private (developer) construction of gravity lines, eligible for SDC credits.

B.2 Public Facility Costs

Sewer infrastructure upgrades for River Terrace are estimated to cost just under $12 million. Facilities in the River Terrace North (RTN) area include a new pump station, a force main, a Scholls Ferry trunk pipe extension, and upsizing the Barrows Road trunk line. River Terrace South (RTS) facilities include a force main, a pump stations, and a pipe upsizing on Beef Bend Road. See **Exhibit 7** for details.

Exhibit 7: Sewer Infrastructure Costs

North River Terrace Facilities	Capital Cost	Near Term	Potential Funding Lead	Potential Funding Source Notes
RTN Force Main	$650,000	☑	CWS	CWS Sewer Fund
RTN Pump Station	$5,666,400	☑	CWS	CWS Sewer Fund
Scholls Ferry Trunk Extension, Phase 1 (city share)	$942,000	☑	Tigard	Tigard Sewer Fund
Barrows Rd. Trunk Upsizing (city share)	$276,300	☑	Tigard	Tigard Sewer Fund
Total Cost (north)	**$7,534,700**			

South River Terrace Facilities	Capital Cost	Near Term	Potential Funding Lead	Potential Funding Source Notes
RTS Force Main	$2,461,900	☑	CWS	CWS Sewer Fund
RTS Pump Station	$1,352,000	☑	CWS	CWS Sewer Fund
Beef Bend Rd. 8" line upsizing to 10" (city share)	$494,000	☐	Tigard	Tigard Sewer Fund
Total Cost (south)	**$4,307,900**			
Grand Total Cost	**$11,842,600**			

Source: River Terrace Sanitary Sewer System Master Plan Addendum, June 2014; Tigard Capital Improvement Program; compiled by FCS Group

B.3 Funding Scenario

The preferred funding scenario for sanitary sewer infrastructure is generally consistent with the existing funding sources utilized by the City of Tigard and CWS. This includes CWS capital funds, SDCs, and developer dedications of local gravity feeds (**Exhibit 8**). As mentioned above, the city is also in the process of enacting a new local sewer rate surcharge that is needed with or without River Terrace development.

Exhibit 8: Sewer Funding Scenario

Potential Funding Options	Scenario	
Funding Source	**A**	**Notes**
Utility Fees (Citywide surcharge)	☑	New local surcharge needed with or without River Terrace
SDC (Citywide)	☑	Existing sewer SDCs
CWS (Capital Fund)	☑	CWS funds
Developer	☑	Developers to provide/construct local system connections
Preliminary Ranking	**1**	

B.4 Evaluation

The preferred funding scenario received a total score of 25 (out of a possible 30 points). The preferred scenario for sanitary sewer funding received a relatively favorable equity score and is expected to facilitate development and not entail overly complicated new funding sources, other than the planned citywide sewer rate surcharge (**Exhibit 9**).

Exhibit 9: Sewer Funding Evaluation Criteria

Evaluation of Cost Burdens and Implementation Criteria	
Equity (1: lower cost burden - 5: higher cost burden)	**A**
Citywide Resident Cost Burden	
Citizens in Subdistrict Cost Burden	
Developer/Property Owner Cost Burden	
Evaluation Criteria (1: worst - 5: best)	
Cost Equity *	
Reliability of Funds	
Facilitates Development	
Ease of Implementation	
Ability to Address Near-Term Costs	
Ability to Address Long-Term Costs	
Average Rating	
Total Score (sum of Evaluation Criteria)	**25**

* denotes relative variance from "uniform" equity (wherein developers, future residents, and existing residents would split costs equally)

B.5 Analysis of Preferred Funding Scenario

Most of the sewer infrastructure required to serve River Terrace requires major near-term investments (primarily by CWS). In addition to funding provided by CWS, the planned new

citywide sewer utility fee surcharge is expected to generate about $1 million in long-term funding, based on a fixed monthly rate. Local sewer SDCs are expected to generate an additional $610,000 in near-term funding (see **Exhibit 10).** Developers will be responsible for constructing local gravity feeds into sewer mainlines, the cost of which is not listed.

Exhibit 10: Sewer Funding Strategy, Scenario A

		Scenario A			
Funding Mechanism	New Funding Source?	Near Term Funding	Long Term Funding	Total	Notes
CWS (capital fund)	☐	$10,130,300		$10,130,300	CWS Capital Imp. Progam funds
Utility Fee (City surcharge)	☑	$609,150	$494,000	$1,103,150	City surcharge on fixed monthly rate
SDC (City wide)	☐	$609,150		$609,150	Sewer connection fees
Total Revenue		**$11,348,600**	**$494,000**	**$11,842,600**	
Total Cost		**$11,348,600**	**$494,000**	**$11,842,600**	

The recommended funding strategy for sanitary sewer systems (see **Exhibit 11**) relies upon existing funding mechanisms already being used by Clean Water Services (CWS) and the City of Tigard, including utility fees (sewer rates) and SDCs.

Exhibit 11: Recommended Sewer Funding Strategy, Scenario A

Funding Mechanism	New Funding Source?	Who Pays?	How Much $?	Notes
Utility Fees (Sewer Fund)	☐	Customers (within city service district)	Avg. monthly sewer utility rates = $54 per account (existing)	Additional citywide sewer rate surcharge required with or without River Terrace
SDC (Citywide, Sewer SDC Fund)	☑	Developers	Sewer SDCs: $4,900 per SFD	Developers provide local lines and pay sewer SDCs
CWS Capital Fund	☐	Customers in CWS district		CWS (capital fund)

C. PARKS

C.1 Overall Findings

The City of Tigard is the parks service provider for River Terrace.

City of Tigard residents voted to support a Parks G.O. Bond in recent years, but the existing parks capital funds are mostly committed. The city must now rely upon SDC funds, user fees, General Funds, and grants to pay for its parks.

In addition to updating the citywide parks SDC, it is recommended that the city consider ways to enhance parks operating revenues, such as through a citywide parks utility fee, and consider a future G.O. Bond to help bridge parks funding gaps. Development Agreements could also be utilized to allow private developers to construct neighborhood parks or dedicate land or easements for future parks and trails (eligible for SDC credits and reimbursement).

C.2 Public Facility Costs

The total cost for parks and trails in River Terrace is over $27 million. Community and neighborhood parks are expected to make up the vast majority of the costs, while trails and linear parks cost $4.9 million combined (see **Exhibit 12**).

Exhibit 12: Parks Infrastructure Costs

Facility	Capital Cost	Potential Funding Sources
Community parks	$15,894,000	Parks SDCs, General Fund, grants, and voter approved GO bonds
Neighborhood parks	$6,727,000	Parks SDCs, General Fund, grants
Linear parks	$3,356,000	Parks SDCs, General Fund, grants
Trails	$1,454,000	Parks SDCs, General Fund, grants, and voter approved GO bonds
Total Costs	**$27,431,000**	

Source: Tigard Park System Master Plan Addendum, Table 5.
* Near-term investment primarily includes land acqusition.

Land acquisition is a near term funding priority because the city does not have a mechanism for exacting park land aside from the voluntary Planned Development process. Early land acquisition is likely critical to ensure land availability for park use in the future.

C.3 Funding Scenarios

Four funding scenarios were evaluated for funding parks in River Terrace. All involve the General Fund, SDC revenues, grants, and developer dedications that would be eligible for SDC credits (see **Exhibit 13)**.

Exhibit 13: Parks Funding Scenarios

	Funding Scenario				
Funding Source	A (status quo)	B	C	D	Notes
City General Fund	☑	☑	☑	☑	City currently allocates General Funds to parks
Utility Fee (new)	☐	☑	☐	☑	City can consider a new monthly parks utility fee
SDC (City wide)	☑	☑	☑	☑	Existing citywide Parks SDCs to be updated
SDC (Subdistrict)	☐	☐	☐	☑	District SDC could focus on neighborhood parks & trails
Urban Renewal District	☐	☐	☑	☐	Urban Renewal District may be formed with voter approval
G.O. Bond	☐	☑	☐	☑	G.O. Bonds may be issued with voter approval
Grants	☑	☑	☑	☑	Grants from state or Metro may be available
Developer	☑	☑	☑	☑	Developers can receive SDC credits for constructing eligible public facility improvements.
Preliminary Ranking	**4**	**2**	**3**	**1**	

C.4 Evaluation

The rankings for the four scenarios indicate that scenario D has the highest score and is the preferred funding scenario. While scenario D maybe somewhat difficult to implement because it relies on a future G.O. Bond, it would generate reliable future revenues that could be used to construct attractive parks and recreation amenities that would help facilitate development.

Scenario A does not have very reliable funding sources since the city would have to leverage far more grant funding. Scenario C has a very high equity score, but the funding sources are not as reliable as scenario C or D. And Scenario C is most difficult to implement since it would require a favorable public vote for the formation of a new Urban Renewal District as well as a G.O. Bond (see **Exhibit 14**).

Exhibit 14: Parks Evaluation Criteria

Evaluation of Cost Burdens and Implementation Criteria	Scenarios			
Equity (1: lower cost burden - 5: higher cost burden)	**A (status quo)**	**B**	**C**	**D**
Citywide Resident Cost Burden				
Citizens in Subdistrict Cost Burden				
Developer/Property Owner Cost Burden				
Evaluation Criteria (1: worst - 5: best)				
Cost Equity *				
Reliability of Funds				
Facilitates Development				
Ease of Implementation				
Ability to Address Near-Term Costs				
Ability to Address Long-Term Costs				
Total Score (sum of Evaluation Criteria)	**12**	**19**	**17**	**21**

* denotes relative variance from "uniform" equity (wherein developers, future residents, and existing residents would split costs equally)

C.5 Analysis of Preferred Funding Scenario

Parks and trails in River Terrace are estimated to cost approximately $27.4 million, as indicated in **Exhibit 15**. For the preferred parks funding scenario (Scenario D), it is estimated that the city would fund approximately $2.25 million in near-term land acquisition for parks in River Terrace. This assumes $250,000 in General Funds and about $2 million in parks SDC funds in the near-term.

The long-term funding requirements of $25.2 million can be funded through the parks SDC, a potential new G.O. Bond, a potential new citywide parks utility fee, and grants from such entities as Metro, the State, and non-profit foundations (such as the Meyer Memorial Trust). The potential new G.O. Bond would require voter approval. It could be part of a larger citywide parks and trails construction program. It is estimated that for every $13 million in bonds, the levy amount would equate to $0.20 per $1,000 in assessed valuation (AV), which would cost the average homeowner about $63 per year.

Exhibit 15: Parks Funding Strategy, Scenario D

Recommended Scenario D					
Funding Mechanism	**New Funding Source?**	**Near Term Funding**	**Long Term Funding**	**Total**	**Notes**
City General Fund	☐	$250,000	-	$250,000	Includes portion of unallocated existing parks GO bond
SDC (Citywide)	☐	$2,000,000	$1,142,800	$3,142,800	Assumes $1,800 per dwelling unit (75% allotted to RT)
SDC (RT District)	☑	-	$10,942,000	$10,942,000	Assumes $4,700 per dwelling unit (100% allotted to RT)
Utility Fee (new citywide)	☑	-	$3,000,000	$3,000,000	New monthly parks utility fee of +/-$1.11 / month (75% allotted to RT)
G.O. Bond (citywide)	☑	-	$9,100,000	$9,100,000	Assumes Voter Approved $13 M bond* (70% allotted to RT)
Grants	☑	-	$996,000	$996,000	Grants (Metro, State, Foundations, etc.)
Total Revenue		**$2,250,000**	**$25,180,800**	**$27,430,800**	
Total Cost		**$2,250,000**	**$25,180,800**	**$27,430,800**	

* assumes voter-approved levy of $0.20 per $1,000 AV; results in average cost to $311,100 median home of $63/year.

The recommended funding strategy for parks (see **Exhibit 16**) relies upon existing funding mechanisms already being used by the City of Tigard including the General Fund and parks SDCs. The recommended strategy also relies on new sources of funding through a local River Terrace parks SDC, citywide parks utility fee, and non-local grants. If public support for a new G.O. bond for parks is not forthcoming, the city may opt to delay implementation of planned parks capital projects, or may need to increase the local parks SDC that is charged on new development.

Exhibit 16: Recommended Parks Funding Strategy, Scenario D

Funding Mechanism	New Funding Source?	Who Pays?	How Much $?	Notes
City General Fund	☐	Citizens	$250,000	Fund Transfers
SDC (City wide)	☐	Developers	Parks SDCs = $1,800 per SFD (est. avg)	Developer SDCs; 75% alotted to RT
SDC (RT District)	☑	Developers	Parks SDCs = $4,700 per SFD (est. avg)	Developer SDCs; 100% alotted to RT
Utility Fee (new city wide)	☑	Customers	+/-$1.11 per month (est. avg)	New citywide parks utility fee (75% alloted to RT)
G.O. Bond	☑	Citizens	Bond costs $63/year for $311,100 median home	New city $13 M G.O. bond; $0.20 per $1,000 AV (70% alotted to RT)
Grants	☑	Other entities	+/- $996,000	Metro, state or federal grants

D. STORMWATER

D.1 Overall Findings

The city is focused on ensuring that development is environmentally sustainable through low impact stormwater design standards and construction of new stormwater water quality and quantity facilities. Recent federal water quality regulations mandate local investments in stormwater facilities and maintenance activities. While planned rate increases by CWS will increase Stormwater Funds for the city, additional local funding sources should be considered to finance, construct, and maintain stormwater facilities in River Terrace.

Stormwater systems within River Terrace are expected to be primarily funded by developers and maintained by the City of Tigard. The city may also consider dedicating funds to form stormwater facility reimbursement districts which could function as a bank used to advance funding for regional facilities, with payments provided to the city (by developers, builders or homeowners) after development occurs. Development Agreements could be utilized to allow private developer construction of regional (drainage basin) facilities, with similar reimbursement payback provisions.

D.2 Public Facility Costs

Total permitting, land and capital cost for stormwater facility improvements and planning/modeling work is estimated at $22 million.[3] Near-term stormwater infrastructure requirements include development of a new stormwater model, high-flow conveyance alternatives analysis, and new design standards for River Terrace. Future stormwater system improvements include 11 water quality/detention ponds, two detention ponds, and potentially two high-flow conveyance facilities (**Exhibit 17**).

[3] These draft cost estimates were prepared by Otak, Inc. as part of the draft Tigard River Terrace Stormwater Master Plan (August 2014). These costs are considered to be on the high-end of what may be realized if developers construct stormwater facilities on-site and avoid public contracting and related prevailing wage requirements.

Exhibit 17: Stormwater Infrastructure Costs

Facility Needs	Capital Cost	Near Term	Potential Funding Lead	Potential Funding Source Notes
Stormwater Modeling Analysis	$50,000	☑	City	City Stormwater Fund
River Terrace Stormwater Design Standards	$150,000	☑	City	City Stormwater Fund
Water Quality and Detention Ponds (11)	$12,349,000	☐	Developers	Deveopers and reimbursement districts
Detention Ponds (2)	$4,265,000	☐	Developers	Deveopers and SWQQ reimbursement districts
High Flow Conveyance Facilities (3)	$5,238,000	☐	Developers	Deveopers and SWQQ reimbursement districts
Total Cost	**$22,052,000**			

Source: River Terrace Stormwater Master Plan, July 2014 Attachment B; and city staff input; compiled by FCS Group

D.3 Funding Scenarios

Four scenarios were evaluated for funding the stormwater infrastructure systems to serve River Terrace. All scenarios include some level of General Fund commitment, utility fees, citywide SDCs, and developer on-site improvements to address stormwater discharge. Scenario A reflects current practices used by the city. Scenario B relies upon reimbursement districts or LIDs within River Terrace. Scenario C includes the formation of a new stormwater taxing district and reimbursement districts within River Terrace. Scenario D includes a new River Terrace district utility fee and reimbursement districts in River Terrace (see **Exhibit 18** for details).

Exhibit 18: Stormwater Funding Scenarios

	Funding Scenario				
Funding Source	A (status quo)	B	C	D	Notes
City General Fund	☑	☑	☑	☑	City to allocate portion of General Fund to stormwater needs
Utility Fee (existing citywide fee)	☑	☑	☑	☑	Existing Citywide fee may be increased
Utility Fee (new RT subdistrict fee)	☐	☐	☐	☑	New RT subdistrict fee is needed under Scenario D
SDC (existing citywide)	☑	☑	☑	☑	Existing Citywide SDC may be increased
Special Taxing District (New RT subdistrict)	☐	☐	☑	☐	RT voters may establish special district for their needs
Reimbursement Districts or LIDs (new)	☐	☑	☑	☑	City or Developers may advance financing and recoup investment using LID or Reimbursement Districts
Developer	☑	☑	☑	☑	Developers to construct facilities to handle runoff from new development
Preliminary Ranking	**4**	**3**	**2**	**1**	

D.4 Evaluation

As indicated in **Exhibit 19**, Scenario D received the highest total score of 19 points (out of a possible 30 points). Scenario D received the highest equity score and, while it will be difficult to implement (because of the administrative cost to create and manage reimbursement districts or LIDs), it would result in fairly reliable funding that could help facilitate development.

Scenario C placed second since it would be harder to implement because of the public vote requirement (from affected voters in River Terrace). It would also entail administrative costs associated with managing LIDs or reimbursement districts. While Scenario A is the easiest to implement, it would be completely dependent upon the private development community to construct both on and off-site stormwater infrastructure, which would likely delay development for many years. Scenario B, which would rely upon formation of several reimbursement districts or LIDs

would be very complicated and expensive for the city to administer, and would not likely generate enough near-term funding to facilitate development in River Terrace.

Exhibit 19: Stormwater Evaluation Criteria

Evaluation of Cost Burdens and Implementation Criteria	Funding Scenario			
Equity (1: lower cost burden - 5: higher cost burden)	**A (status quo)**	**B**	**C**	**D**
Citywide Resident Cost Burden				
Citizens in Subdistrict Cost Burden				
Developer/Property Owner Cost Burden				
Evaluation Criteria (1: worst - 5: best)				
Cost Equity *				
Reliability of Funds				
Facilitates Development				
Ease of Implementation				
Ability to Address Near-Term Costs				
Ability to Address Long-Term Costs				
Average Rating				
Total Score (sum of Evaluation Criteria)	**12**	**14**	**17**	**19**

* denotes relative variance from "uniform" equity (whereas developers, future residents, and existing residents would split costs equally)

D.5 Analysis of Preferred Funding Scenario

Stormwater system improvements within River Terrace are estimated to cost $22 million. For the preferred stormwater funding scenario (Scenario D), the city would pay for stormwater modeling, high-flow conveyance alternatives analysis, and stormwater design standards in the near-term using available stormwater funds. Most of the funding for stormwater facilities would need to come from developer construction of on-site facilities required to address the stormwater runoff attributed to their planned developments.

To help facilitate development to the extent possible, it is recommended that the city work with affected property owners and developers to implement a new River Terrace district stormwater utility fee surcharge (equates to +/- $12 per household per month) and dedicate up to $250,000 in General Funds every 6 years to form new reimbursement districts in River Terrace. New reimbursement districts could fund approximately $9.7 million in regional stormwater facilities over the long-term and could be focused on facilities that benefit or involve multiple property owners (see **Exhibit 20**). The city or developers that participate in the advance financing used to form reimbursement districts would be compensated (paid back) over time though special assessments on benefiting property owners that opt to participate in new development over time.

Exhibit 20: Stormwater Funding Analysis, Scenario D

Scenario D							
Funding Mechanism	**New Funding Source?**	**Near Term City Funding**	**Long Term City Funding**	**Total City Funding**	**Developer Funding (Timing Uncertain)**	**Total**	**Notes**
General Fund	☐	***$250,000***	***$832,500***	***$1,082,500***	-	$1,082,500	Assumes $250,000 every 6 years
Utility Fee (city wide)	☐	$250,000	$832,500	$1,082,500	-	$1,082,500	Existing stormwater rate (adjusted for inflation)
SDC (City wide)	☐	$200,000		$200,000	-	$200,000	Existing SDC
Utility Fee (RT subdistrict)	☑	***$750,000***	**$5,750,000**	**$6,500,000**	-	$6,500,000	Assumes $12/month rate surcharge to RT households
Reimbursement Districts	☑	***$500,000***	***$1,665,000***	***$2,165,000***	-	$2,165,000	City contributes funds or "credit" to reimbursement districts
Developers	☐	-	-	-	$11,022,000	$11,022,000	Developer to provide on-site stormwater facilities
Total Revenue		**$1,950,000**	**$9,080,000**	**$11,030,000**	**$11,022,000**	**$22,052,000**	
Total Cost		**$1,950,000**	**$9,080,000**	**$11,030,000**	**$11,022,000**	**$22,052,000**	
Reimbursement District Funding		***$1,500,000***	***$8,247,500***	***$9,747,500***			

Note: potential stormwater reimbursement district contributions shown in bold italics.
* development costs would incur as development proceeds over the buildout of River Terrace.

The recommended funding strategy for stormwater facilities (see **Exhibit 21**) relies upon existing funding mechanisms already being used by the City of Tigard including the General Fund,

stormwater SDCs, and developer dedications of on-site facilities. Potential new sources of funding include a River Terrace subdistrict stormwater utility fee and city or developer-established reimbursement districts.

Exhibit 21: Recommended Stormwater Funding Strategy, Scenario D

Funding Mechanism	New Funding Source?	Who Pays?	How Much $?	Notes
General Fund	☐	Citizens	Avg. of $42,000 per year to seed reimbursement district(s)	Discretionary fund transfers
SDC (City wide)	☐	Developers	Current fee of $500 per dwelling	Existing storm SDCs may be adjusted
Utility Fee (city wide)	☐	Customers (city wide)	Avg. monthly storm utility rates = $8.75	Existing rates may be adjusted
Utility Fee (RT subdistrict)	☑	River Terrace Customers (new residents)	$12/month surcharge	New fee surcharge for RT subdistrict, could be used to help pay O&M or for reimbursement district debt payment
Reimbursement Districts	☑	Developers or City advances financing; with future payments by builders	Assumes $1-2M per district (every 6 years)	Focus may be on facilities involving multiple property owners with off site impacts
Developers	☐	Developers		Developer dedications (on site)

E. TRANSPORTATION

E.1 Overall Findings

Transportation infrastructure for River Terrace is required for new vehicle, pedestrian, and bicycle facilities. Traditionally, the city has worked in partnership with ODOT (responsible for state facilities) and Washington County (responsible for county facilities). The city is responsible for upgrades to local routes within the city's municipal service area, which include neighborhood routes and collector roads. Typically, developer construction/dedications are required for new neighborhood routes, and a mix of local funding sources are used to fund new collector routes and capacity expansion.

The city's existing transportation funds are generally committed and not available for investing in new transportation improvements in River Terrace over the next five years. The city is in the process of considering a new local city-wide and/or sub-district transportation SDC (TSDC) to supplement the funds it receives from the Washington County TDT. In addition to developer funding of neighborhood routes, Development Agreements could be utilized to allow private developers to advance financing for road segments and intersection improvements (may be eligible for SDC credits and reimbursement).

E.2 Public Facility Costs

Transportation infrastructure needs and costs are significant and often contingent on when and where new development occurs. Total transportation capital costs (for collector improvements, arterial improvements, and selected trails) are estimated at $149.6 million (see **Exhibit 22**).

The location of the recommended transportation projects included in the River Terrace Transportation System Plan (TSP) Addendum is depicted by the map in **Exhibit 23**.

Within the next 20-years, the recommended transportation facilities are expected to cost approximately $42.68 million. $25.15 million of this amount is considered to be public cost, including $8 million in Roy Rogers Road improvements. The remaining $17.5 million represents the estimated value of public improvements that development will be required to build that are not credit eligible.

Near-term transportation needs include: the first phase of River Terrace Boulevard; a traffic signal at Roy Rogers Road/Bull Mountain Road intersection; a roundabout at the Bull Mountain Road/River Terrace Boulevard intersection; and upgrades to various Washington County facilities.[4] The long term needs include all other road extensions, intersection improvements, and selected multi-use trails.

While River Terrace has many transportation infrastructure needs, the larger region has far more needs and very limited funding. The city needs to negotiate a cost sharing scenario with the County for the planned improvements, especially those impacting County facilities such as Roy Rogers Road, Scholls Ferry Road, and Bull Mountain Road.

Exhibit 22: Transportation Infrastructure Costs

			Included in Funding Strategy			Not in Funding Strategy		
Project ID# (see Map)	Project Description	Total Capital Cost Estimate[1]	Public Capital Cost[2]	Near Term (yrs. 1-6)	Long Term (yrs. 7-20)	Private Cost	Non-River Terrace Public Cost[3]	Outside Planning Area or Horizon (20+ yrs)[4]
Project ID 1	Neighborhood Route (west of Roy Rogers Rd)	$7,000,000				✓		
Project ID 2	Lorenzo Ln Collector Extension (west of Roy Rogers Rd)	$2,500,000	$120,000		✓			
Project ID 3	Lorenzo Ln Collector Extension (east of Roy Rogers Rd)	$3,500,000						✓
Project ID 4	Neighborhood Route (east of Roy Rogers Rd)	$4,000,000				✓		
Project ID 5	River Terrace Blvd (Scholls Ferry Rd to Lorenzo Ln)	$9,000,000						
	• Phase 1: North (67%)	($6,030,000)	$2,613,000		✓			
	• Phase 2: South (33%)	($2,970,000)						✓

[4] The timing of signalized intersections on Washington County facilities and local cost sharing funding responsibilities are unknown at this time and will depend upon subsequent county signal warrant analysis and full funding agreements.

Project ID# (see Map)	Project Description	Total Capital Cost Estimate[1]	Included in Funding Strategy			Not in Funding Strategy		
			Public Capital Cost[2]	Near Term (yrs. 1-6)	Long Term (yrs. 7-20)	Private Cost	Non-River Terrace Public Cost[3]	Outside Planning Area or Horizon (20+ yrs)[4]
Project ID 6	River Terrace Blvd (Lorenzo Ln to Bull Mtn Rd)	$6,500,000						
	• Phase 1: South (75%)	($4,875,000)	$2,325,000	✓				
	• Phase 2: North (25%)	($1,625,000)						✓
Project ID 7	River Terrace Blvd (Bull Mtn Rd to South UGB)	$12,500,000						
	• Phase 1: North (33%)	($4,125,000)	$1,881,000		✓			
	• Phase 2: South (50%)	($6,250,000)	$2,850,000		✓			
	• Phase 3: Middle (17%)	($2,125,000)						✓
Project ID 8	E-W Collector Street (Roy Rogers Rd to River Terrace Blvd)	$2,500,000	$120,000		✓			
Project ID 9	E-W Neighborhood Route (River Terrace Blvd to 161st Extension)	$2,500,000				✓		
Project ID 10	N-S Neighborhood Route (Hazeltine Ln to Woodhue Extension)	$5,000,000				✓		
Project ID 11	N-S Neighborhood Route (Woodhue Extension to Beef Bend Rd)	$3,500,000				✓		✓
Project ID 12	E-W Neighborhood Route (161st Extension to 150th Ave)	$6,000,000				✓		
Project ID 13	Intersection Improvement: Signal (Roy Rogers Rd & New E-W Collector)	$1,000,000	$1,000,000		✓			
Project ID 14	Intersection Improvement: Signal (Roy Rogers Rd & Bull Mtn Rd)	$1,000,000	$1,000,000	✓				
Project ID 15	Intersection Improvement: Signal (Roy Rogers Rd & Lorenzo Ln Extension)	$1,000,000						✓
Project ID 16	Intersection Improvement: Signal (Scholls Ferry Rd & River Terrace Blvd)	$1,000,000	$1,000,000		✓			
Project ID 17	Intersection Improvement: Roundabout (River Terrace Blvd & New Neighborhood Route)	$1,500,000						✓
Project ID 18	Intersection Improvement: Roundabout (River Terrace Blvd & Bull Mtn Rd)	$1,500,000	$1,500,000	✓				
Project ID 19	Intersection Improvement: Roundabout (River Terrace Blvd & New E-W Collector)	$2,000,000						✓

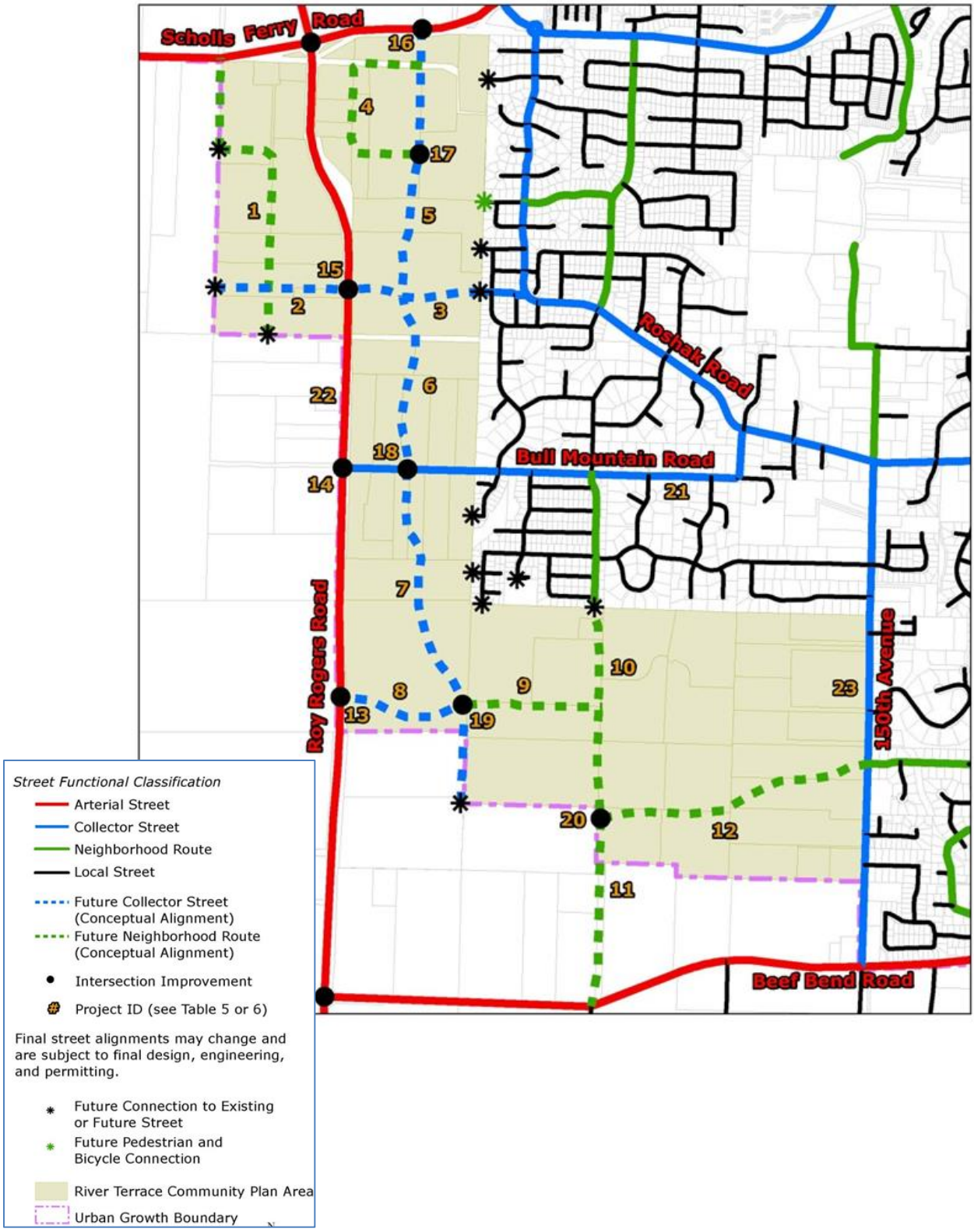
Project ID# (see Map)	Project Description	Total Capital Cost Estimate[1]	Included in Funding Strategy			Not in Funding Strategy		
			Public Capital Cost[2]	Near Term (yrs. 1-6)	Long Term (yrs. 7-20)	Private Cost	Non-River Terrace Public Cost[3]	Outside Planning Area or Horizon (20+ yrs)[4]
Project ID 20	Intersection Improvement: Roundabout (Woodhue Extension & 161st Extension)	$2,000,000				✓		
Project ID 21	Bull Mountain Road: Upgrade to Urban Standards (Roshak Rd to Roy Rogers Rd)	$4,000,000						
	• Phase 1: West (30%)	($1,200,000)	$350,000	✓				
	• Phase 2: East (70%)	($2,800,000)					✓	✓
Project ID 22	Roy Rogers Road: Upgrade to Urban Standards (Scholls Ferry Rd to Beef Bend Rd)	$35,000,000						
	• Phase 1: Inside UGB (17%)	($4,000,000)	$4,000,000	✓				
	• Phase 2: Inside UGB (17%)	($4,000,000)	$4,000,000		✓			
	• Phase 3: Outside UGB (66%)	($27,000,000)					✓	✓
Project ID 23	150th Avenue: Upgrade to Urban Standards (Bull Mtn Rd to Beef Bend Rd)	$4,000,000						
	• Phase 1: North (10%)	($400,000)	$94,000	✓				
	• Phase 2: South & Outside RT (90%)	($3,600,000)					✓	✓
Project ID 24	Highway 99W/ Walnut Street Intersection Improvement	$10,000,000					✓	✓
Project ID 25	Highway 99W/ Bull Mountain Intersection Improvement	$5,000,000					✓	✓
Project ID 26	Highway 99W/ Durham Road Intersection Improvement	$10,000,000					✓	✓
Project ID N/A	East-West River Terrace Trail (River Terrace Blvd to 150th Ave)	$3,600,000						
	• Phase 1: West (50%)	($1,800,000)	$1,800,000		✓			
	• Phase 2: East (50%)	($1,800,000)						✓
Project ID N/A	Improvements where new streets meet existing streets	$2,500,000						
	• Phase 1: Local Streets (20%)	($500,000)	$500,000	✓				
	• Phase 2: Local & Collector Streets (80%)	($2,000,000)						✓
TOTAL		**$149,600,000**	**$25,153,000**					

Notes:

Project ID# (see Map)	Project Description	Total Capital Cost Estimate[1]	Included in Funding Strategy			Not in Funding Strategy		
			Public Capital Cost[2]	Near Term (yrs. 1-6)	Long Term (yrs. 7-20)	Private Cost	Non-River Terrace Public Cost[3]	Outside Planning Area or Horizon (20+ yrs)[4]

[1] Capital cost estimates and projects derived from River Terrace Transportation System Plan Addendum, Nov. 2014. Costs are in 2014 dollars.
[2] Public capital cost includes only the "oversized" portion of the project. This "oversized" portion reflects those costs for which a developer could expect reimbursement in the form of SDC credits. Assumes non-creditable value of dedications equals $1,700 per LF (new collector projects); and $567/LF for street retrofits.
[3] Potential non-River Terrace funding sources include base TSDC and TDT collected outside River Terrace, WA County TDT for projects on County roads in unincorporated areas, County MSTIP for regional capacity and safety projects on County roads, and ODOT STIP funding for state highways.
[4] Includes projects outside the River Terrace planning area either elsewhere in the city or in unincorporated county areas; or projects needed beyond year 20. Of those projects in unincorporated areas, some are located outside the urban growth boundary.

Exhibit 23: Recommended Transportation Projects in River Terrace Area



E.3 Funding Scenarios

Five scenarios were evaluated for funding the transportation infrastructure in River Terrace, as shown in **Exhibit 24**. Each scenario includes some allocation of the city's street fund (which utilizes local and state fuel tax), the Washington County TDT, and developer dedications (for neighborhood streets and portions of new collector streets). Scenario B adds citywide and sub-district transportation system development charges (TSDCs) to the mix of funding sources. Scenario C includes a citywide TSDC and a new River Terrace Urban Renewal District. Scenario D includes a citywide TSDC, sub-district TSDC, LIDs, and G.O. Bonds, but does not include an urban renewal district.

After reviewing these scenarios, the Tigard City Council requested that an additional scenario, Scenario E, be developed and evaluated. This new scenario includes a new sub-district transportation utility fee along with a citywide TSDC, and a sub-district TSDC, street funds, grants, and developer dedications.

Exhibit 24: Transportation Funding Scenarios

	Funding Scenarios					
Capital Funding Source	A (Status Quo)	B	C	D	E	Notes
Fund Transfers	☑	☑	☑	☑	☑	City may transfer local or state fuel tax revenue to transportation projects
Transportation Utility Fee (existing city wide)	☐	☐	☐	☐	☐	Funds are dedicated to street maintenance not capital construction
Transportation Utility Fee Surcharge (new RT subdistrict)	☐	☐	☐	☐	☑	City may establish new utility fee surcharge with funds to be dedicated to capital construction within River Terrace
Transportation System Development Charge (Citywide TSDC)	☐	☑	☑	☑	☑	City may establish new TSDC on new development citywide
River Terrace (RT)-TSDC (new Subdistrict)	☐	☑	☐	☑	☑	City may establish new RT-TSDC on new development in RT subdistrict
TDT (existing)	☑	☑	☑	☑	☑	Existing TDT is charged to new development
LID or Reimbursement Dist. (new)	☐	☐	☐	☑	☐	LIDs may provide important "gap" funding; requires 51%+ property owner approval
Urban Renewal District (new)	☐	☐	☑	☐	☐	City voters may establish new URD in RT subdistrict
Tax Levy (new citywide GO bond)	☐	☐	☐	☑	☐	Citywide voters may establish GO bonds for selected transportation improvements
Grants	☐	☐	☐	☐	☑	
Developers	☑	☑	☑	☑	☑	Developers to provide neighborhood transportation facilities and can receive TDT/SDC credits for constructing eligible public facilities
Preliminary Ranking	**5**	**4**	**2**	**3**	**1**	

E.4 Evaluation

Scenario E received the highest average rating because of high marks for equity, facilitating development, reliability of funds, ease of implementation, and ability to address near-term and long-term costs.

Scenario C placed second in the evaluation, but since it relies on the creation of a voter-approved urban renewal district, it is very complex and difficult to implement and may not generate adequate funding which could delay facility construction and development for many years.

Scenario D would also be difficult to implement since it would rely upon a voter-approved G.O. Bond, and would not facilitate development, since it would rely on relatively high TSDC and LID costs per dwelling unit.

Scenarios A and B are not likely to generate adequate long-term funding to implement the planned transportation facilities (see **Exhibit 25**).

Exhibit 25: Transportation Funding Evaluation

Evaluation of Cost Burdens and Implementation Criteria					
Equity (1: lower cost burden - 5: higher cost burden)	**A (Status Quo)**	**B**	**C**	**D**	**E**
Citywide Resident Cost Burden					
Citizens in Subdistrict Cost Burden					
Developer/Property Owner Cost Burden					
Evaluation Criteria (1: worst - 5: best)					
Cost Equity *					
Reliability of Funds					
Facilitates Development					
Ease of Implementation					
Ability to Address Near-Term Costs					
Ability to Address Long-Term Costs					
Average Rating					
Total Score (sum of Evaluation Criteria)	12	15	19	17	22

* denotes relative variance from "uniform" equity (wherein developers, future residents, and existing residents would split costs equally)

E.5 Analysis of Preferred Funding Scenarios

Scenario E assumes that the city provides approximately $150,000 per year in street funds (state or local fuel tax revenue) to River Terrace projects, and TDT funds that would otherwise be collected from River Terrace development are exchanged for credits to developers that construct credit-eligible projects, such as frontage improvements along Roy Rogers Road.

Additionally, it is assumed that a new local citywide TSDC is created (average cost per dwelling unit estimated at $5,000 with 55% of the funds collected in River Terrace allotted to River Terrace projects) and a new River Terrace district TSDC is created (average cost per dwelling unit estimated at $1,531 with 100% of the funds collected in River Terrace allotted to River Terrace projects).[5] The recommended funding strategy also includes a new transportation utility fee surcharge within River Terrace (at an average cost of $15 dollars per month per dwelling unit or equivalent dwelling unit). Cost sharing among developers, Washington County, and ODOT is expected to result in additional funding for selected facilities listed above. See **Exhibit 26** for details.

While the transportation funding strategy tends to balance out over the long-term (with anticipated revenues equal or greater to expected costs), there is a significant near-term funding gap (during years 1-6) that would need to be bridged through advance financing in some form. This potential near-term issue is identified as a policy issue in the next section of this report.

[5] All allotment percentages are intended as targets and not absolute requirements.

Exhibit 26: Transportation Funding Strategy, Scenario E

Scenario E					
Funding Mechanism	New Funding Source?	Near Term	Long Term	Total (years 1-20)	Notes
Fund Transfers	☐	$1,000,000	$2,000,000	$3,000,000	Assumes avg. of +/-$150,000 per year
TDT Revenue (net after credits)	☐	$0	$96,000	$96,000	Assumes $6,323 per avg. dwelling unit (55% of funds collected in RT allotted to RT projects including $8M in TDT credits for Roy Rogers Road)
Transportation System Development Charge (Citywide TSDC)	☑	$1,485,000	$4,917,000	$6,402,000	Assumes $5,000 per avg. dwelling unit (55% of funds collected in RT allotted to RT district)
River Terrace (RT) TSDC (new Subdistrict)	☑	$827,000	$2,738,000	$3,565,000	Assumes $1,531 per avg. dwelling unit (100% dedicated to RT district)
Transportation Utility Fee Surcharge (new RT subdistrict)	☑	$290,000	$3,900,000	$4,190,000	Assumes $15/month transportation utility fee surcharge (100% dedicated to RT district)
Private Cost (non-credit eligible: excludes Roy Rogers Road improvements)	☐	$3,700,000	$13,820,000	$17,520,000	Includes on-site and adjacent (half street) improvements to collector or arterial facilities
Developers (includes TDT credits for Roy Rogers Road improvements)	☐	$4,000,000	$4,000,000	$8,000,000	Assumes (half street) improvements to Roy Rogers Road are TDT credit eligible
WA County (cost share)	☐	tbd	tbd	tbd	Selected County roadway improvements
ODOT/Metro grants (cost share)	☐	$0	$900,000	$900,000	Hwy 99 and pathway improvements
Total Revenue		**$11,300,000**	**$32,370,000**	**$43,670,000**	
Public Cost		**$9,770,000**	**$15,400,000**	**$25,170,000**	
Private Cost (Non-credit eligible)		**$3,700,000**	**$13,820,000**	**$17,520,000**	
Total Cost		**$13,470,000**	**$29,220,000**	**$42,690,000**	
Potential Funding Gap*		**($2,170,000)**	**$3,150,000**	**$980,000**	

* Funding gap could be "bridged" through: debt financing; additional fund transfers by the City; grants/contributions from County/Metro; and/or deferral or phase-in of future projects. tbd = to be determined.

The recommended funding strategy for transportation facilities (see **Exhibit 27**) relies upon existing funding mechanisms already being used by the City of Tigard including the General Fund, TDT charges/credits, grants, and developer dedications of on-site facilities. Potential new sources of funding include a River Terrace district transportation utility fee and a local citywide and River Terrace district TSDC.

Exhibit 27: Recommended Scenario, Scenario E

Funding Mechanism	New Funding Source?	Who Pays?	How Much $?	Notes
Fund Transfers	☐	Citizens	Avg. $150,000 a year contributions	Funding from local or state gas tax funds
TDT Revenue	☐	Developers (citywide)	TDT = $6,323 per dwelling (avg)	Existing TDT (assumes 55% of funds collected in RT are allotted to RT projects or developer credits)
Transportation System Development Charge (Citywide TSDC)	☑	Developers (citywide)	$5,000 per dwelling (avg)	New citywide SDC; assumes 55% of funds collected in RT are allotted to RT district
River Terrace (RT) TSDC (new Subdistrict)	☑	Developers (within RT district)	Subdistrict Transportaion SDCs = $1,531 per dwelling (avg)	New subdistrict SDC (100% dedicated to RT district)
Transportation Utility Fee Surcharge (new RT subdistrict)	☑	Property Owners (within RT district)	$15/month surcharge	100% dedicated to RT projects
Private Cost (non-credit eligible: excludes Roy Rogers Road improvements)	☐	Developers (within RT district)	ROW and street dedications for new routes	Focus is usually for on site improvements
Grants	☐	State/Metro citizens	$900,000	focus on trails
WA County (cost share)	☐	County property owners/citizens	tbd	County roadway improvements
ODOT (cost share)	☐	State citizens	tbd	Hwy 99 improvements

*All allotment percentages are intended as targets and not absolute requirements.

IV. POLICY CONSIDERATIONS

The River Terrace funding strategy includes a plan for funding required public facilities using existing and new funding sources as well as partnerships with service providers and developers. The funding strategy recognizes the limitations of current financial resources that are available to the city and other service providers, and provides a plan for funding infrastructure required to support planned development.

A. GENERAL CONSIDERATIONS

- It is recommended that local city policies be adopted to clarify the relationship between the provision and funding of public facilities and when new development can be permitted in River Terrace (and possibly elsewhere in the city). This may entail adoption of an adequate public facilities ordinance that addresses the process for determining when and how public facilities are considered reasonably funded so that development can be permitted in River Terrace.
- Ongoing inter-jurisdictional coordination will also be required between the city, Washington County, ODOT, CWS, and other agencies to ensure that cost sharing agreements are consistent with each agency's expectations.
- The city may desire to extend its Capital Improvement Program from five years to six years to provide additional time for River Terrace SDCs and fund balances to accumulate to ensure that adequate funds are in place to complete the highest priority projects.
- The city should update its SDCs for water, sewer, stormwater, transportation and parks by FYE 2015 to take these recommendations into account. As part of this update, the city may also consider updating its SDC policies regarding how revenues are to be allocated to River Terrace and other citywide needs. The city's SDC credit policies should also be updated to clarify how SDC credits are calculated and applied to eligible public facilities.

The findings and recommendations contained in this Funding Strategy also include the following issues and considerations for each public facility type.

B. WATER SYSTEM

- Existing funding sources and planned rate increases should be adequate for addressing water system requirements needed citywide and for River Terrace.
- Adequate water capacity is currently available to serve future River Terrace development within the 410 and 713 zones. However, there is a city-wide need for additional water storage capacity in the 550 zone. City staff estimates that only 72 additional homes can be built in River Terrace within the 550 zone before the new 3.0 million gallon per day (gpd) Cach Reservoir is constructed.
- The city may consider other interim water system improvements that could be provided, such as pressure reducing valves from the 713 zone to serve the 550 zone, to increase the amount of development that can occur in the 550 zone, in advance of the new Cach Reservoir.

C. SANITARY SEWER SYSTEM

- Existing funding sources, planned rate increases by CWS, and a new sanitary sewer surcharge by the city should be adequate for addressing sanitary sewer requirements needed citywide and for River Terrace.
- The city will need to coordinate closely with CWS and interested developers to ensure that planned sewer pump stations in River Terrace north and south areas advance to construction in the near term.

D. PARKS AND TRAILS SYSTEM

- City funding for parks and trails is generally limited to parks SDC revenues and General Fund allocations, which can vary widely each year.
- The city's parks SDC is in process of being updated to take into account planned facility improvements needed in River Terrace, as well as recent investments made by the city elsewhere in the city.
- The city should consider new funding resources (such as a citywide parks utility fee) to make parks funding more independent from the General Fund and help accumulate reserves for parks improvements citywide and in River Terrace.
- Public support for a future citywide parks and trails G.O. bond should also be considered after the current G.O. bond for parks sunsets.

E. STORMWATER SYSTEM

- City funding for stormwater facilities and maintenance activities is very limited and inadequate for addressing future River Terrace or citywide needs.
- The high-flow conveyance facilities require additional alternatives analysis, special permitting, and land or easement acquisition because of the unique nature of this condition and the fact that there are downstream impacts outside the city and Urban Growth Boundary. This could be problematic since the city may not be able to acquire land or fund regional facilities needed at the pace of development.
- The city is in process of considering increases in local stormwater SDCs to take into account planned facility improvements citywide and in River Terrace.
- The city should consider new funding resources (such as a River Terrace stormwater district and district utility fee) and public-private partnerships to generate a funds for advance financing regional water quality and quantity facilities, detention ponds, and high-flow conveyance facilities in River Terrace.
- The city may utilize full faith and credit obligations for advance financing of reimbursement districts to pay for 1-2 regional facilities every 6 years in River Terrace.

F. TRANSPORTATION SYSTEM

- The city's existing transportation funds are generally committed and not available for investing in new transportation improvements in River Terrace over the next six years.
- The city is in the process of considering a new local city-wide TSDC and/or subdistrict(s) TSDC to supplement the funds it receives from the TDT. It is recommended that the city consider

policies to allocate a portion of TSDC/TDT revenues generated by new development within River Terrace to projects within River Terrace.

- The city will need to work with Washington County and ODOT to discuss potential cost sharing responsibilities for County and State facilities.
- The city should continue to work with Washington County and other local governments to identify potential sources of advance financing for improvements to major County facilities such as Roy Rogers Road and Scholls Ferry Road, and ODOT facilities including Hwy. 99W.
- In addition to developer funding of neighborhood routes, Development Agreements could be utilized to allow private developers to advance financing for road segments and intersection improvements (may be eligible for TSDC/TDT credits).

These policy considerations serve as a starting point for ensuring that the city has the ability to fund necessary public facilities in River Terrace as development occurs. The actual timing of public facility investments will depend on many factors. While the city has control over local utility rates and SDCs, the city cannot predict development market timing or the future cost of financing. It should be recognized that for any Funding Strategy to be successful, the city will need to continue to follow sound public financing principles that should not waiver in spite of changing market conditions. It is also advised that the city should re-evaluate and revise this Funding Strategy every five years in order to ensure that it remains relevant and useful in guiding public investment in River Terrace over the next two decades.

V. APPENDIX

10-Year Forecast of Selected City Funds

Water Utility Fund

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Water Utility	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected
Water Fund										
Resources:										
Beginning fund balance	$ 12,520,630	$ 6,104,977	$ 4,944,428	$ 4,788,614	$ 4,832,714	$ 4,921,639	$ 5,019,045	$ 5,113,576	$ 5,201,114	$ 5,288,088
Revenue:										
43126 Developer overhead	9,663	7,440	7,440	7,440	7,440	7,440	7,440	7,440	7,440	7,440
43128 Fire service reimbursement	1,470	-	-	-	-	-	-	-	-	-
43130 Miscellanous fees and charges	3,267	793	793	793	793	793	793	793	793	793
43301 SDC reimbursement	-	-	-	-	-	-	-	-	-	-
45100 Utility sales	18,057,552	18,645,801	18,989,939	19,358,488	19,752,088	20,151,966	20,528,654	20,872,712	21,220,821	21,523,867
45101 Other utility sales	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,456
45102 Leaks/misreads credits	(22,984)	(21,988)	(22,053)	(22,123)	(22,198)	(22,273)	(22,345)	(22,410)	(22,476)	(22,533)
45104 Meter sales	27,762	35,805	70,373	81,586	93,499	96,959	100,547	104,269	108,129	112,133
45105 Fire hydrant flow testing service	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006
45150 Late penalties/charges	121,136	125,185	125,561	125,963	126,392	126,829	127,240	127,616	127,995	128,326
45151 Returned check fees	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290	1,290
45199 Bad debt	(20,544)	(24,933)	(25,281)	(25,654)	(26,052)	(26,457)	(26,838)	(27,186)	(27,538)	(27,844)
45319 Miscellanous fees and charges	372	372	372	372	372	372	372	372	372	372
45320 Rental income	33,234	33,234	33,234	33,234	33,234	33,234	33,234	33,234	33,234	33,234
47000 Interest earnings	67,611	32,967	26,700	25,859	26,097	26,577	27,103	27,613	28,086	28,556
48000 Other revenue	-	-	-	-	-	-	-	-	-	-
48001 Recovered expenditures	10,825	-	-	-	-	-	-	-	-	-
49100 Transfer in from General Fund	27,460	27,460	27,460	27,460	27,460	27,460	27,460	27,460	27,460	27,460
49500 Transfer in from Sanitary Sewer Fund	13,413	13,413	13,413	13,413	13,413	13,413	13,413	13,413	13,413	13,413
49510 Transfer in from Stormwater Fund	17,878	17,878	17,878	17,878	17,878	17,878	17,878	17,878	17,878	17,878
Total revenue	18,359,867	18,905,178	19,277,579	19,656,460	20,062,168	20,465,943	20,846,704	21,194,956	21,547,360	21,854,846
Total resources	$ 30,880,497	$ 25,010,154	$ 24,222,008	$ 24,445,074	$ 24,894,882	$ 25,387,582	$ 25,865,748	$ 26,308,533	$ 26,748,473	$ 27,142,934
Requirements:										
Expenditures:										
Personnel services:										
Salaries	$ 893,506	$ 935,614	$ 979,707	$ 1,025,877	$ 1,074,224	$ 1,124,849	$ 1,177,859	$ 1,233,368	$ 1,291,493	$ 1,352,357
Benefits	437,142	458,999	481,949	506,047	531,349	557,916	585,812	615,103	645,858	678,151
Total personnel services	1,330,648	1,394,613	1,461,656	1,531,924	1,605,573	1,682,765	1,763,671	1,848,471	1,937,351	2,030,508
Materials and services:										
Supplies	3,869,952	4,005,400	2,005,400	2,075,589	2,148,235	2,223,423	2,301,243	2,381,786	2,465,149	2,551,429
Franchise fee	508,000	672,961	685,382	698,684	712,889	727,322	740,917	753,335	765,899	776,836
Other service	1,120,611	1,159,832	1,200,427	1,242,441	1,285,927	1,330,934	1,377,517	1,425,730	1,475,631	1,527,278
Total materials and services	5,498,563	5,838,194	3,891,209	4,016,714	4,147,051	4,281,679	4,419,677	4,560,851	4,706,678	4,855,543
Capital outlay	3,300	3,416	3,535	3,659	3,787	3,919	4,057	4,199	4,345	4,498
Transfers out and indirect cost allocations	1,543,771	1,611,269	1,681,719	1,755,249	1,831,994	1,912,094	1,995,697	2,082,955	2,174,028	2,269,083
Non-program expenditures										
Transfers out to Water CIP Fund	7,639,391	2,467,150	1,671,982	1,408,009	1,308,561	1,396,004	1,463,089	1,488,918	1,502,845	1,464,662
Transfers out to Water Debt Service Fund	8,490,141	8,469,584	10,429,485	10,590,152	10,756,216	10,758,020	10,757,320	10,758,120	10,755,320	10,756,145
Transfers out to other funds	269,707	281,499	293,807	306,654	320,061	334,055	348,661	363,906	379,817	396,424
Total non-program expenditures	16,399,239	11,218,234	12,395,275	12,304,814	12,384,838	12,488,080	12,569,070	12,610,943	12,637,982	12,617,230
Total expenditures	24,775,521	20,065,726	19,433,394	19,612,360	19,973,242	20,368,538	20,752,172	21,107,419	21,460,385	21,776,862
Ending fund balance	6,104,977	4,944,428	4,788,614	4,832,714	4,921,639	5,019,045	5,113,576	5,201,114	5,288,088	5,366,072
Total requirements	$ 30,880,497	$ 25,010,154	$ 24,222,008	$ 24,445,074	$ 24,894,882	$ 25,387,582	$ 25,865,748	$ 26,308,533	$ 26,748,473	$ 27,142,934
Days of expenditures in ending fund balance	90	90	90	90	90	90	90	90	90	90

Water CIP Fund

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Water Utility	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected
Water CIP Fund										
Resources:										
Beginning fund balance	$ 43,726,812	$ 17,974,151	$ (31,102)	$ (38,230)	$ (25,709)	$ 5,980	$ 1,134,916	$ 2,325,353	$ 3,535,859	$ 4,754,107
Revenue:										
43300 System development charges	-	-	-	-	-	-	-	-	-	-
44800 Federal grants	-	-	-	-	-	-	-	-	-	-
47000 Interest earnings	236,125	97,060	(168)	(206)	(139)	32	6,129	12,557	19,094	25,672
48001 Recovered expenditures	5,265	-	-	-	-	-	-	-	-	-
49001 Debt proceeds	46,894,542	-	1,425,529	1,952,010	1,967,930	0	0	0	0	0
49100 Transfer in from General Fund	-	-	-	-	-	-	-	-	-	-
49425 Transfer in from Parks SDC Fund	-	-	-	-	-	-	-	-	-	-
49500 Transfer in from Sanitary Sewer Fund	-	-	-	-	-	-	-	-	-	-
49530 Transfer in from Water Fund	888,104	2,467,150	1,671,982	1,408,009	1,308,561	1,396,004	1,463,089	1,488,918	1,502,845	1,464,662
49531 Transfer in from Water SDC Fund	345,000	-	-	-	-	-	-	-	-	-
Total revenue	48,369,036	2,564,211	3,097,343	3,359,813	3,276,351	1,396,037	1,469,217	1,501,475	1,521,939	1,490,334
Total resources	$ 92,095,848	$ 20,538,362	$ 3,066,241	$ 3,321,582	$ 3,250,642	$ 1,402,017	$ 2,604,133	$ 3,826,828	$ 5,057,798	$ 6,244,441
Requirements:										
Expenditures:										
Capital outlay	$ 73,906,047	$ 20,344,385	$ 2,869,551	$ 3,102,100	$ 2,988,750	$ -	$ -	$ -	$ -	$ -
Debt service	-	-	-	-	-	-	-	-	-	-
Transfers out	215,650	225,079	234,920	245,191	255,912	267,101	278,780	290,969	303,691	316,969
Other										
Total expenditures	74,121,697	20,569,464	3,104,471	3,347,291	3,244,662	267,101	278,780	290,969	303,691	316,969
Ending fund balance	17,974,151	(31,102)	(38,230)	(25,709)	5,980	1,134,916	2,325,353	3,535,859	4,754,107	5,927,472
Total requirements	$ 92,095,848	$ 20,538,362	$ 3,066,241	$ 3,321,582	$ 3,250,642	$ 1,402,017	$ 2,604,133	$ 3,826,828	$ 5,057,798	$ 6,244,441
Days of expenditures in ending fund balance	89	(1)	(4)	(3)	1	1,552	3,047	4,438	5,718	6,830
Water Debt Service Fund										
Resources:										
Beginning fund balance	$ 6,766,983	$ 10,573,816	$ 10,573,816	$ 10,691,767	$ 10,854,820	$ 11,020,765	$ 11,020,765	$ 11,020,765	$ 11,020,765	$ 11,020,765
Revenue:										
47000 Interest earnings	36,542	57,099	57,099	57,736	58,616	59,512	59,512	59,512	59,512	59,512
49001 Debt proceeds	3,806,833	-	117,951	163,053	165,945	0	0	0	0	0
49530 Transfer in from Water Fund	8,490,141	8,469,584	10,429,485	10,590,152	10,756,216	10,758,020	10,757,320	10,758,120	10,755,320	10,756,145
Total revenue	12,333,515	8,526,683	10,604,535	10,810,941	10,980,776	10,817,532	10,816,832	10,817,632	10,814,832	10,815,657
Total resources	$ 19,100,498	$ 19,100,498	$ 21,178,351	$ 21,502,708	$ 21,835,597	$ 21,838,297	$ 21,837,597	$ 21,838,397	$ 21,835,597	$ 21,836,422
Requirements:										
Debt service										
Existing debt service	$ 4,719,850	$ 4,719,850	$ 6,561,800	$ 6,560,050	$ 6,561,050	$ 6,563,750	$ 6,563,050	$ 6,563,850	$ 6,561,050	$ 6,561,875
New debt service	3,806,833	3,806,833	3,924,784	4,087,837	4,253,782	4,253,782	4,253,782	4,253,782	4,253,782	4,253,782
Total debt service	8,526,683	8,526,683	10,486,584	10,647,887	10,814,832	10,817,532	10,816,832	10,817,632	10,814,832	10,815,657
Ending fund balance	10,573,816	10,573,816	10,691,767	10,854,820	11,020,765	11,020,765	11,020,765	11,020,765	11,020,765	11,020,765
Total requirements	$ 19,100,498	$ 19,100,498	$ 21,178,351	$ 21,502,708	$ 21,835,597	$ 21,838,297	$ 21,837,597	$ 21,838,397	$ 21,835,597	$ 21,836,422
Days of expenditures in ending fund balance	453	453	372	372	372	372	372	372	372	372

Water SDC Fund

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Water Utility	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected
Water SDC Fund										
Resources:										
Beginning fund balance	$ 2,860,840	$ 4,149,831	$ 5,066,575	$ 6,851,719	$ 8,926,597	$ 11,310,247	$ 13,793,190	$ 16,379,172	$ 19,072,081	$ 21,875,947
Revenue:										
43300 System development charges SDCi	693,446	894,335	1,757,785	2,037,879	2,335,446	2,421,867	2,511,499	2,604,461	2,700,877	2,800,877
43301 SDC reimbursement SDCr	925,359	-	-	-	-	-	-	-	-	-
47000 Interest earnings	15,449	22,409	27,360	36,999	48,204	61,075	74,483	88,448	102,989	118,130
Total revenue	1,634,254	916,744	1,785,145	2,074,878	2,383,650	2,482,943	2,585,982	2,692,909	2,803,867	2,919,007
Total resources	$ 4,495,094	$ 5,066,575	$ 6,851,719	$ 8,926,597	$ 11,310,247	$ 13,793,190	$ 16,379,172	$ 19,072,081	$ 21,875,947	$ 24,794,954
Requirements:										
Transfers out										
Transfers out to Water CIP Fund	$ 345,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transfers out to other funds	263	-	-	-	-	-	-	-	-	-
Total transfers out	345,263	-	-	-	-	-	-	-	-	-
Ending fund balance	4,149,831	5,066,575	6,851,719	8,926,597	11,310,247	13,793,190	16,379,172	19,072,081	21,875,947	24,794,954
Total requirements	$ 4,840,357	$ 5,066,575	$ 6,851,719	$ 8,926,597	$ 11,310,247	$ 13,793,190	$ 16,379,172	$ 19,072,081	$ 21,875,947	$ 24,794,954
Revenue Assumptions										
Interest rate	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%
Customer accounts:										
Customer accounts in existing service area	19,875	19,964	20,054	20,144	20,235	20,326	20,417	20,509	20,601	20,694
Customer accounts in new service area		0	80	180	300	420	540	660	780	900
Total customer accounts	19,875	19,964	20,134	20,324	20,535	20,746	20,957	21,169	21,381	21,594
New customers	2,924	89	170	190	211	211	211	212	212	213
Customer account growth in existing service area		0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%
Total customer account growth	17.25%	0.45%	0.85%	0.94%	1.04%	1.03%	1.02%	1.01%	1.00%	0.99%
Rate revenue per account, first half of fiscal year	$ 499	$ 521	$ 526	$ 531	$ 536	$ 542	$ 547	$ 551	$ 554	$ 558
Rate revenue per account, second half of fiscal year	$ 409	$ 413	$ 417	$ 421	$ 426	$ 430	$ 433	$ 435	$ 438	$ 439
Annual rate adjustment on January 1	4.28%	0.99%	0.99%	0.99%	0.99%	0.99%	0.66%	0.66%	0.66%	0.14%
Share of revenue in first half of fiscal year	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%
Franchise fee as percentage of total rate revenue	2.81%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%
SDC revenue per new account	$ 9,662	$ 10,000	$ 10,350	$ 10,712	$ 11,087	$ 11,475	$ 11,877	$ 12,292	$ 12,723	$ 13,168

Water Utility Fund Assumptions

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Water Utility	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected
Cost Assumptions										
Full-time equivalent (FTE) positions	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Salaries per FTE	$ 68,731	$ 71,970	$ 75,362	$ 78,914	$ 82,633	$ 86,527	$ 90,605	$ 94,874	$ 99,346	$ 104,027
Growth in salaries per FTE	10.52%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%
Benefits per FTE	$ 33,626	$ 35,308	$ 37,073	$ 38,927	$ 40,873	$ 42,917	$ 45,062	$ 47,316	$ 49,681	$ 52,165
Growth in benefits per FTE	4.47%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Annual escalation of materials and services	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Annual escalation of capital outlay	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Annual escalation of transfers	6.84%	4.37%	4.37%	4.37%	4.37%	4.37%	4.37%	4.37%	4.37%	4.37%
Capital projects										
Projects for River Terrace:										
Pressure Reducing Value Design	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Pressure Reducing Valve Construction	-	-	-	-	-	-	-	-	-	-
20-inch transmission mains in 410 zone (Design)	-	-	-	-	-	-	-	-	-	-
20-inch transmission mains in 410 zone (Construction)	-	-	-	-	-	-	-	-	-	-
16-inch transmission mains in 550 zone (Design)	-	-	-	-	-	-	-	-	-	-
16-inch transmission mains in 550 zone (Construction)	-	-	-	-	-	-	-	-	-	-
3.0 MG Cach Reservoir Design	-	-	-	1,050,000	-	-	-	-	-	-
3.0 MG Cach Reservoir Construction	-	-	-	-	-	-	-	-	-	-
16-inch transmission from reservoir to 550B	-	-	-	-	-	-	-	-	-	-
1,400 gpm (firm capacity) pump station	-	-	-	-	-	-	-	-	-	-
Total projects for River Terrace	-	-	-	1,050,000	-	-	-	-	-	-
Projects for existing service area	73,906,047	20,344,385	2,869,551	2,052,100	2,988,750	-	-	-	-	-
Total capital projects	$ 73,906,047	$ 20,344,385	$ 2,869,551	$ 3,102,100	$ 2,988,750	$ -	$ -	$ -	$ -	$ -
Debt										
Issuance cost percentage	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Interest rate	4.00%	4.10%	4.20%	4.30%	4.40%	4.50%	4.50%	4.50%	4.50%	4.50%
Term	20	20	20	20	20	20	20	20	20	20
Principal:										
Proceeds	$ 46,894,542	$ -	$ 1,425,529	$ 1,952,010	$ 1,967,930	$ 0	$ 0	$ 0	$ 0	$ 0
Issuance costs	1,034,722	-	31,500	43,165	43,548	0	0	0	0	0
Debt reserve	3,806,833	-	117,951	163,053	165,945	0	0	0	0	0
Total principal	$ 51,736,097	$ -	$ 1,574,980	$ 2,158,228	$ 2,177,423	$ 0	$ 0	$ 0	$ 0	$ 0
Debt service coverage ratio (minimum 1.15)	1.17	1.18	1.17	1.16	1.15	1.16	1.17	1.17	1.18	1.17

Sanitary Sewer Fund

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Sanitary Sewer Utility	6/30/2015 Estimate	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected
Sanitary Sewer Fund										
Resources:										
Beginning fund balance	$ 1,449,654	$ 1,320,471	$ 6,837	$ 601,969	$ 671,891	$ 913,444	$ 2,200,096	$ 3,506,954	$ 4,833,058	$ 6,177,370
Revenue:										
43120 Sewer connection fees	74,506	16,738	34,359	40,030	46,057	47,757	49,519	51,347	53,243	55,208
43130 Miscellaneous fees/charges	256,314	256,314	256,314	256,314	256,314	256,314	256,314	256,314	256,314	256,314
45100 Utility sales	2,926,727	2,995,967	2,869,395	2,955,650	3,046,976	3,140,298	3,235,663	3,333,115	3,432,703	3,534,478
45199 Bad debt	(50,500)	(50,500)	(50,500)	(50,500)	(50,500)	(50,500)	(50,500)	(50,500)	(50,500)	(50,500)
45319 Miscellanous fees and charges	-	-	-	-	-	-	-	-	-	-
47000 Interest earnings	7,828	7,131	37	3,251	3,628	4,933	11,881	18,938	26,099	33,358
48001 Recovered expenditures	141,674	119,422	103,766	108,562	107,991	100,655	101,303	101,977	102,676	103,402
49200 Transfer in from Gas Tax Fund	45,400	-	-	-	-	-	-	-	-	-
49421 Transfer in from Parks Bond Fund	21,800	-	-	-	-	-	-	-	-	-
49425 Transfer in from Parks SDC Fund	375,450	-	-	-	-	-	-	-	-	-
49510 Transfer in from Stormwater Fund	272,400	-	-	-	-	-	-	-	-	-
49511 Transfer in from Water Quality/Quantity Fund	439,200	-	-	-	-	-	-	-	-	-
49532 Transfer in from Water CIP Fund	215,650									
Proceeds from new debt	-	-	-	-	-	-	-	-	-	-
Total revenue	4,726,449	3,345,071	3,213,370	3,313,307	3,410,465	3,499,456	3,604,179	3,711,190	3,820,534	3,932,259
Total resources	$ 6,176,103	$ 4,665,542	$ 3,220,207	$ 3,915,275	$ 4,082,357	$ 4,412,900	$ 5,804,275	$ 7,218,143	$ 8,653,592	$ 10,109,630
Requirements:										
Expenditures:										
Personnel services:										
Salaries	$ 381,237	$ 374,171	$ 390,800	$ 408,584	$ 427,599	$ 447,456	$ 468,191	$ 489,841	$ 512,445	$ 536,045
Benefits	165,637	183,817	192,006	200,766	210,132	219,914	230,129	240,797	251,936	263,566
Total personnel services	546,874	557,988	582,806	609,349	637,731	667,370	698,320	730,638	764,381	799,611
Materials and services:										
Supplies	35,907	37,164	38,465	39,811	41,204	42,646	44,139	45,684	47,283	48,938
Service	614,361	635,864	658,119	681,153	704,994	729,668	755,207	781,639	808,996	837,311
Total materials and services	650,268	673,028	696,584	720,964	746,198	772,315	799,346	827,323	856,279	886,249
Capital outlay	36,500	37,778	39,100	40,468	41,885	43,351	44,868	46,438	48,064	49,746
Debt service:										
Existing debt service	-	-	-	-	-	-	-	-	-	-
New debt service	-	-	-	-	-	-	-	-	-	-
Total debt service	-	-	-	-	-	-	-	-	-	-
Transfers out and indirect cost allocations	598,130	619,176	640,963	663,516	686,864	711,032	736,052	761,951	788,762	816,516
Non-program expenditures										
Loan to CCDA	-	-	-	-	-	-	-	-	-	-
Transfers out	79,849	18,736	18,736	18,736	18,736	18,736	18,736	18,736	18,736	18,736
Capital projects	2,944,011	2,752,000	640,050	1,190,350	1,037,500	-	-	-	-	-
Total non-program expenditures	3,023,860	2,770,736	658,786	1,209,086	1,056,236	18,736	18,736	18,736	18,736	18,736
Total expenditures	4,855,632	4,658,705	2,618,239	3,243,384	3,168,913	2,212,804	2,297,321	2,385,086	2,476,221	2,570,858
Ending fund balance	1,320,471	6,837	601,969	671,891	913,444	2,200,096	3,506,954	4,833,058	6,177,370	7,538,772
Total requirements	$ 6,176,103	$ 4,665,542	$ 3,220,207	$ 3,915,275	$ 4,082,357	$ 4,412,900	$ 5,804,275	$ 7,218,143	$ 8,653,592	$ 10,109,630
Days of expenditures in ending fund balance	99	1	84	76	105	363	558	740	911	1,071

Sanitary Sewer Fund Assumptions

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Sanitary Sewer Utility	6/30/2015 Estimate	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected
Revenue Assumptions										
Interest rate	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%
Customer accounts:										
Customer accounts in existing service area	18,162	18,244	18,326	18,409	18,492	18,575	18,658	18,742	18,827	18,911
Customer accounts in new service area		0	80	180	300	420	540	660	780	900
Total customer accounts	18,162	18,244	18,406	18,589	18,792	18,995	19,198	19,402	19,607	19,811
New customers	81	82	162	182	203	203	204	204	204	205
Customer account growth in existing service area	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%
Total customer account growth	0.45%	0.45%	0.89%	0.99%	1.09%	1.08%	1.07%	1.06%	1.05%	1.04%
Franchise fee as percentage of total rate revenue	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Rates:										
Total CWS fixed monthly rate per EDU	$ 25.85	$ 26.62	$ 27.42	$ 28.24	$ 29.09	$ 29.96	$ 30.85	$ 31.77	$ 32.73	$ 33.70
Total CWS volumetric monthly rate per CCF	$ 1.44	$ 1.48	$ 1.52	$ 1.56	$ 1.60	$ 1.64	$ 1.68	$ 1.72	$ 1.76	$ 1.80
City portion of CWS fixed monthly rate per EDU	$ 4.25	$ 4.38	$ 4.51	$ 4.65	$ 4.78	$ 4.93	$ 5.08	$ 5.23	$ 5.38	$ 5.54
City portion of CWS volumetric monthly rate per CCF	$ 0.28	$ 0.29	$ 0.30	$ 0.31	$ 0.32	$ 0.33	$ 0.34	$ 0.35	$ 0.36	$ 0.37
City surcharge on fixed monthly rate	$ 6.50	$ 6.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50
City surcharge on volumetric monthly rate	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
City portion of CWS system development charge per EDU	$ 197.87	$ 204.80	$ 211.96	$ 219.38	$ 227.06	$ 235.01	$ 243.23	$ 251.75	$ 260.56	$ 269.68
Rate revenue:										
CWS portion	$ 9,929,435	$ 10,250,723	$ 10,625,647	$ 11,022,085	$ 11,441,259	$ 11,871,933	$ 12,314,426	$ 12,769,068	$ 13,236,201	$ 13,716,180
City franchise fee	676,640	697,194	710,265	735,670	762,539	790,117	818,426	847,483	877,311	907,929
City utility revenue	2,926,727	2,995,967	2,869,395	2,955,650	3,046,976	3,140,298	3,235,663	3,333,115	3,432,703	3,534,478
Total rate revenue	$ 13,532,803	$ 13,943,885	$ 14,205,308	$ 14,713,405	$ 15,250,774	$ 15,802,349	$ 16,368,514	$ 16,949,666	$ 17,546,215	$ 18,158,587
Consumption										
Average annual consumption per account in CCF	248	248	248	248	248	248	248	248	248	248
Growth in average annual consumption per account	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cost Assumptions										
Miles of sanitary sewer system	166.9	167.7	169.1	170.8	172.7	174.5	176.4	178.3	180.2	182.1
Full-time equivalent (FTE) positions	5.50	5.52	5.57	5.63	5.69	5.75	5.81	5.88	5.94	6.00
Salaries per FTE	$ 65,421	$ 67,726	$ 70,113	$ 72,584	$ 75,142	$ 77,791	$ 80,532	$ 83,370	$ 86,309	$ 89,351
Growth in salaries per FTE	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%
Benefits per FTE	$ 32,135	$ 33,271	$ 34,448	$ 35,666	$ 36,927	$ 38,232	$ 39,584	$ 40,983	$ 42,432	$ 43,933
Growth in benefits per FTE	3.54%	3.54%	3.54%	3.54%	3.54%	3.54%	3.54%	3.54%	3.54%	3.54%
Annual escalation of materials and services	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Annual escalation of capital outlay	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Annual escalation of transfers	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Sanitary Sewer Utility	6/30/2015 Estimate	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected
Capital projects										
Projects for River Terrace:										
North Gravity Segment 1	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
North Gravity Segment 2	-	-	-	-	-	-	-	-	-	-
North Gravity Segment 3	-	-	-	-	-	-	-	-	-	-
North Gravity Segment 4	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 1	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 2	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 3	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 4	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 5	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 6	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 7	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 8A	-	-	-	-	-	-	-	-	-	-
South Gravity Segment 9A	-	-	-	-	-	-	-	-	-	-
Total projects for River Terrace	-	-	-	-	-	-	-	-	-	-
Projects for existing service area	2,912,500	2,752,000	640,050	1,190,350	1,037,500	-	-	-	-	-
Total capital projects	$ 2,912,500	$ 2,752,000	$ 640,050	$ 1,190,350	$ 1,037,500	$ -	$ -	$ -	$ -	$ -
Debt										
Issuance cost percentage	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Interest rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Term	20	20	20	20	20	20	20	20	20	20
Principal:										
Proceeds	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Issuance costs	-	-	-	-	-	-	-	-	-	-
Debt reserve	-	-	-	-	-	-	-	-	-	-
Total principal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Parks Funds

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Parks Funding	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected	6/30/2025 Projected
Special Revenue Fund - Parks Bond											
Resources:											
Beginning fund balance	$ 2,344,697	$ 351,574	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Revenue:											
47000 Interest earnings	4,020	1,898	-	-	-	-	-	-	-	-	-
48001 Recovered expenditures	-	-	-	-	-	-	-	-	-	-	-
Total revenue	4,020	1,898	-	-	-	-	-	-	-	-	-
Total resources	$ 2,348,717	$ 353,472	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Requirements:											
Expenditures (transfers out)	$ 1,997,143	$ 353,472									
Ending fund balance	351,574	-	-	-	-	-	-	-	-	-	-
Total requirements	$ 351,574	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Improvement Fund - Parks Capital											
Resources:											
Beginning fund balance	$ 174,509	$ 163,149	$ 316,117	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Revenue:											
44501 Intergovernmental Revenue	41,506	-	-	-	-	-	-	-	-	-	-
47000 Interest earnings	3,015	881	1,707	-	-	-	-	-	-	-	-
48001 Revoered Expenditures	-	-	-	-	-	-	-	-	-	-	-
Transfers in											
49100 Transfer in from General Fund	-	-	-	-	-	-	-	-	-	-	-
49200 Transfer in from Gas Tax Fund	-	-	-	-	-	-	-	-	-	-	-
49260 Transfer in from Tree Replacement Fund	250,000	-	-	-	-	-	-	-	-	-	-
49421 Transfer in from Parks Bond Fund	1,975,343	353,472	-	-	-	-	-	-	-	-	-
49425 Transfer in from Parks SDC Fund	750,606	1,308,945	723,997	749,073	775,017	801,859	829,632	858,366	888,096	918,855	950,679
49500 Transfer in from Sanitary Sewer Fund	32,500	-	-	-	-	-	-	-	-	-	-
49510 Transfer in from Stormwater Fund	10,000	-	-	-	-	-	-	-	-	-	-
49530 Transfer in from Water Fund	24,500	-	-	-	-	-	-	-	-	-	-
Total transfers in	3,042,949	1,662,417	723,997	749,073	775,017	801,859	829,632	858,366	888,096	918,855	950,679
Total resources	$ 3,261,979	$ 1,826,447	$ 1,041,821	$ 749,073	$ 775,017	$ 801,859	$ 829,632	$ 858,366	$ 888,096	$ 918,855	$ 950,679
Requirements:											
Expenditures:											
Work in progress	$ 3,042,949	$ 1,510,330	$ 1,041,821	$ 749,073	$ 775,017	$ 801,859	$ 829,632	$ 858,366	$ 888,096	$ 918,855	$ 950,679
Total Transfers Out	55,881	-	-	-	-	-	-	-	-	-	-
Total expenditures	3,098,830	1,510,330	1,041,821	749,073	775,017	801,859	829,632	858,366	888,096	918,855	950,679
Ending fund balance	163,149	316,117	-	-	-	-	-	-	-	-	-
Total requirements	$ 3,261,979	$ 1,826,447	$ 1,041,821	$ 749,073	$ 775,017	$ 801,859	$ 829,632	$ 858,366	$ 888,096	$ 918,855	$ 950,679
Days of expenditures in ending fund balance	19	76	0	0	0	0	0	0	0	0	0

Parks SDC Fund and Assumptions

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Parks Funding	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected	6/30/2025 Projected
Parks SDC Fund											
Resources:											
Beginning fund balance	$ 1,049,011	$ 605,912	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Revenue:											
43300 Parks SDCs	676,336	699,761	723,997	749,073	775,017	801,859	829,632	858,366	888,096	918,855	950,679
47000 Interest Earnings	19,782	3,272	-	-	-	-	-	-	-	-	-
Total revenue	696,118	703,033	723,997	749,073	775,017	801,859	829,632	858,366	888,096	918,855	950,679
Total resources	$ 1,745,129	$ 1,308,945	$ 723,997	$ 749,073	$ 775,017	$ 801,859	$ 829,632	$ 858,366	$ 888,096	$ 918,855	$ 950,679
Requirements:											
Expenditures:											
Debt service	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Work in progress	12,000	-	-	-	-	-	-	-	-	-	-
Total transfers out	1,127,217	1,308,945	723,997	749,073	775,017	801,859	829,632	858,366	888,096	918,855	950,679
Total expenditures	1,139,217	1,308,945	723,997	749,073	775,017	801,859	829,632	858,366	888,096	918,855	950,679
Ending fund balance	605,912	-	-	-	-	-	-	-	-	-	-
Total requirements	$ 1,745,129	$ 1,308,945	$ 723,997	$ 749,073	$ 775,017	$ 801,859	$ 829,632	$ 858,366	$ 888,096	$ 918,855	$ 950,679
Days of expenditures in ending fund balance	194	0	0	0	0	0	0	0	0	0	0
Revenue Assumptions											
Interest rate		0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%
Customer accounts:											
EDUs in existing service area	23,402	23,507	23,613	23,719	23,826	23,933	24,041	24,149	24,258	24,367	24,476
EDUs in new service area											
Total EDUs	23,402	23,507	23,613	23,719	23,826	23,933	24,041	24,149	24,258	24,367	24,476
New EDUs	105	105	106	106	107	107	108	108	109	109	110
Customer account growth in existing service area	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%
Total customer account growth		0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%
Parks System Development Charge											
SDC per EDU	$ 6,451	$ 6,645	$ 6,844	$ 7,050	$ 7,261	$ 7,479	$ 7,703	$ 7,934	$ 8,172	$ 8,418	$ 8,670
Annual increase in SDC per EDU	7.58%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Capital projects											
Existing capital improvement plan		$ 1,510,330	$ 3,967,000	$ 2,544,628	$ 810,000	$ 801,859	$ 829,632	$ 858,366	$ 888,096	$ 918,855	$ 950,679
Parks projects in River Terrace		-	(2,925,179)	(1,795,555)	(34,983)	-	-	-	-	-	-

Stormwater Funds

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Stormwater Utility	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected	6/30/2025 Projected
Stormwater Fund											
Resources:											
Beginning fund balance	$ 3,078,705	$ 3,875,260	$ 3,616,044	$ 3,964,139	$ 4,551,452	$ 5,389,013	$ 6,366,481	$ 7,485,343	$ 8,747,042	$ 10,152,971	$ 11,704,474
Revenue:											
Local SDCi		1,032,755	1,514,382	1,622,089	1,736,746	1,738,936	1,741,134	1,743,339	1,745,552	1,747,772	1,750,000
45100 Utility sales	2,170,387	2,341,647	2,520,331	2,702,866	2,889,548	3,078,904	3,270,946	3,465,682	3,663,125	3,863,284	4,066,169
45103 Tigard SWM Surcharge	863,904	810,751	816,320	822,385	828,946	835,524	842,118	848,729	855,357	862,002	868,664
45199 Bad debt	-	-	-	-	-	-	-	-	-	-	-
47000 Interest earnings	7,936	20,926	19,527	21,406	24,578	29,101	34,379	40,421	47,234	54,826	63,204
47100 Gain or loss on investments	-	-	-	-	-	-	-	-	-	-	-
48001 Recovered expenditures	3,069	-	-	-	-	-	-	-	-	-	-
Total revenue	3,045,296	4,206,079	4,870,560	5,168,746	5,479,818	5,682,465	5,888,576	6,098,171	6,311,268	6,527,884	6,748,037
Total resources	$ 6,124,001	$ 8,081,339	$ 8,486,604	$ 9,132,885	$ 10,031,269	$ 11,071,477	$ 12,255,057	$ 13,583,515	$ 15,058,310	$ 16,680,855	$ 18,452,511
Requirements:											
Expenditures:											
Personnel services:											
Salaries	$ 393,762	$ 407,201	$ 421,098	$ 435,469	$ 450,331	$ 465,701	$ 481,594	$ 498,031	$ 515,028	$ 532,605	$ 550,782
Benefits	202,865	204,166	205,476	206,793	208,120	209,454	210,798	212,150	213,510	214,880	216,258
Total personnel services	596,627	611,367	626,573	642,263	658,451	675,155	692,392	710,180	728,538	747,485	767,040
Materials and services:											
Supplies	33,245	34,409	35,613	36,859	38,149	39,485	40,867	42,297	43,777	45,310	46,895
Service	488,165	505,251	522,935	541,237	560,181	579,787	600,079	621,082	642,820	665,319	688,605
Total materials and services	521,410	539,659	558,547	578,097	598,330	619,272	640,946	663,379	686,597	710,628	735,500
Capital outlay	9,100	9,419	9,748	10,089	10,442	10,808	11,186	11,578	11,983	12,402	12,836
Transfers out and indirect cost allocations	431,775	443,977	456,524	469,425	482,691	496,332	510,359	524,782	539,612	554,862	570,542
Healthy Streams program											
Non-program expenditures											
Transfers out	350,956	360,874	371,072	381,559	392,342	403,430	414,831	426,554	438,608	451,004	463,749
Capital projects	338,873	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Total non-program expenditures	689,829	2,860,874	2,871,072	2,881,559	2,892,342	2,903,430	2,914,831	2,926,554	2,938,608	2,951,004	2,963,749
Total expenditures	2,248,741	4,465,296	4,522,465	4,581,433	4,642,257	4,704,997	4,769,714	4,836,473	4,905,339	4,976,381	5,049,668
Ending fund balance	3,875,260	3,616,044	3,964,139	4,551,452	5,389,013	6,366,481	7,485,343	8,747,042	10,152,971	11,704,474	13,402,843
Total requirements	$ 6,124,001	$ 8,081,339	$ 8,486,604	$ 9,132,885	$ 10,031,269	$ 11,071,477	$ 12,255,057	$ 13,583,515	$ 15,058,310	$ 16,680,855	$ 18,452,511
Days of expenditures in ending fund balance	629	296	320	363	424	494	573	661	756	859	969
Water Quality/Quantity Fund											
Resources:											
Beginning fund balance	$ 1,202,483	$ 788,098	$ 802,110	$ 821,400	$ 842,128	$ 864,301	$ 886,638	$ 909,140	$ 931,809	$ 954,646	$ 977,651
Revenue:											
43122 FIL Water Quantity	9,240	9,282	14,230	15,498	16,767	16,810	16,852	16,895	16,938	16,981	17,024
43123 FIL Water Quality	473	475	728	793	858	860	863	865	867	869	871
47000 Interest earnings	15,102	4,256	4,331	4,436	4,547	4,667	4,788	4,909	5,032	5,155	5,279
Total revenue	24,815	14,012	19,290	20,727	22,173	22,337	22,503	22,669	22,837	23,005	23,175
Total resources	$ 1,227,298	$ 802,110	$ 821,400	$ 842,128	$ 864,301	$ 886,638	$ 909,140	$ 931,809	$ 954,646	$ 977,651	$ 1,000,826
Requirements:											
Expenditures	$ 439,200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ending fund balance	788,098	802,110	821,400	842,128	864,301	886,638	909,140	931,809	954,646	977,651	1,000,826
Total requirements	$ 788,098	$ 802,110	$ 821,400	$ 842,128	$ 864,301	$ 886,638	$ 909,140	$ 931,809	$ 954,646	$ 977,651	$ 1,000,826
Days of expenditures in ending fund balance	655										

Stormwater Fund Assumptions

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Stormwater Utility	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected	6/30/2025 Projected
Revenue Assumptions											
Interest rate	0.26%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%
Equivalent service units:											
ESUs in existing service area	33,630	33,781	33,933	34,086	34,239	34,393	34,548	34,704	34,860	35,017	35,174
ESUs in River Terrace		0	80	180	300	420	540	660	780	900	1,020
Total ESUs	33,630	33,781	34,013	34,266	34,539	34,813	35,088	35,364	35,640	35,917	36,194
New ESUs	151	151	232	253	273	274	275	275	276	277	278
Customer account growth in existing service area	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%
Total customer account growth	0.45%	0.45%	0.69%	0.74%	0.80%	0.79%	0.79%	0.79%	0.78%	0.78%	0.77%
Franchise fee as percentage of total rate revenue	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Rates:											
Total CWS fixed monthly rate per EDU	$ 6.75	$ 7.25	$ 7.75	$ 8.25	$ 8.75	$ 9.25	$ 9.75	$ 10.25	$ 10.75	$ 11.25	$ 11.75
River Terrace surcharge on fixed monthly rate		$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00
Existing service area surcharge on fixed monthly rate	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00
Cost Assumptions											
Full-time equivalent (FTE) positions	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Salaries per FTE	$ 60,579	$ 62,646	$ 64,784	$ 66,995	$ 69,282	$ 71,646	$ 74,091	$ 76,620	$ 79,235	$ 81,939	$ 84,736
Growth in salaries per FTE	18.85%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%	3.41%
Benefits per FTE	$ 31,210	$ 31,410	$ 31,612	$ 31,814	$ 32,018	$ 32,224	$ 32,430	$ 32,638	$ 32,848	$ 33,058	$ 33,270
Growth in benefits per FTE	7.87%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%
Annual escalation of materials and services	10.74%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Annual escalation of capital outlay	-76.08%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Annual escalation of transfers		2.83%	2.83%	2.83%	2.83%	2.83%	2.83%	2.83%	2.83%	2.83%	2.83%
Capital projects											
Project expenditures											
Projects for River Terrace, growth-related		$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
Projects for River Terrace, **not** growth-related		-	-	-	-	-	-	-	-	-	-
Projects for existing service area, growth related		750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Projects for existing service area, **not** growth related		750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Total project expenditures		$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000
SDCi cost basis											
River Terrace		$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
Rest of city		750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Total SDCi cost basis		$ 1,750,000	$ 1,750,000	$ 1,750,000	$ 1,750,000	$ 1,750,000	$ 1,750,000	$ 1,750,000	$ 1,750,000	$ 1,750,000	$ 1,750,000
Growth in ESUs											
River Terrace		0	80	100	120	120	120	120	120	120	120
Rest of city		151	152	153	153	154	155	155	156	157	158
Total growth in ESUs		151	232	253	273	274	275	275	276	277	278
Calculated SDCi											
Area-specific in River Terrace		$ 9,803.92	$ 8,824	$ 8,511	$ 8,333	$ 8,333	$ 8,333	$ 8,333	$ 8,333	$ 8,333	$ 8,333
Area-specific in rest of city		$ 4,856	$ 4,846	$ 4,835	$ 4,824	$ 4,813	$ 4,802	$ 4,792	$ 4,781	$ 4,770	$ 4,760
Uniform		$ 6,824	$ 6,527	$ 6,419	$ 6,353	$ 6,345	$ 6,337	$ 6,329	$ 6,321	$ 6,313	$ 6,305
SDCi revenue											
Area-specific SDCi revenue											
River Terrace		$ -	$ 705,882	$ 851,064	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
Rest of city		734,938	736,601	738,267	739,936	741,607	743,280	744,956	746,635	748,316	750,000
Total area-specific SDCi revenue		$ 734,938	$ 1,442,483	$ 1,589,331	$ 1,739,936	$ 1,741,607	$ 1,743,280	$ 1,744,956	$ 1,746,635	$ 1,748,316	$ 1,750,000
Uniform SDCi revenue		$ 1,032,755	$ 1,514,382	$ 1,622,089	$ 1,736,746	$ 1,738,936	$ 1,741,134	$ 1,743,339	$ 1,745,552	$ 1,747,772	$ 1,750,000
ESUs in River Terrace											
Baseline		0	0	0	0	0	0	0	0	0	0
Low		0	60	140	240	340	440	540	640	740	840
Medium		0	80	180	300	420	540	660	780	900	1,020
High		0	100	220	360	500	640	780	920	1,060	1,200
Type of Local SDC											
None		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Area-specific		$ 734,938	$ 1,442,483	$ 1,589,331	$ 1,739,936	$ 1,741,607	$ 1,743,280	$ 1,744,956	$ 1,746,635	$ 1,748,316	$ 1,750,000
Uniform		$ 1,032,755	$ 1,514,382	$ 1,622,089	$ 1,736,746	$ 1,738,936	$ 1,741,134	$ 1,743,339	$ 1,745,552	$ 1,747,772	$ 1,750,000

Transportation Funds

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Transportation Funding	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected	6/30/2025 Projected
City Gas Tax Fund											
Resources:											
Beginning fund balance	$ 1,014,922	$ 772,190	$ 1,235,733	$ 705,957	$ (323,927)	$ 145,481	$ 620,852	$ 1,395,844	$ 2,175,068	$ 2,958,547	$ 3,746,304
Revenue:											
44200 Gas tax	739,620	739,667	739,715	739,762	739,809	739,857	739,904	739,951	739,999	740,046	740,094
44801 State grants	314	-	-	-	-	-	-	-	-	-	-
47000 Interest earnings	34,584	4,170	6,673	3,812	(1,749)	786	3,353	7,538	11,745	15,976	20,230
48001 Recovered expenditures	31,735	31,735	31,735	31,735	31,735	31,735	31,735	31,735	31,735	31,735	31,735
Total revenue	806,253	775,572	778,123	775,309	769,795	772,377	774,992	779,224	783,479	787,757	792,059
Total resources	$ 1,821,175	$ 1,547,762	$ 2,013,856	$ 1,481,266	$ 445,868	$ 917,858	$ 1,395,844	$ 2,175,068	$ 2,958,547	$ 3,746,304	$ 4,538,363
Requirements:											
Expenditures:											
Program expenditures	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-program expenditures											
Debt service	315,860	312,029	307,899	305,193	300,387	297,006					
Work in progress	-	-	1,000,000	1,500,000	-	-	-	-	-	-	-
Transfers out to Transportation CIP Fund	733,125	-	-	-	-	-	-	-	-	-	-
Other transfers out	-	-	-	-	-	-	-	-	-	-	-
Total non-program expenditures	1,048,985	312,029	1,307,899	1,805,193	300,387	297,006	-	-	-	-	-
Total expenditures	1,048,985	312,029	1,307,899	1,805,193	300,387	297,006	-	-	-	-	-
Ending fund balance	772,190	1,235,733	705,957	(323,927)	145,481	620,852	1,395,844	2,175,068	2,958,547	3,746,304	4,538,363
Total requirements	$ 1,821,175	$ 1,547,762	$ 2,013,856	$ 1,481,266	$ 445,868	$ 917,858	$ 1,395,844	$ 2,175,068	$ 2,958,547	$ 3,746,304	$ 4,538,363
Gas Tax Fund											
Resources:											
Beginning fund balance	$ 460,463	$ 287,648	$ 733,087	$ 684,117	$ 425,706	$ 229,049	$ 659,321	$ 1,639,156	$ 2,606,227	$ 3,558,979	$ 4,495,776
Revenue:											
43119 Street lighting fees	225	156	108	75	52	36	25	17	12	8	6
43125 Fee-in-lieu bicycle striping	-	-	-	-	-	-	-	-	-	-	-
44200 Gas tax	2,809,993	2,873,368	2,938,172	3,004,437	3,072,197	3,141,486	3,212,337	3,284,785	3,358,868	3,434,622	3,512,084
44201 Other gas tax	180,450	178,864	177,291	175,733	174,188	172,656	171,139	169,634	168,143	166,665	165,199
44501 Intergovernmental revenue	-	-	-	-	-	-	-	-	-	-	-
45319 Miscellaneous fees and charges	-	-	-	-	-	-	-	-	-	-	-
47000 Interest earnings	55,732	1,553	3,959	3,694	2,299	1,237	3,560	8,851	14,074	19,218	24,277
48001 Recovered expenditures	61,345	62,370	63,413	64,473	65,550	66,646	67,760	68,893	70,044	71,215	72,405
49001 Debt proceeds	-	-	-	-	-	-	-	-	-	-	-
49412 Transfer in from Street Maintenance Fund	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Total revenue	3,207,745	3,216,311	3,282,942	3,348,412	3,414,286	3,482,061	3,554,820	3,632,181	3,711,141	3,791,728	3,873,971
Total resources	$ 3,668,208	$ 3,503,958	$ 4,016,029	$ 4,032,529	$ 3,839,992	$ 3,711,110	$ 4,214,141	$ 5,271,337	$ 6,317,368	$ 7,350,707	$ 8,369,747
Requirements:											
Expenditures:											
Program expenditures	$ 2,094,752	$ 2,168,068	$ 2,243,951	$ 2,322,489	$ 2,403,776	$ 2,487,908	$ 2,574,985	$ 2,665,109	$ 2,758,388	$ 2,854,932	$ 2,954,854
Non-program expenditures											
Debt service, existing	599,676	592,403	584,561	579,424	570,300	563,881					
Debt service, new		-	-	-	-	-	-	-	-	-	-
Work in progress	-	10,400	503,400	704,910	636,866	-	-	-	-	-	-
Transfers out to Transportation CIP Fund	613,388	-	-	-	-	-	-	-	-	-	-
Other transfers out	72,745	-	-	-	-	-	-	-	-	-	-
Total non-program expenditures	1,285,809	602,803	1,087,961	1,284,334	1,207,166	563,881	-	-	-	-	-
Total expenditures	3,380,561	2,770,872	3,331,912	3,606,823	3,610,942	3,051,789	2,574,985	2,665,109	2,758,388	2,854,932	2,954,854
Ending fund balance	287,648	733,087	684,117	425,706	229,049	659,321	1,639,156	2,606,227	3,558,979	4,495,776	5,414,893
Total requirements	$ 3,668,208	$ 3,503,958	$ 4,016,029	$ 4,032,529	$ 3,839,992	$ 3,711,110	$ 4,214,141	$ 5,271,337	$ 6,317,368	$ 7,350,707	$ 8,369,747
Days of expenditures in ending fund balance	31	97	75	43	23	79	233	357	471	575	669

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City of Tigard Transportation Funding	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected	6/30/2025 Projected
Street Maintenance Fee Fund											
Resources:											
Beginning fund balance	$ 1,298,606	$ 1,193,753	$ 1,164,894	$ 1,153,092	$ 1,163,962	$ 1,208,479	$ 1,287,952	$ 1,404,622	$ 1,560,758	$ 1,758,643	$ 2,000,557
Revenue:											
43130 Miscellaneous fees and charges	2,004,673	2,152,878	2,270,738	2,396,655	2,531,215	2,673,230	2,823,108	2,981,281	3,148,202	3,324,351	3,510,232
45199 Bad debt	(5,050)	(9,204)	(11,519)	(13,992)	(16,635)	(19,425)	(22,368)	(25,475)	(28,754)	(32,213)	(35,864)
45319 Miscellaneous fees and charges	-	-	-	-	-	-	-	-	-	-	-
47000 Interest earnings	2,043	6,446	6,290	6,227	6,285	6,526	6,955	7,585	8,428	9,497	10,803
48001 Recovered expenditures	1,286	-	-	-	-	-	-	-	-	-	-
Total revenue	2,002,952	2,150,120	2,265,510	2,388,890	2,520,866	2,660,331	2,807,695	2,963,391	3,127,876	3,301,634	3,485,171
Total resources	$ 3,301,558	$ 3,343,873	$ 3,430,403	$ 3,541,982	$ 3,684,828	$ 3,868,811	$ 4,095,647	$ 4,368,013	$ 4,688,635	$ 5,060,277	$ 5,485,727
Requirements:											
Expenditures:											
Program expenditures	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-program expenditures											
Debt service	-	-	-	-	-	-	-	-	-	-	-
Work in progress	1,900,000	1,950,000	2,025,000	2,100,000	2,170,000	2,243,294	2,319,064	2,397,394	2,478,368	2,562,078	2,648,616
Total transfers out	207,805	228,979	252,311	278,020	306,349	337,564	371,960	409,861	451,624	497,642	548,349
Total non-program expenditures	2,107,805	2,178,979	2,277,311	2,378,020	2,476,349	2,580,859	2,691,025	2,807,254	2,929,992	3,059,720	3,196,964
Total expenditures	2,107,805	2,178,979	2,277,311	2,378,020	2,476,349	2,580,859	2,691,025	2,807,254	2,929,992	3,059,720	3,196,964
Ending fund balance	1,193,753	1,164,894	1,153,092	1,163,962	1,208,479	1,287,952	1,404,622	1,560,758	1,758,643	2,000,557	2,288,763
Total requirements	$ 3,301,558	$ 3,343,873	$ 3,430,403	$ 3,541,982	$ 3,684,828	$ 3,868,811	$ 4,095,647	$ 4,368,013	$ 4,688,635	$ 5,060,277	$ 5,485,727
Days of expenditures in ending fund balance	207	195	185	179	178	182	191	203	219	239	261
Transportation Development Tax Fund											
Resources:											
Beginning fund balance	$ 1,234,890	$ 1,010,045	$ 1,275,684	$ 948,709	$ 1,499,532	$ 3,177,310	$ 4,867,341	$ 6,569,706	$ 8,284,486	$ 10,011,763	$ 11,751,619
Revenue:											
43320 TDT fees	557,000	700,185	1,343,336	1,506,501	1,669,680	1,672,874	1,676,081	1,679,304	1,682,541	1,685,792	1,689,058
47000 Interest earnings	11,279	5,454	6,889	5,123	8,097	17,157	26,284	35,476	44,736	54,064	63,459
Total revenue	568,279	705,639	1,350,224	1,511,624	1,677,777	1,690,031	1,702,365	1,714,780	1,727,277	1,739,856	1,752,517
Total resources	$ 1,803,169	$ 1,715,684	$ 2,625,909	$ 2,460,332	$ 3,177,310	$ 4,867,341	$ 6,569,706	$ 8,284,486	$ 10,011,763	$ 11,751,619	$ 13,504,136
Requirements:											
Expenditures:											
Program expenditures	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-program expenditures											
Debt service	-	-	-	-	-	-	-	-	-	-	-
Work in progress	12,000	440,000	1,677,200	960,800	-	-	-	-	-	-	-
Transfers out to Transportation CIP Fund	780,927	-	-	-	-	-	-	-	-	-	-
Other transfers out	197	-	-	-	-	-	-	-	-	-	-
Total non-program expenditures	793,124	440,000	1,677,200	960,800	-	-	-	-	-	-	-
Total expenditures	793,124	440,000	1,677,200	960,800	-	-	-	-	-	-	-
Ending fund balance	1,010,045	1,275,684	948,709	1,499,532	3,177,310	4,867,341	6,569,706	8,284,486	10,011,763	11,751,619	13,504,136
Total requirements	$ 1,803,169	$ 1,715,684	$ 2,625,909	$ 2,460,332	$ 3,177,310	$ 4,867,341	$ 6,569,706	$ 8,284,486	$ 10,011,763	$ 11,751,619	$ 13,504,136

Transportation Fund Assumptions

FCS GROUP
Solutions-Oriented Consulting

City of Tigard Transportation Funding	6/30/2015 Budget	6/30/2016 Projected	6/30/2017 Projected	6/30/2018 Projected	6/30/2019 Projected	6/30/2020 Projected	6/30/2021 Projected	6/30/2022 Projected	6/30/2023 Projected	6/30/2024 Projected	6/30/2025 Projected
Transportation CIP Fund											
Resources:											
Beginning fund balance	$ 72,568	$ 30,262	$ (369,738)	$ (369,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)
Revenue:											
44800 Federal grants	-	-	-	-	-	-	-	-	-	-	-
44802 Grants, other	200,000	-	-	-	-	-	-	-	-	-	-
49200 Transfer in from Gas Tax Fund	613,388	-	-	-	-	-	-	-	-	-	-
49205 Transfer in from City Gas Tax Fund	733,125	-	-	-	-	-	-	-	-	-	-
49405 Transfer in from TDT Fund	780,927	-	-	-	-	-	-	-	-	-	-
49410 Transfer in from Traffic Impact Fee Fund	355,923	-	-	-	-	-	-	-	-	-	-
49411 Transfer in from Underground Utility Fund	204,882	-	-	-	-	-	-	-	-	-	-
49500 Transfer in from Sanitary Sewer Fund	15,200	-	-	-	-	-	-	-	-	-	-
49510 Transfer in from Stormwater Fund	15,200	-	-	-	-	-	-	-	-	-	-
49530 Transfer in from Water Fund	91,798	-	-	-	-	-	-	-	-	-	-
Total revenue	3,010,443	-	-	-	-	-	-	-	-	-	-
Total resources	$ 3,083,011	$ 30,262	$ (369,738)	$ (369,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)
Requirements:											
Expenditures:											
Program expenditures	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-program expenditures											
Debt service	-	-	-	-	-	-	-	-	-	-	-
Work in progress	3,008,136	400,000		3,050,000							
Total transfers out	44,613	-	-	-	-	-	-	-	-	-	-
Total non-program expenditures	3,052,749	400,000	-	3,050,000	-	-	-	-	-	-	-
Total expenditures	3,052,749	400,000	-	3,050,000	-	-	-	-	-	-	-
Ending fund balance	30,262	(369,738)	(369,738)	(3,419,738)	(3,419,738)	(3,419,738)	(3,419,738)	(3,419,738)	(3,419,738)	(3,419,738)	(3,419,738)
Total requirements	$ 3,083,011	$ 30,262	$ (369,738)	$ (369,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)	$ (3,419,738)
Days of expenditures in ending fund balance	4	(338)	#DIV/0!	(410)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Revenue Assumptions											
Interest rate		0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%
Customer accounts:											
EDUs in existing service area											
Residential	19,450	19,537	19,625	19,713	19,802	19,891	19,981	20,071	20,161	20,252	20,343
Commercial and industrial	9,113	9,113	9,113	9,113	9,113	9,113	9,113	9,113	9,113	9,113	9,113
Total EDUs in existing service area	28,563	28,651	28,738	28,827	28,915	29,005	29,094	29,184	29,274	29,365	29,456
EDUs in new service area		0	80	180	300	420	540	660	780	900	1,020
Total EDUs	28,563	28,651	28,818	29,007	29,215	29,425	29,634	29,844	30,054	30,265	30,476
New EDUs	84	88	168	188	209	209	210	210	210	211	211
Residential account growth in existing service area	0.43%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%
Non-residential account growth in existing service aera	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total customer account growth	0.29%	0.31%	0.59%	0.65%	0.72%	0.72%	0.71%	0.71%	0.70%	0.70%	0.70%
Street maintenance fee:											
Monthly fee per EDU, July through December	$ 5.83	$ 6.11	$ 6.41	$ 6.72	$ 7.05	$ 7.39	$ 7.75	$ 8.13	$ 8.52	$ 8.94	$ 9.37
Monthly fee per EDU, January through June	$ 6.11	$ 6.41	$ 6.72	$ 7.05	$ 7.39	$ 7.75	$ 8.13	$ 8.52	$ 8.94	$ 9.37	$ 9.83
Average monthly fee per EDU	$ 5.97	$ 6.26	$ 6.57	$ 6.89	$ 7.22	$ 7.57	$ 7.94	$ 8.32	$ 8.73	$ 9.15	$ 9.60
Annual rate increase	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%
Transporation development tax (TDT):											
TDT per EDU	$ 6,665	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000
Annual increase in TDT per EDU	0.00%	20.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Capital projects											
Capacity for project spending by fund:											
City Gas Tax Fund	$ -	$ -	$ 1,000,000	$ 1,500,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Gas Tax Fund	-	10,400	503,400	704,910	636,866	-	-	-	-	-	-
Street Maintenance Fee Fund	1,900,000	1,950,000	2,025,000	2,100,000	2,170,000	2,243,294	2,319,064	2,397,394	2,478,368	2,562,078	2,648,616
Transportation Development Tax Fund	12,000	440,000	1,677,200	960,800	-	-	-	-	-	-	-
Transportation CIP Fund	3,008,136	400,000	-	3,050,000	-	-	-	-	-	-	-
Total capacity for project spending by fund	$ 4,920,136	$ 2,800,400	$ 5,205,600	$ 8,315,710	$ 2,806,866	$ 2,243,294	$ 2,319,064	$ 2,397,394	$ 2,478,368	$ 2,562,078	$ 2,648,616
Debt											
Issuance cost percentage		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Interest rate		4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Term		20	20	20	20	20	20	20	20	20	20
Principal:											
Proceeds		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Issuance costs		-	-	-	-	-	-	-	-	-	-
Debt reserve		-	-	-	-	-	-	-	-	-	-
Total principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

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