Monroe Riverside District Master Plan

Framework for a Vibrant District in Downtown Monroe

Adopted June 28, 2021

We aspire to have a vibrancy and vitality within the Riverside District, enhancing it as an asset and source of pride for the whole community, as well as a significant attraction for visitors. This district will take advantage of visual and physical access to the Long Tom River, traffic on the highway, proximity to larger cities, and the needs and desires of the Monroe community.

- City of Monroe Comprehensive Plan

Advisory Committee Members:

Dan Sheets, Mayor, Festival Planner

Cam Bishop, Army Corps of Engineers

Janeece Cook, Strengthening Rural Families, Amigos de Monroe

Patrick Depa, Benton County Small Cities Planner

John Greydanus, South Benton County Recreation Alliance (SBCRA), Safe Routes to School

Evelyn Lee, SBCRA, Tribune News

Joe Severson, Oregon State Marine Board

Kevin Shanley, Representative for the Long Tom Watershed Council

Ellen Tappon, SBCRA

Patrick Wingard, Department of Land Conservation and Development

Planning Commission:

Fred Cuthbertson – Chair

Tim Eastridge – Vice Chair

Linda Fredricks

John Greydanus

David Mills

Thorin Nielson

Kathy Smith

City Council:

Dan Sheets, Mayor

Jeanni Cuthbertson, Council President

Tony Baker

Katherine Larkin

Lisa Lindner

Nick Ritch

Special Thanks:

Taylor Evans

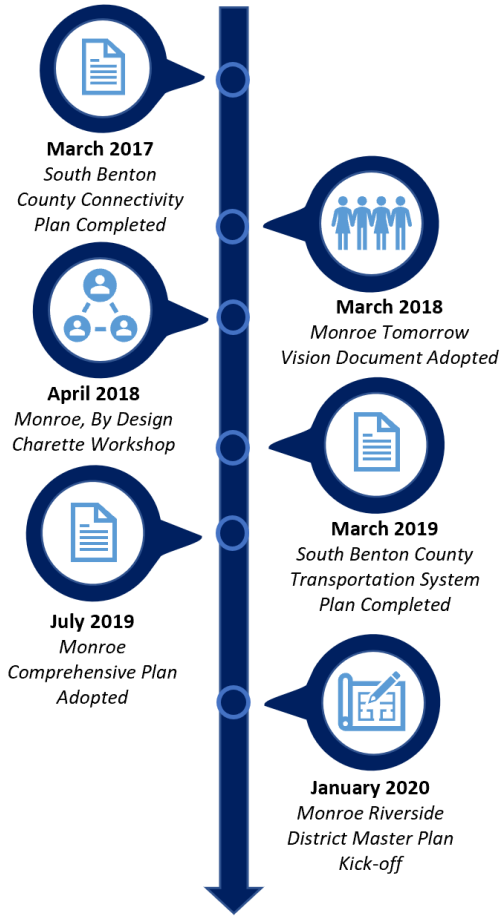
Contents

I. Introduction & Existing Conditions

The Monroe Riverside District Master Plan (Master Plan) is the result of many years of visioning and collaboration from the Monroe community. The 2018 *Monroe Tomorrow* process helped the community develop a vision for Monroe's future, which was the foundation and framework of the subsequent Comprehensive Plan update in 2019. Benton County also adopted an update to its Transportation System Plan in 2019, which includes specific projects for the City of Monroe, notably active transportation projects aimed at creating a regional network of off-street pedestrian and bicycle facilities anchored in Monroe. This master plan builds on these efforts by articulating the vision for a vibrant and livable commercial area with integrated land use, transportation, and infrastructure plans and the tools to develop the district over time

The City of Monroe serves as the economic and social hub for the South Benton County area, which includes the unincorporated communities of Alpine, Bellfountain, Glenbrook, Ingram Island, and Irish Bend. Its history centers on the Long Tom River. The Long Tom had cultural significance for the Chelamela and Chemapho bands of the Kalapuya tribe. Importance to white settlers dates at least as far back to the Applegate Trail, which provided a southern alternative to the western-most segment of the Oregon Trail and followed the river. The river fueled sawmills and flour mills in the nineteenth century and carried passengers and goods via sternwheeler. Today it remains an important, but underutilized, community amenity.

FIGURE 1. TIMELINE OF PLANNING EFFORTS FOR MONROE



The City of Monroe, Oregon, was established in 1853 along the historic Applegate Trail. The City is located along Highway 99 West between Eugene (23 miles south) and Corvallis (17 miles north). The Long Tom River forms part of the City's eastern boundary while the west side of the City traces the beginning of the Coast Range foothills. This unique and strategic location offers very diverse opportunities including hiking and mountain biking, fishing, wine tasting at local wineries, or higher education and NCAA Division I sports at Oregon State University and University of Oregon.

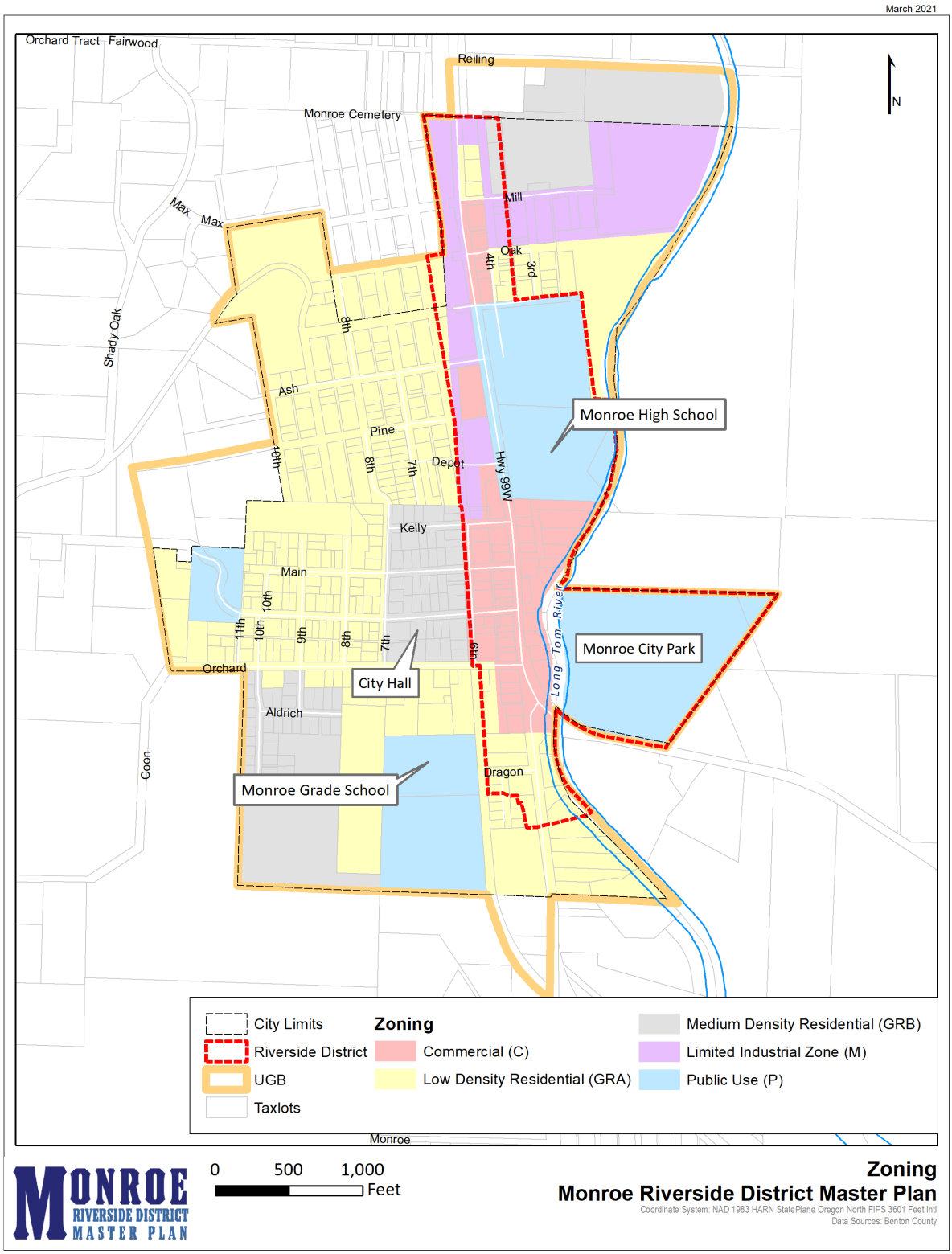
Existing and Future Conditions

The Monroe Riverside District (Figure 1) comprises the historic downtown and commercial core of the City of Monroe along Highway 99W, as well as the City's single existing crossing of the Long Tom River[1]. The district also encompasses several public uses, including Monroe High School, the Monroe Community Library, and City Park on the east side of the river. The district includes a total of 103 acres of land in Commercial, Light Industrial, and Residential (GRA) designations, and a mix of historic structures, new businesses, and vacant/underutilized land.

While the future conditions used in this planning effort are generally based on 20-year forecasts, this plan is intended to develop a framework that can allow the Riverside District to serve as the commercial and civic center of the Monroe community far beyond the 20-year planning horizon.

[1] *The area addressed by this planning process was refined from the "Study Area" to the current recommended overlay district. This was done in order to: 1) simplify administration by removing multiple overlay districts for the City, 2) enable a consistent design and gateway opportunities for the full length of the city along OR 99W.*

FIGURE 2. MONROE ZONING MAP AND PROPOSED RIVERSIDE DISTRICT



Natural Resource Conditions

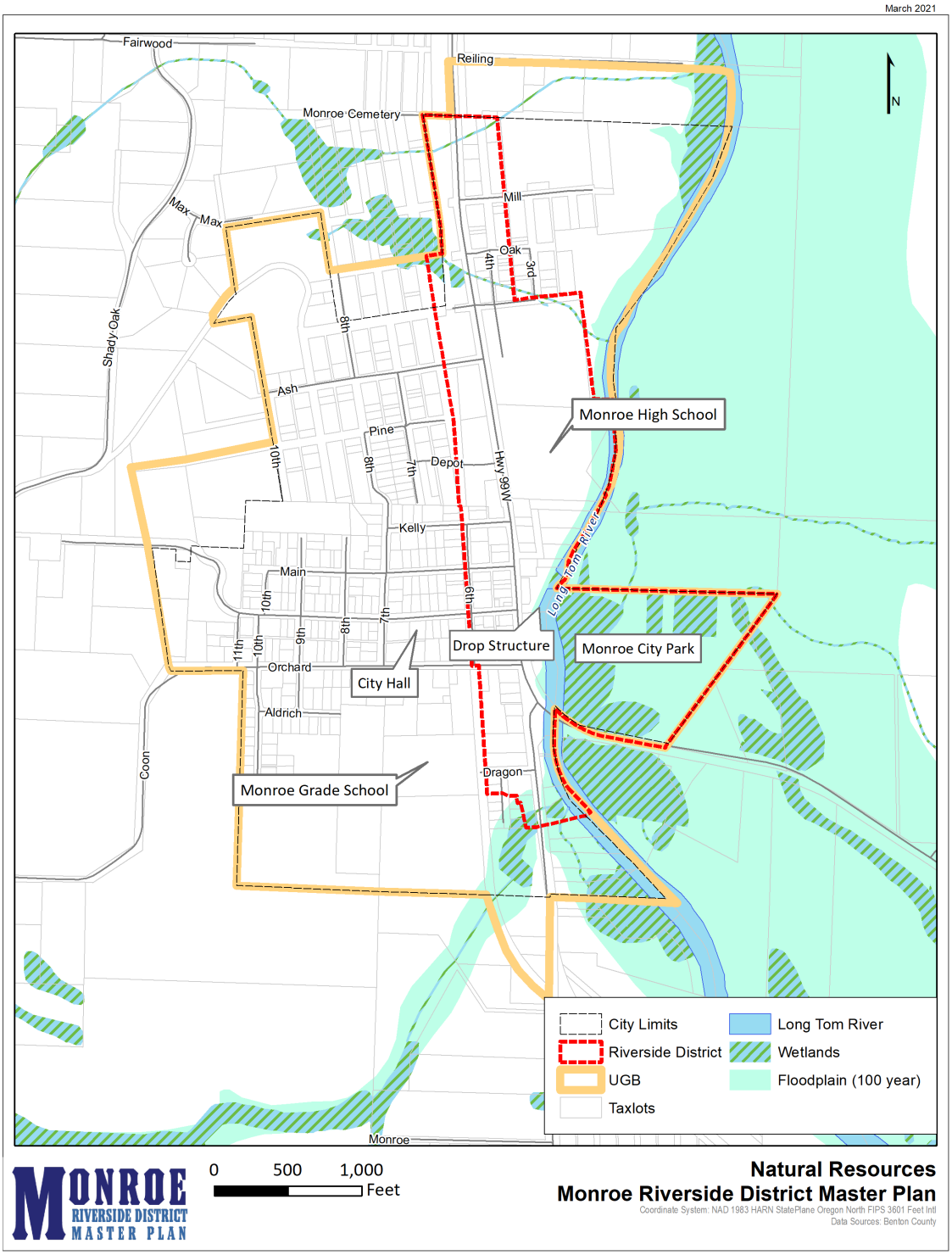
The Long Tom River is a tributary of the Willamette River and a significant resource for the community. It is the City's primary drinking water source, an open space amenity, and contains an Army Corps of Engineers drop structure (which controls the water's velocity and energy as it passes to a lower elevation, and includes a reportedly ineffective fish ladder) within the Riverfront District. Currently, there is no direct public access to the Long Tom River from the west side of town and commercial areas along Highway 99W; the only access is from City Park on the east side of the river. The City also owns land containing lagoons, wetland areas, and City Park on the east side of the river.

Figure 3 shows the mapped floodplain and wetlands in the Riverside District, though the long-term hydrology of the area may change subject to the outcomes of Army Corps planning for the future of the drop structure.[2]

FIGURE 3. ARMY CORPS OF ENGINEERS DROP STRUCTURE AND FISH LADDER, LOOKING WEST

[2] The City of Monroe is working in partnership with the Army Corps of Engineers to evaluate the future of the Long Tom River and the drop structure in Monroe as part of the "1135 Project" (named after Section 1135 of the Water Resources Development Act). More information is available from the Long Tom Watershed Council: https://www.longtom.org/

FIGURE 4. RIVER, FLOODPLAIN, AND WETLANDS



Market and Business Conditions

The Local Market

Monroe is a small community of roughly 640 residents, that has grown at a modest pace of 0.3% per year since 2000. This growth rate is forecasted to continue, meaning growth of roughly 1.5 residents per year over coming decades. However, the city serves as the center of services and business for a broader area of unincorporated households in southeast Benton County. The school district provides one measure of this larger market area, covering an expanded area of roughly 4,000 in population. Commercial businesses in Monroe also have the benefit of high visibility from traffic on Highway 99W which runs between that larger Corvallis and Eugene markets, and many smaller towns in between. This highway features an estimated daily traffic count of roughly 7,000 vehicles, representing a potential customer base for local retail, dining, and services.

Local Employment

Monroe features an estimated 175 jobs as of 2017, according to the US Census. A large majority of this employment is in the educational sector, representing the teachers, staff, and administrative personnel of the Monroe School District and its two local schools. Employment in retail and dining are the next largest industries. A majority of residents commute to work in surrounding communities, or in the county for agricultural, logging, and other natural resource employment.

FIGURE 5. LONG TIMBER BREWING, RECENT CONSTRUCTION IN THE RIVERSIDE DISTRICT

Market Opportunities and Challenges

Monroe has undertaken intensive planning efforts[3] in recent years that have included working with the community to identify opportunities and challenges for the local business environment. Some of the key factors related to the business climate are:

Advantages and Opportunities

- Well-maintained public school system, and community services, including the recently completed Monroe Community Library, and South Benton Community Museum.
- On-going transportation and main street planning projects, and Army Corps of Engineers river restoration project.
- Available land for development in the Riverside District.
- Access to nature, including riverfront property, biking and hiking trails, nearby National Wildlife Refuge, and Alsea Falls Recreation Site.
- Active regional agriculture, vineyards, craft and artisan food and beverage production, and seasonal farmers market.
- Annual Monroe Festival introduces local food, wine, microbrew, art, and music to a regional audience.
- The new brewpub in town has proven very popular and can serve as an attractor for customers, and catalyst for other businesses in the area.
- A growing local Latino community brings new community, diversity, and support for new businesses.
- Growing community networks for economic development and small businesses.
- Increasing local capacity for planning initiatives. Significant recent planning efforts on housing, economic development, and transportation.
- Good highway traffic and visibility from visitors on Highway 99W.

Disadvantages and Challenges

- Missing services require residents and workers to travel for daily needs (groceries, gasoline, retail, movies, and entertainment).
- Many independently owned businesses are operated out of homes, having little visibility and difficult to network through local business organization.
- Despite many useful recent and on-going planning projects, local government remains challenged by limited capacity and resources for new projects.
- Vacant land and real estate create gaps in the streetscape of the main commercial street, which is the result of a general lack of available retail/commercial storefronts to rent or lease in Monroe. Shortage of housing options for local workers and general community growth.
- Scarcity of sustainable employment opportunities within the city, prevalence of commuting to nearly towns.
- Lack of transit services. Substandard transportation infrastructure on some streets, including lack of sidewalks.

[3] "Economic Assessment of Monroe", Constellation Planning (PSU), 2019.

Community-Identified Needs

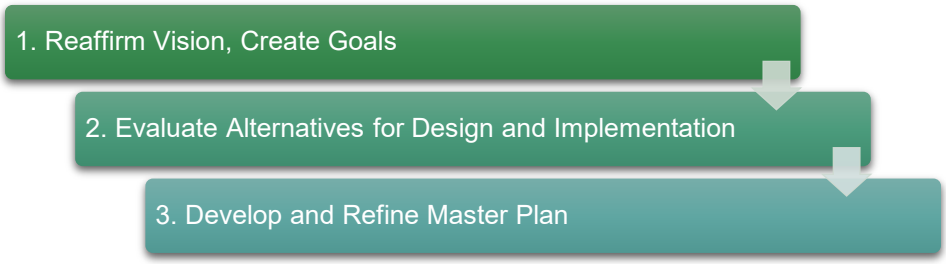
- There is a desire to encourage and support small, local businesses. There is a strong art, craft, and artisan culture in Monroe, that can grow and serve as the foundation for new businesses and the community's economic identity.
- Remote workers seeking the small community experience could be a good target for recruitment.
- Small and home-based businesses could benefit from a co-working or "hub" space to create a sense of connection and cooperation.
- The community continues to value agriculture as a key part of Monroe's identity and economy. The small and tight-knit nature of the community is a strong asset, despite some challenges it poses for economic development.
- Additional indoor and outdoor recreational space would be welcome, including indoor playgrounds or art space, year-round recreation center, as well as enhanced amenities at City Park.

II. Master Plan Process

This master plan provides a framework to support the long-term development of the Riverside District through an integrated set of land use, transportation, and infrastructure recommendations.

This plan was developed with the help of the Project Advisory Committee (PAC), City staff, elected officials, and the broader Monroe area community. While meetings and open houses largely took place online due to the COVID-19 pandemic, this process nonetheless benefited from the robust engagement of a diverse array of stakeholders and residents.

FIGURE 6. RIVERSIDE DISTRICT PROCESS



The plan was developed in three general phases. The first phase was to reaffirm the community vision for the Riverside District and establish the goals and objectives for the Master Plan effort. Next the objective was to develop and discuss a set of alternatives illustrating urban design elements and implementation measures available to the City in creating the Riverside District. Lastly, the preliminary recommendations were discussed with the community, refined, and ultimately documented in this Master Plan to guide City efforts to develop an iconic Riverside District.

A detailed schedule is shown in Figure 7 and screenshots from the Online Open House are shown in Figure 8.

FIGURE 7. DETAILED PROJECT SCHEDULE

Project Reconnaissance & Kickoff Meeting: Jan 2020

Advisory Committee 1: April 2020

Online Open House 1: April 2020

Alternatives Analysis: May-September 2020

Advisory Committee 2: September 2020

Online Open House 2: December 2020

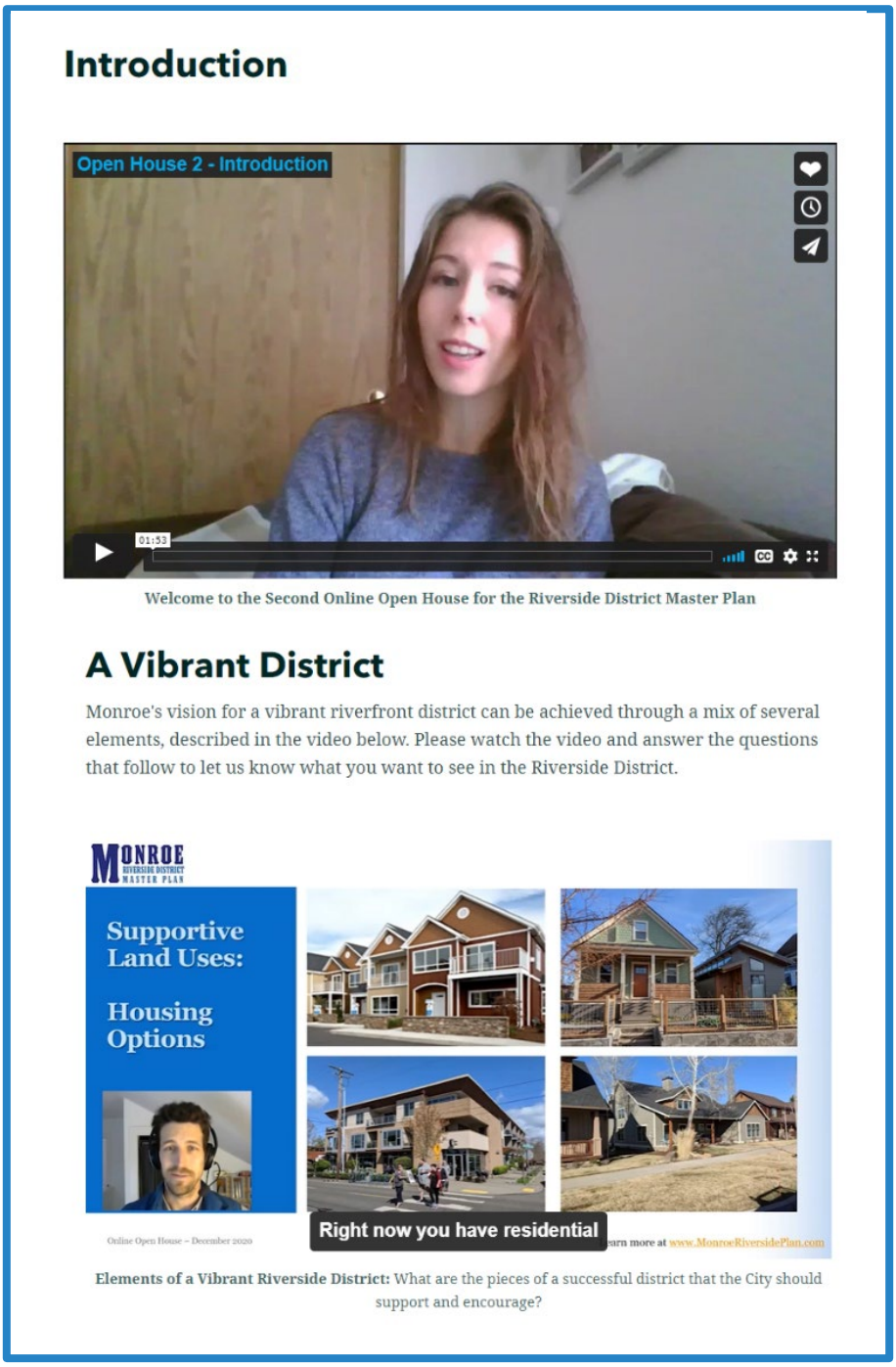
Implementation Measures: Jan-Feb 2021

Advisory Committee Meeting 3: March 2021

Draft Master Plan: April 2021

Revisions and Adoption: May-July 2021

FIGURE 8. SCREENSHOTS OF ONLINE OPEN HOUSE (DEC. 2020)



Vision and Goals

The Comprehensive Plan captures the collective vision for the City of Monroe:

Our vibrant, rural town is a welcoming and inclusive community celebrating its agrarian heritage, natural environment, neighborly culture, and local economy.

A list of aspirations provides a specific vision for the Riverside District:

> *We aspire to have a vibrancy and vitality within the Riverside District, enhancing it as an asset and source of pride for the whole community, as well as a significant attraction for visitors. This district will take advantage of visual and physical access to the Long Tom River, traffic on the highway, proximity to larger cities, and the needs and desires of the Monroe community.*

The Master Plan's Goals and Objectives are intended to reflect the City's adopted policies and echo the *Monroe Tomorrow* vision while providing more specific guidance for future land use, transportation, and investment decisions related to the Riverside District. These Goals and Objectives also guided project work, ensuring that the planning process was open and engaging to all community members and stakeholders.

Goal 1: Reflect the Community's Vision and Values through an Open and Engaging Process

Objective 1.1 Revisit and reaffirm the Monroe Tomorrow vision and aspirations for the Riverside District.

Objective 1.2 Engage with members of the Monroe community, including youth, elderly, rural residents, minority populations, and Spanish speakers.

Objective 1.3 Provide information about the project to community members where they live, work, play, and go to school.

Objective 1.4 Take advantage of the Monroe Festival to engage residents of Monroe and its surrounding communities.[4]

Objective 1.5 Engage members of the business community, property owners, and community organizations such as Amgios de Monroe and the Monroe Festival Committee. Support existing community organizations and seek opportunities for partnership during the planning process and implementation steps.

[4] This goal was developed in February 2020. Since that time, the 2020 Monroe Festival has been postponed – alternative outreach methods were used for this process.

Goal 2: Develop a Cohesive Downtown Design

Objective 2.1 Explore ways to integrate the historic orientation of commercial uses to the highway with the opportunities offered by proximity to the Long Tom River.

Objective 2.2 Refine design elements identified in previous community workshops and articulate and illustrate the desired “Monroe Style” that promotes a downtown character.

Objective 2.3 Explore gateway treatments as OR 99W enters the City and identify potential unifying streetscape elements.

Objective 2.4 Identify programs to assist business and property owners with enhancing the exterior appearance of buildings to attract new tenants and contribute to the aesthetic quality of the Riverside District.

Objective 2.5 Create opportunities for retail, mixed-use, and transit-supportive development in the Riverside District, in particular along the Highway 99W corridor, to enhance the concentration of storefront businesses and pedestrian activity.

Goal 3: Capitalize on Locational Advantages

Objective 3.1 Determine the types of businesses that could thrive in Monroe, given local and regional demographics and characteristics that are unique to the City.

Objective 3.2 Explore the mix of uses that could support retail and civic activity in the Riverfront District.

Objective 3.4 Explore opportunities for outdoor recreation and active open space, as well as for tourism, festivals, and businesses that may wish to locate along the Long Tom River.

Objective 3.5 Support industries suitable to the area, including those related to recreational activities, arts and culture, and agri-tourism.

Goal 4: Enhance the Riverfront

Objective 4.1 Identify ways to improve public access to the river, including refining concepts for the Long Tom River Trail and footbridge.

Objective 4.2 Identify natural resources, and landforms associated with the river (e.g. floodplain areas, steep slopes, wetlands); to establish both protected and suitable development areas ensuring the community continues to benefit from this amenity as growth occurs downtown.

Objective 4.3 Coordinate with the U.S. Army Corps of Engineers to develop solutions at their Drop Structure that combine community needs, ecosystem restoration, flood risk management, and public safety.

Goal 5: Improve Multi-modal Connections and Transportation Choices

Objective 5.1 Identify barriers to accommodating future transit service along the 99W corridor.

Objective 5.2 Ensure that planned and new multi-modal connections support the land uses envisioned for the Riverfront District.

Objective 5.3 Identify direct and safe bicycle and pedestrian connections recommended in the South Benton County Connectivity Plan, including:

- Links between the Monroe's existing and future neighborhoods, City Park, and the downtown commercial district;
- Connections across the Long Tom River by the proposed footbridge to Monroe City Park; and
- Connections to neighboring communities, such as the 6th Street Trail.

Objective 5.4 Identify needs for additional pedestrian connections across 5th Street/OR 99W and preferred design for improvements.

Objective 5.5 Identify physical connections linking key sites on either side of the Long Tom River through a robust multi-modal network and encourage multimodal connections that preserve views of the Long Tom River and other natural amenities of the area.

Goal 6: Create an Implementable Plan

Objective 6.1 Identify near-, medium-, and long-term actions that implement plan recommendations.

Objective 6.2 Estimate costs for proposed infrastructure improvements and identify potential revenue sources.

Objective 6.3 Develop development requirements and design guidelines to implement the recommendations of the Riverside District Plan as the development of individual properties occurs.

III. Riverside District Frameworks

The Monroe Riverside District will develop and redevelop over time through a combination of private and public investment. This Master Plan lays out the following interrelated frameworks that work together to create the vibrant, walkable area envisioned by the Monroe community:

- Urban Design Framework
- Land Use & Regulatory Framework
- Parks and Open Space
- Transportation
- Infrastructure

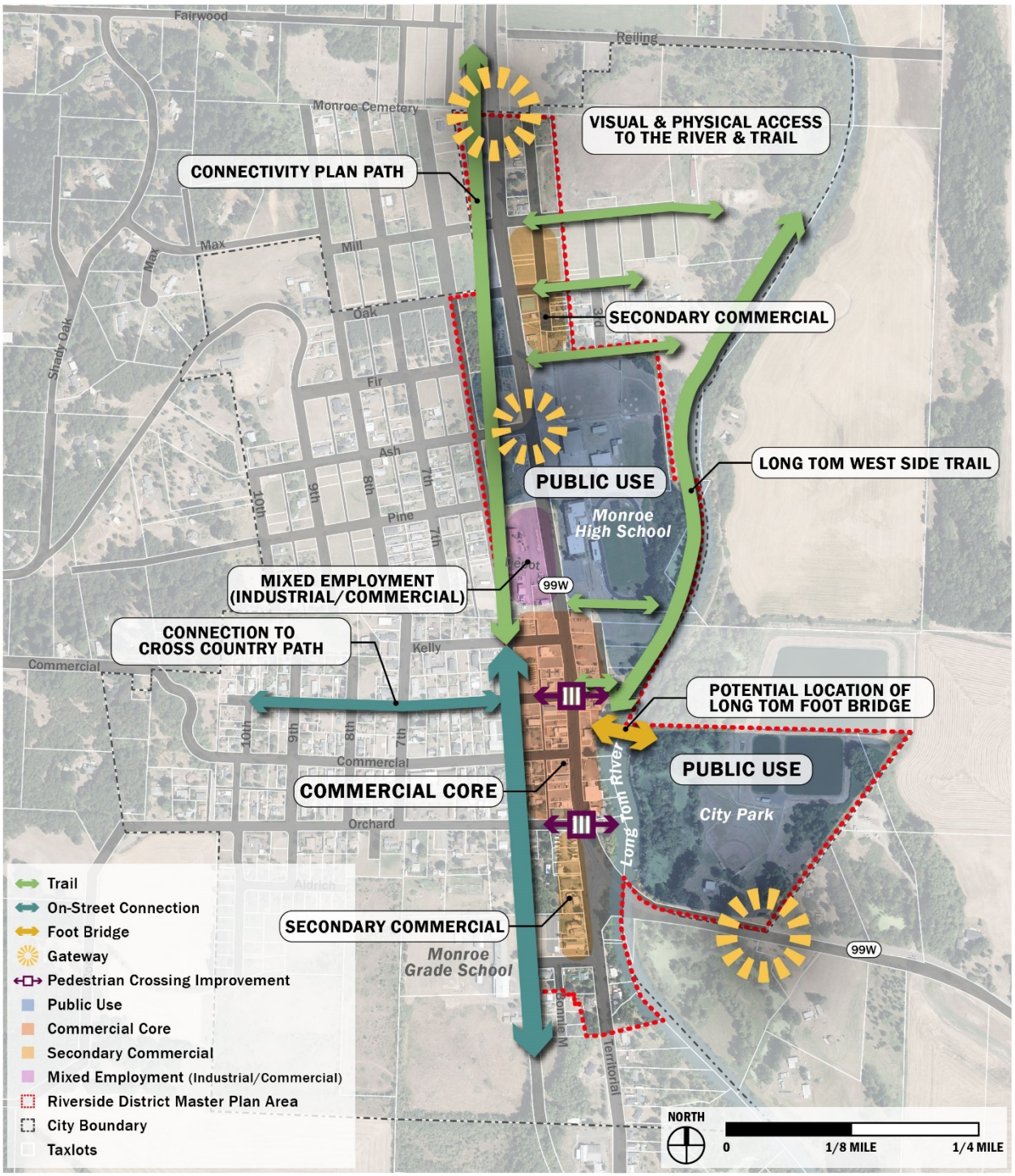
Urban Design Framework

The goal of the urban design framework is to frame and connect the businesses, public institutions, and open spaces that comprise the Riverside District and ensure that development over time results in a cohesive district. A diagram of the Riverside District is shown 9. The district contains the following components:

- **Walkable Commercial Core**. The commercially zoned area along the highway between Orchard Street and Kelly Street is the heart of the Riverside District. It contains a historic, closely-spaced local street network with small, walkable blocks on which many of the City's key commercial establishments sit. As the commercial core develops over time, the City's Development Code will guide the types of business and residential uses that can be built and how they are designed. Public investment in infrastructure, transportation projects, plazas and open space, and other features like street furniture will further support the growth and cohesiveness of this district.
- **Connections to the River, City Park, and Monroe Shared Use Path.** Visual and physical access to the Long Tom River and a proposed pedestrian footbridge connecting to City Park are vital to the Riverside District. The Monroe Shared Use Path is envisioned to connect from the Riverside District to nearby areas such as the Alesa Falls mountain biking area near Alpine along the former Bailey Branch rail corridor. The transportation framework of this plan identifies the priority transportation projects that will let visitors and residents alike enjoy all that Monroe has to offer.
- **Public Institutions.** The Monroe Library and Monroe High School make up a significant amount of the land within the Riverside District. Students, staff, and library patrons will comprise much of the year-round activity in the area.
- **Highway 99 Gateways.** The Riverside District stretches the length of the City of Monroe along OR 99W. Gateways, such as the existing gateway at the south end of the City, let road users know they have arrived in town. The built form along the highway also offers cues to slow down and pay attention.
- **Employment Land.** Besides public uses and businesses in the Commercial Core, parcels in the District host a variety of commercial uses. This employment land is shown as "secondary commercial" and "mixed employment" on Figure 9.
- **Residential Land.** Several residential parcels are included within the Riverside District. The provisions of the proposed Riverside District Overlay specifically exempt residential land from its requirements. However, in the long term it is appropriate for the City to consider infill and/or redevelopment in these areas to more intensive uses (including

multifamily or mixed-use developments) that will further support the vibrancy of the Riverside District.

FIGURE 9. RIVERSIDE DISTRICT URBAN DESIGN FRAMEWORK



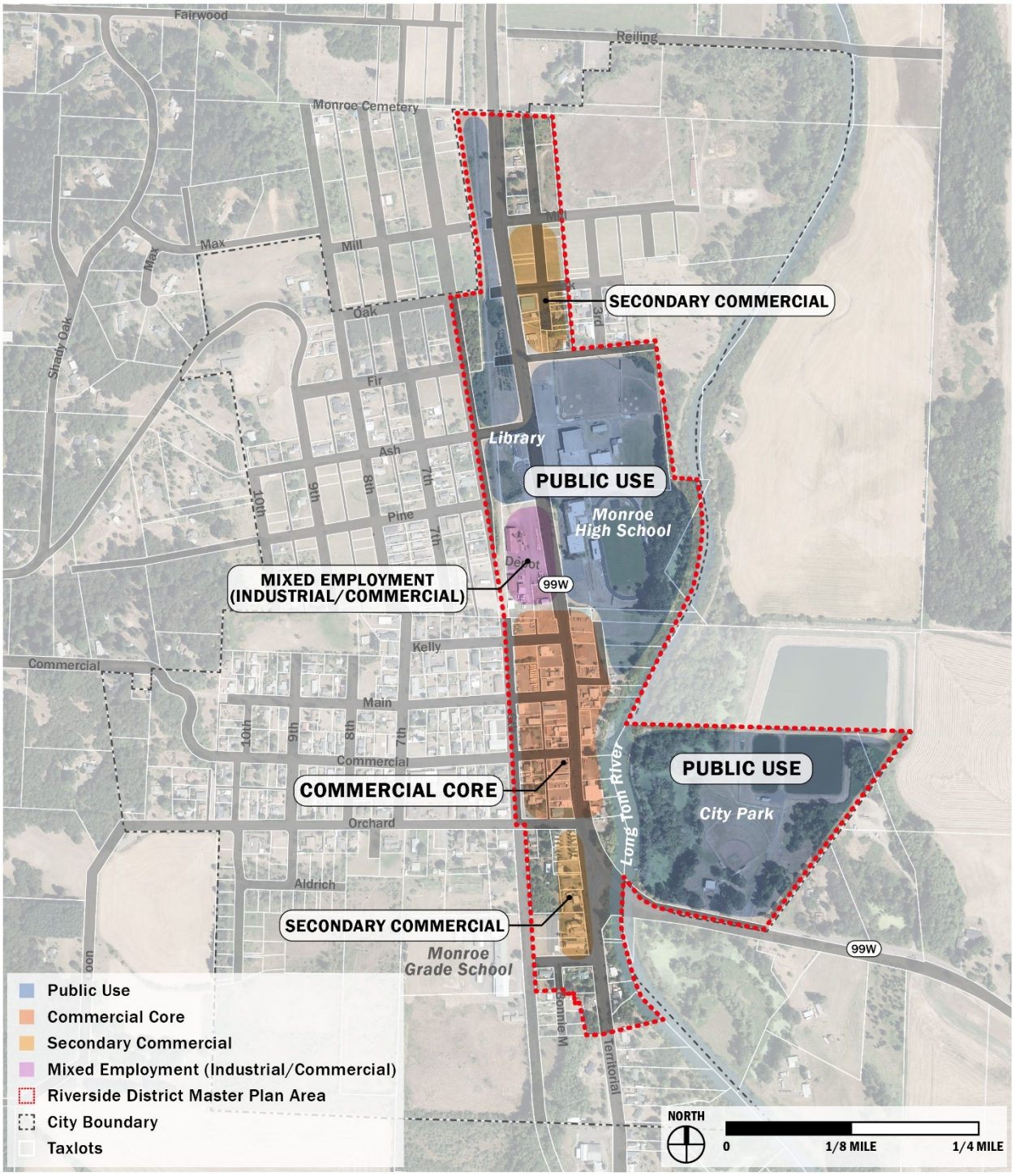
Land Use and Regulatory Framework

The Land Use and Regulatory Framework addresses the types of businesses and institutions within the Riverside District, as well as the orientation of buildings and provision of public amenities through the development process. An overview of the land use framework is shown in Figure 10. Elements of this framework include:

- Supportive Land Uses;
- Building Orientation and Design;
- Parking, Loading, Access, and Circulation;
- Signs, Landscaping, Fences and Walls, and Outdoor Storage

These elements will be implemented through the Development Code amendments described in **Section IV. Implementation and Funding** and will come to fruition through future development permitting.

FIGURE 10. LAND USE FRAMEWORK



Supportive Land Uses

The types of land uses (i.e. residential, commercial, industrial, institutional) that are in the Riverside District have a significant impact on the district's function and character. A combination of private and public land uses will support the success of the district by encouraging visitors, new businesses and employment, recreational opportunities, and more goods and services for the residents of the Monroe community.

Land uses that support a thriving downtown include offices, retail shops, eating/drinking establishments, parks/open space, and areas for temporary or seasonal outdoor recreation and events. Heavy industrial/manufacturing uses are not ideal for downtown areas, however there are ways to effectively incorporate industrial uses into the district through a combination of design requirements and "artisanal" or "mixed employment" requirements. The mixed employment designation would permit light manufacturing, but requires a commercial use on the site (e.g. gift shop, offices, etc.), such as a brewery with production and tasting rooms in the same building.

There is also an opportunity for the Riverside District to enhance its "built-in" customer-base by creating more opportunities for residential uses. By allowing mixed-use development (buildings with both residential and commercial space), more residential units can be incorporated into the Riverside District to support the district and, potentially in the future, transit ridership.

FIGURE 11. EXAMPLES OF SMALL SCALE MIXED-USE, PORTLAND (TOP) AND LAKE OSWEGO (BOTTOM)

(NE Alberta Street, Portland, OR)

(Lake Oswego, OR)

FIGURE 12. ADAPTIVE REUSE OF INDUSTRIAL SITE, ALPINE AVENUE, MCMINNVILLE OR

FIGURE 13. ARTISANAL INDUSTRIAL – HOP VALLEY TASTING ROOM AND PRODUCTION, EUGENE, OR

Building Orientation and Design

A building's location on a site and its design are important, regardless of the building' s use. Building design can enhance the aesthetics, character, and identity of an area, while improving the pedestrian environment. Design elements for the Monroe Riverside District include:

- **Building setback requirements.** New non-residential construction will have a "build-to" line, requiring the building or public space be located adjacent to the sidewalk.
- **Parking location.** Parking lots must be located behind the building in order to promote pedestrian activity and safety in front of buildings.
- **Glazing and Façade Articulation.** These design requirements prohibit blank, opaque walls from facing the street.
- **Weather Protection.** Buildings must provide weather protection (such as awnings) along their street-facing frontages.
- **Visual and Physical Access to the River and Planned Open Spaces.** Development must allow for visual and physical access to the Long Tom River and planned open spaces nearby. This requirement will ensure that the river is a prominent and accessible feature of the Riverside District as development and redevelopment occurs.

Parking, Loading, Access, and Circulation

How vehicles, pedestrians, and bicycles access a site from the street and move internally within a site are important to the function of the Riverside District. Important transportation characteristics include:

- Limitations on the number of vehicular access points to reduce the number of turning movements, thereby reducing conflicts with both through traffic and with pedestrians and cyclists.
- Safe, direct, and convenient pedestrian and bicycle access separated from vehicle travel areas.
- Designated loading areas to ensure loading does not conflict with the movement of other vehicles or create hazards for cyclists and pedestrians.
- Two key active transportation connections: the Monroe Shared Use Path, which is being implemented in pieces currently, and a new Long Tom River Trail on the west side of the River that includes a proposed footbridge.

An overall parking strategy for the Riverside District may be needed in the future, as the district develops. Adequate parking is important for vehicle users, but an over-abundance of parking will detract from the district's developable area, walkability, and aesthetics. Many downtowns have central parking lots that can serve multiple uses, which may be an option for the Riverside District.

Signs, Landscaping, Fences and Walls, and Outdoor Lighting

Typically jurisdictions regulate signage through requirements limiting the number, size, and location of freestanding signs and those located on buildings. In a downtown area where the focus is primarily on pedestrians, signs should be smaller and lower than those along a busy highway corridor with high traffic speeds. Temporary signage located within the sidewalk area (e.g., A-frame signage) should be regulated to reduce conflicts with sidewalk users.

Landscaping is an important element of site design. Minimum landscaped area requirements can apply to areas of the site not covered in the building or pavement, to improve the aesthetic and appeal of the buildings. Additionally, planting standards can define permitted types of landscaping in order to create visual coherence, promote native plantings, and address irrigation and erosion control. Many downtowns require street trees and parking lot landscaping to break up the amount of pavement, and provide visual and physical separation between pedestrian and vehicle areas.

Screening reduces the visual impact of utilitarian building elements (e.g. large utility equipment and waste collection areas) and can reduce conflicts between uses that are not complimentary. Screening can be in the form of fences, walls, and/or landscaping, and is often required for outdoor equipment, waste collection areas, and utility boxes.

Outdoor lighting can illuminate businesses after dark and improve safety, but also can have negative effects on neighboring properties. Setting appropriate minimum and maximum lighting standards and requiring lighting to have a downward focus or shielding can limit its negative impacts.

Parks and Open Space Framework

Parks, open space, and public facilities are defining features of the Riverside District. A specific objective of this master plan is to improve access to City Park on the east side of the Long Tom River. Providing easier access to the park may increase its usage and the enhanced connection between the park and Downtown Monroe would bring more visitors to the City's commercial

core. Many downtowns, including those along riverfronts, have open space areas embedded within the downtown in the form of mini parks, plazas, boardwalks, etc. Examples include plazas in the cities of Corvallis and Independence (see Figure 14). The open spaces provide locations for local events, such as farmers markets and festivals, and a public place for relaxing and gathering.

FIGURE 14. RIVERFRONT PATH AND PLAZA, CORVALLIS OR

FIGURE 15. CORVALLIS RIVERFRONT PATH, AERIAL VIEW

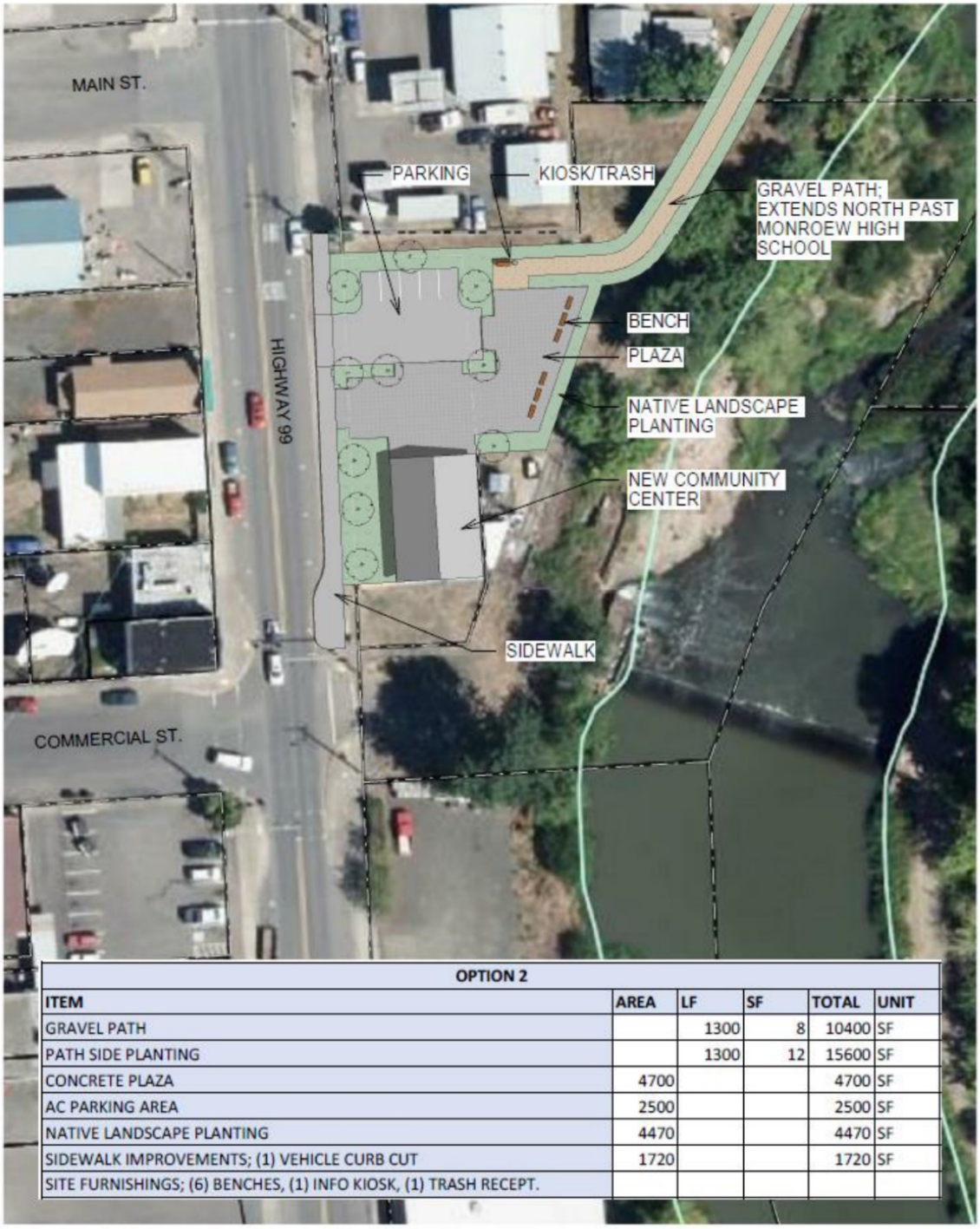
The key open spaces of the Riverside District include the existing City Park on the east side of the Long Tom River, a planned River Trail along the Long Tom's west bank, an envisioned trailhead and future pedestrian footbridge over the river, and opportunities for plazas and other small open spaces envisioned as part of the District's future development.

Several options for a park and/or trailhead are shown in the following figures. These designs are preliminary and exploratory.

FIGURE 16. POTENTIAL CENTRALLY-LOCATED PARK DIAGRAM

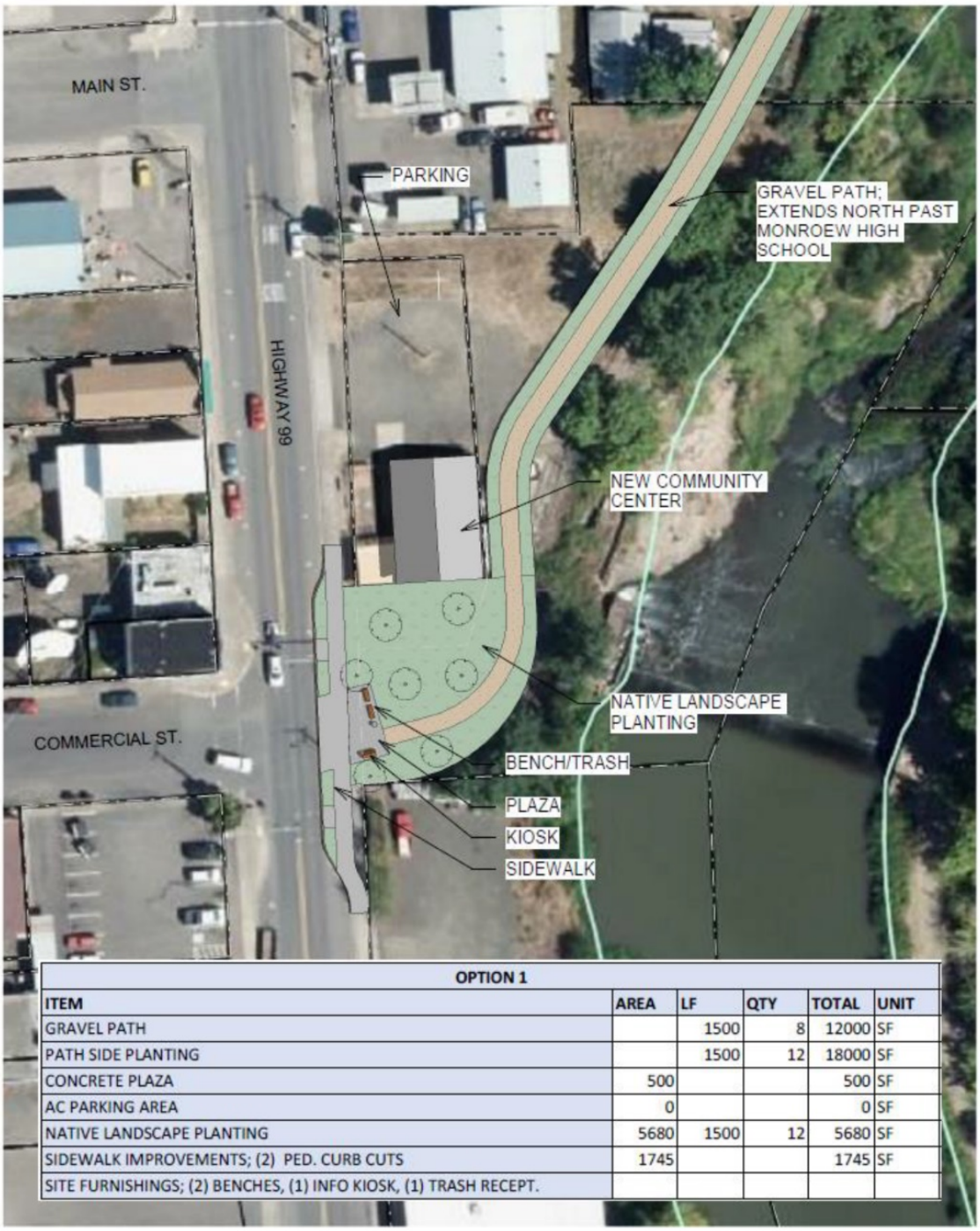
OPTION 3					
ITEM	AREA	LF	QTY	TOTAL	UNIT
GRAVEL PATH		1425	8	11400	SF
PATH SIDE PLANTING		1425	12	17100	SF
CONCRETE PLAZA	2400			2400	SF
AC PARKING AREA	2370			2370	SF
NATIVE LANDSCAPE PLANTING	2900			2900	SF
SIDEWALK IMPROVEMENTS; (2) PED. CURB CUT, (1) VEHICLE CURB CUT	2500			2500	SF
BOARDWALK	1512			1512	SF
WOOD BRIDGE		250		250	LF
PLAYGROUND	260			260	SF
SITE FURNISHINGS; (7) BENCHES, (1) INFO KIOSK, (1) TRASH RECEPT.					

FIGURE 17. POTENTIAL MID-BLOCK LOOKOUT DIAGRAM



OPTION 2					
ITEM	AREA	LF	SF	TOTAL	UNIT
GRAVEL PATH		1300	8	10400	SF
PATH SIDE PLANTING		1300	12	15600	SF
CONCRETE PLAZA	4700			4700	SF
AC PARKING AREA	2500			2500	SF
NATIVE LANDSCAPE PLANTING	4470			4470	SF
SIDEWALK IMPROVEMENTS; (1) VEHICLE CURB CUT	1720			1720	SF
SITE FURNISHINGS; (6) BENCHES, (1) INFO KIOSK, (1) TRASH RECEPT.					

FIGURE 18. POTENTIAL TRAILHEAD IMPROVEMENTS



OPTION 1					
ITEM	AREA	LF	QTY	TOTAL	UNIT
GRAVEL PATH		1500	8	12000	SF
PATH SIDE PLANTING		1500	12	18000	SF
CONCRETE PLAZA	500			500	SF
AC PARKING AREA	0			0	SF
NATIVE LANDSCAPE PLANTING	5680	1500	12	5680	SF
SIDEWALK IMPROVEMENTS; (2) PED. CURB CUTS	1745			1745	SF
SITE FURNISHINGS; (2) BENCHES, (1) INFO KIOSK, (1) TRASH RECEPT.					

The Long Tom River is the central and primary natural resource in the City of Monroe. It is important to have protections in place for proper use and to allow continuous use into the future. Protection can be achieved through limiting physical encroachment of development (e.g. buildings), while requiring visual and/or physical access, and having protection or mitigation areas that are also attractive and accessible spaces. For example, trails are a great way to

reduce building development along the riverfront and can have minimal environmental impact while providing access to the riverfront. Examples of this are seen in communities around Oregon, including Riverview Park (Independence) and North Riverfront Park (Corvallis). Both incorporate public plazas and open space between the river and downtown area, which provides outdoor recreation opportunities such as trails and boat ramps.

Transportation Framework

The Riverside District is envisioned to be a place that is safe and accommodating for all kinds of transportation modes. Travelers on the highway will stop and visit local establishments, logging trucks and other freight vehicles will efficiently travel through town, people on bicycles will make use of the Monroe shared-use path, intercity transit will bring other visitors from nearby communities, and people will walk all around. For this area to be successful, transportation infrastructure, including sidewalks, paths, and intersections, must be designed and built to accommodate this wide range of modes safely and comfortably.

The Transportation Framework explains how the City can accomplish multimodal objectives. The transportation system needs for the Monroe Riverside District and the recommended improvements are broken down into the following five categories; project numbers refer project descriptions in the adopted Transportation System Plan and Table 1 in this section.

1. **Access from the West/South** – These projects improve active transportation facilities (sidewalks, off-street paths for bicyclists and pedestrians) on streets that provide access between the OR 99W corridor and residential areas to the west and south, enhancing the overall walkability of Monroe. They will improve access to active transportation in the District.

2. **Improve OR 99W** – Increased traffic in the future is not expected to cause congestion at any of the major intersections in Monroe including: OR 99W & Orchard Street, OR 99W & Territorial Highway, and 6th Street & Orchard Street. However, many blocks west of OR 99W need new or improved sidewalks. The bike lane along OR 99W has a gap between Kelly Street and Orchard Street and is narrow when crossing the Long Tom River bridge. These conditions result in impediments for active transportation users accessing the Riverside District. These projects improve active transportation facilities along OR 99W, including projects that make it easier to cross the street (MRDP-7) and visual cues that encourage slower travel speeds by people driving (MRDP-8).

   Projects in this category will require coordination with ODOT but will also be eligible to compete for additional statewide funding. Many of the projects in this category are low cost which will increase the feasibility of construction. However, the highest cost project, the improvement of the Long Tom River Bridge (MRDP-3), is in this category. Also, in this category is project CC-138, the improvement of the intersection of OR 99W and Orchard Street. ***Based on the rate of expected development this project will not be***

warranted in the next 20 years and may be the least likely to be funded and constructed within that timeframe.

3. **Parallel Routes to OR 99W** – These projects improve streets and paths parallel to OR 99W. They connect the existing residential areas of Monroe with the Riverside District and provide comfortable alternative routes to the busier highway. Also in this group of projects is the Monroe Shared-Use Path, which is broken down into several segments. Feasibility of these projects are directly tied to cost.

4. **River Access** – There is currently no access to the Long Tom River from the west and the only connection to City Park is via the OR 99W bridge, which has narrow shoulders for walking and biking. A safe river crossing for people walking and biking is needed. Several projects to improve active transportation access to the Long Tom River are recommended. They improve the visibility of the river (MAT-18) by providing public access on the west side and improve the accessibility of City Park (MAT-19).

   Projects in this category will require right-of-way acquisition and environmental considerations due to proximity to the Long Tom River. They are also high cost projects and feasibility will be challenging.

5. **Transit Access –** There is currently no fixed-route transit connecting Monroe with any neighboring cities, though the Monroe Comprehensive Plan has several policies in support of future transit service. Improvements can be made to existing infrastructure, such as access to the bus shelter, that will improve the quality of transit when service is restored. Improvements to transit accessibility enhance regional access to the Riverside District for people without vehicles or who cannot drive and also people with vehicles who may not want to drive.

A full list of projects (including those not considered high priority) is provided in **Appendix D.**

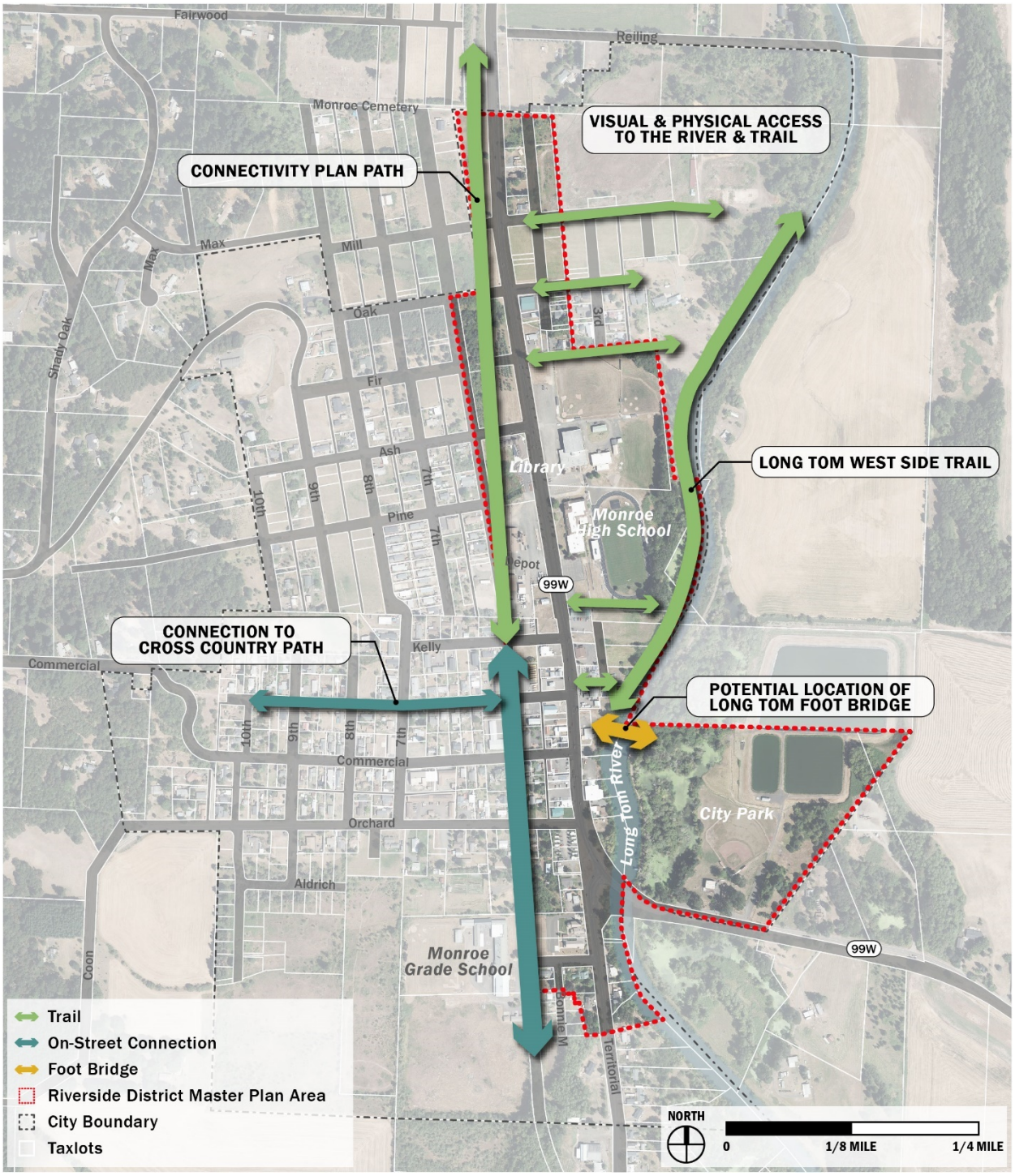
The recommendation is that Monroe focus early implementation efforts on projects that improve safety for people walking and biking along and across OR 99W, which has the highest volumes and speeds of motor vehicle traffic and divides the Riverside District. The recommended high-priority projects for near-term implementation are listed in Table 1. Many of these are also lower cost projects, making them easier to implement. Also, because these projects are directly on OR 99W or would benefit the highway, they may be eligible for funding from ODOT.

TABLE 1. RECOMMENDED HIGH-PRIORITY TRANSPORTATION IMPROVEMENTS

Project ID	Project Name	Cost[1]
MRDP-3	**OR 99W Long Tom River Bridge Improvement**	**High**
Benefit: Improves access to City Park. This project could be interchangeable with the Long Tom Foot Bridge project (MAT-19).		
MRDP-6	**OR 99W Gateway Treatments**	**Low-Medium**
Benefit: Helps achieve lower motor vehicle speeds on the highway.		
MRDP-7	**OR 99W Pedestrian Crossing Improvements**	**Low**
Benefit: Enhances the ability to cross the highway on foot and reduces the barrier effect of OR 99W.		
MRDP-8	**OR 99W Mid-block Curb Extensions**	**Low**
Benefit: Helps achieve lower motor vehicle speeds on the highway and creates an opportunity for streetscape improvements to enhance the appearance of the corridor.		
MRDP-14	**6th Street Shared-Use Path Safe Routes to School**	**(already funded)**
Benefit: This project has already secured funding and creates an extension of AT-122 and MRDP-15 that includes other improvements to 6th Street.		
MRDP-15	**6th Street Shared-Use Path from Main/ Commercial St. to Orchard St.**	**Medium**
Benefit: Creates an alternative route to OR 99W for people biking in the segment where no bike facilities are available on the highway.		
AT-122	**Monroe Cross Country Shared-Use Path (Kelly St. to Main St. or Commercial St. segment)**	**Medium**
Benefit: Creates an alternative route to OR 99W for people biking in the segment where no bike facilities are available on the highway.		
AT-125	**6th Street & Orchard Street Intersection Improvement**	**Low**
Benefit: Helps complete the alternative biking route to OR 99W (AT-122 and MRDP-15) and complements the safe route to school project (MRDP-14).		

[1] Low = $0-$50,000 Medium = $50,000-$250,000 High > $250,000

FIGURE 19. ACTIVE TRANSPORTATION PROJECTS



Long Tom River Footbridge

A pedestrian bridge over the Long Tom River is an important connection between the Riverside District's commercial core and City Park. Implementing a new pedestrian bridge would require approval and permitting through the Army Corps of Engineers and permanent easements or public Right-of-Way on either end of the bridge. The construction cost of a pedestrian bridge ranges very widely, but is typically in the territory of around $1M, depending on soil conditions, grade considerations, dimensions, and aesthetic considerations. An example of a footbridge in Silverton, OR is shown in Figure 20.[5]

FIGURE 20. SILVERTON CREEK COVERED BRIDGE AND CONNECTION TO SIDEWALK

[5] An alternative to a new footbridge would be widening of the existing OR 99W bridge. However, widening the existing bridge is entirely subject to ODOT approval, as this is an ODOT facility, and may not be any less costly or more expeditious than a new pedestrian footbridge. As part of this Master Plan process, ideas for re-striping of the bridge (to avoid the need to widen it to accommodate bikes/pedestrians) was discussed with ODOT. It was determined that the drawbacks of the proposal outweighed the possible benefits and it is unlikely that ODOT will ultimately support the approach.

Monroe Shared-Use Path

Several of the high-priority active transportation projects in Table 1 are pieces of an interconnected multimodal system of paths, trails, sidewalks, and other amenities that was envisioned as part of the 2017 South Benton County Connectivity Plan (See Figure 24). Through the Riverfront District this system consists of on-street facilities and a shared-use path utilizing the former Bailey Branch rail corridor. The path connection is envisioned to connect the planned Long Tom footbridge and riverside trail to a network that would serve the entire South Benton County area, including attractions such as wineries and the Alesa Falls mountain biking area near Alpine. This route, anchored in the Monroe Riverside District, would be an incredible asset for residents and visitors to enjoy.

As noted in the Connectivity Plan, the benefits of this type of shared-use path include:

- Provides a dedicated facility for users of all ages and abilities
- Provides, in some cases, non-motorized access to areas that are otherwise served
- only by limited-access roadways
- Provides non-motorized transportation access to natural and recreational areas, which can help low-income people obtain access to recreational assets.
- Provides, in some cases, a short-cut between cities or neighborhoods
- Paths have a small footprint and can display a distinctly rural character

FIGURE 21. SHARED USE PATH CROSS-SECTION, MONROE TRANSPORTATION SYSTEM PLAN

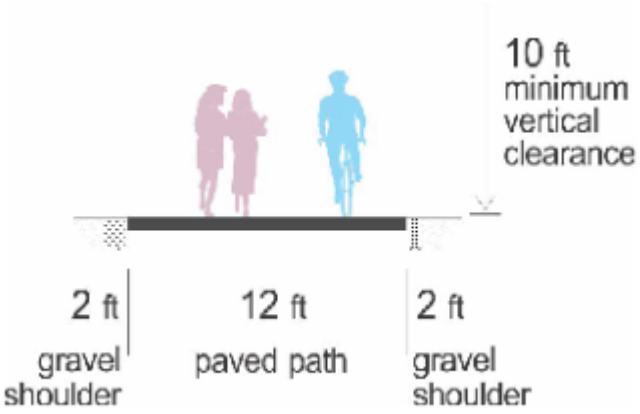
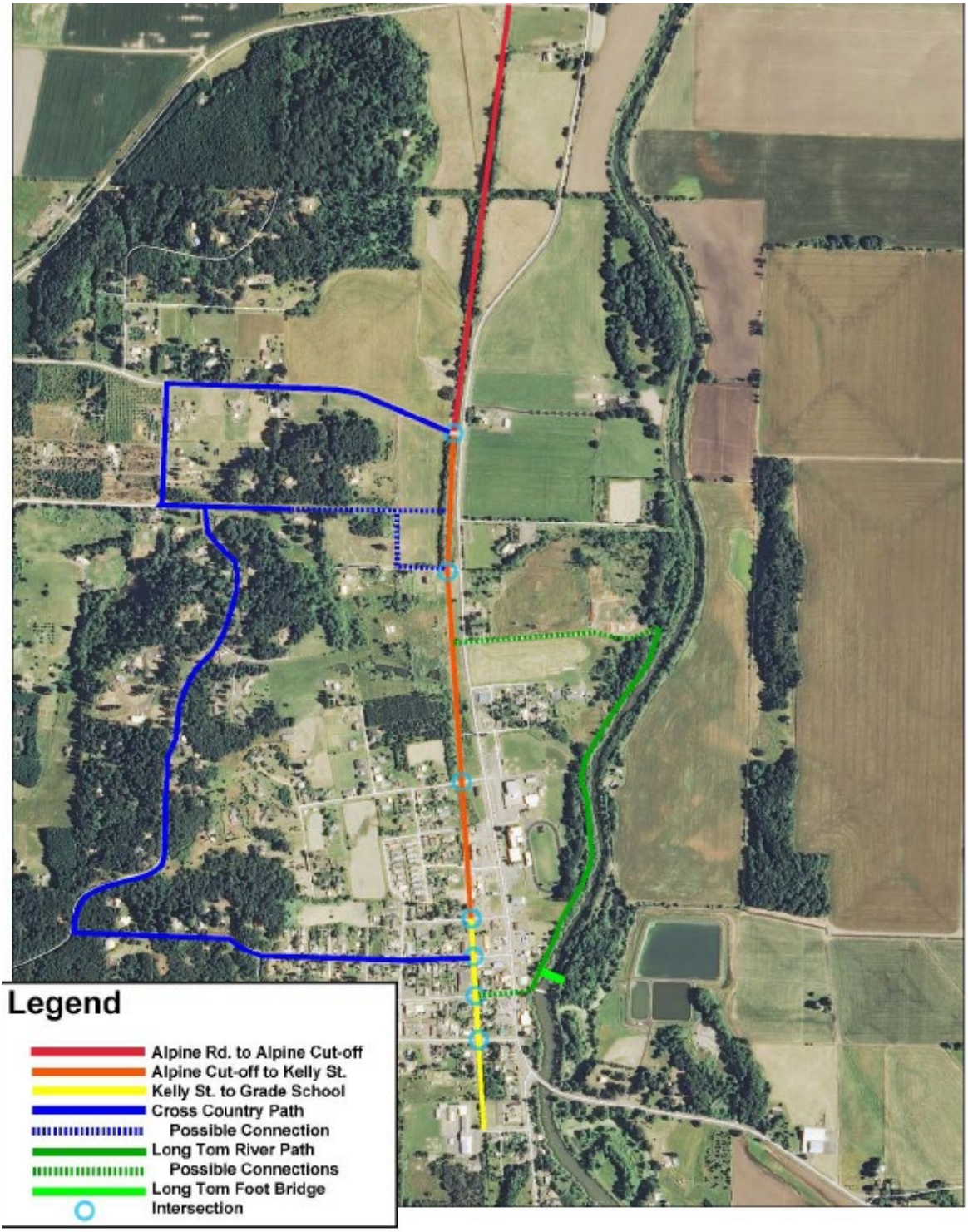


FIGURE 22. RURAL SHARED USE PATH - YACOLT, WA (POP. 1,600)

(Source: https://ruraldesignguide.com/physically-separated/shared-use-path)

FIGURE 23. EXAMPLE OF MARKED CROSSWALK, SOUTH BENTON COUNTY CONNECTIVITY PLAN

FIGURE 24. PROPOSED CONNECTIVITY PROJECTS, SOUTH BENTON COUNTY CONNECTIVITY PLAN



Infrastructure Framework

The elements of the Riverfront District rest on a foundation of the City's basic water, wastewater, and stormwater infrastructure. This section provides recommendations and high-level cost estimates for needed infrastructure improvements to support the long-term growth of the Riverside District and the City of Monroe as a whole. Additional details are available in Attachment A: Public Improvement Plan.

FIGURE 25. EXISTING WATER INTAKE FACILITY

Water Supply Improvements

The City is in the process of increasing the security of its potable water, which is paramount to the success of existing and future development in the Riverside District. Though the City recently obtained permission to withdraw water year-round from the Long Tom River, the rate is limited and the City is currently facing pressure to find an alternative source of water. The future of the drop structure, which allows for current water supply capture, is subject to long-range planning being undertaken by the Army Corps of Engineers (ACOE). Also, the City expects population growth and increased water demand. Based on the conditions described, it is recommended the City take a two-pronged approach to meeting these challenges:

1. **Utilize Alternative Sources of Water.** Use of existing wells appears to be the most feasible and least expensive alternative source of potable water, but will require improvements to the City's existing infrastructure. In addition, the City's existing wells require upgrades - specifically an emergency power supply and the addition of low water pump protection. These improvements have been identified in the City's Water System Master Plan and discussed with City staff, and should be implemented as a high priority improvement.

   Existing wells can provide a sustainable source for most – but not all – of the City's water demands. The City should work to maintain the water rights to the Long Tom River in the future with additional wells or re-explore obtaining water from Kyle Springs. Proactively taking these steps will help ensure support from the Oregon Water Resources Department, the ACOE, and Benton County.

2. **Take a Comprehensive Water Conservation Approach.** This approach will require strong political and community support but has the potential to reduce water use and the economic burden on City ratepayers. The City has been proactive and is already taking such steps as implementing a meter replacement program to better capture actual water use. The following steps are recommended:
    - Implement fair water rate structures that provide affordable prices for those who use water efficiently and significantly higher water rates for customers who use excessive amounts of water. The City's current tiered structure could be adjusted, with a lower base rate for lower water use to encourage lower consumption.
    - Establish a toilet replacement program; higher efficiency toilets can save 12,000 gallons annually over older (pre-1992) models – per toilet. Corvallis has a toilet rebate program that may be a model for Monroe.
    - Strive to educate the public. Educating the public on the cost of their water can help reduce water demand and the cost of water to the ratepayer.

Water Treatment Plant Improvements

The existing Water Treatment Plant has filter media and equipment that is nearing the end of its useful life and it currently lacks an emergency power supply. It is recommended that the City upgrades to replace filter media and equipment, and installs a generator to allow the plant to work throughout a temporary loss of power. Improvements should also include those necessary to treat well water to provide a sustainable water supply.

Making these upgrades is a high priority not only to meet current water demands, but also to support the community's future growth. Given the criticality of ensuring a sustainable water supply, it is strongly recommended that the Water Treatment Plant improvements be considered a high priority project. By making these improvements to the City's Water Treatment Plant, the City would be able to use existing water wells. This would be seen as a movement in the right direction by the Oregon Water Resources Department and help reduce reliance on the existing drop structure on the Long Tom River.

The two water main replacements on OR 99W and on Ash Street are a high priority. These two projects would provide adequate fire flow in case of emergency and would also support future growth. If the City pursued street upgrades in the same area, the water projects could be used as a funding match for grant-funded street improvements, thus addressing multiple needs in the same area.

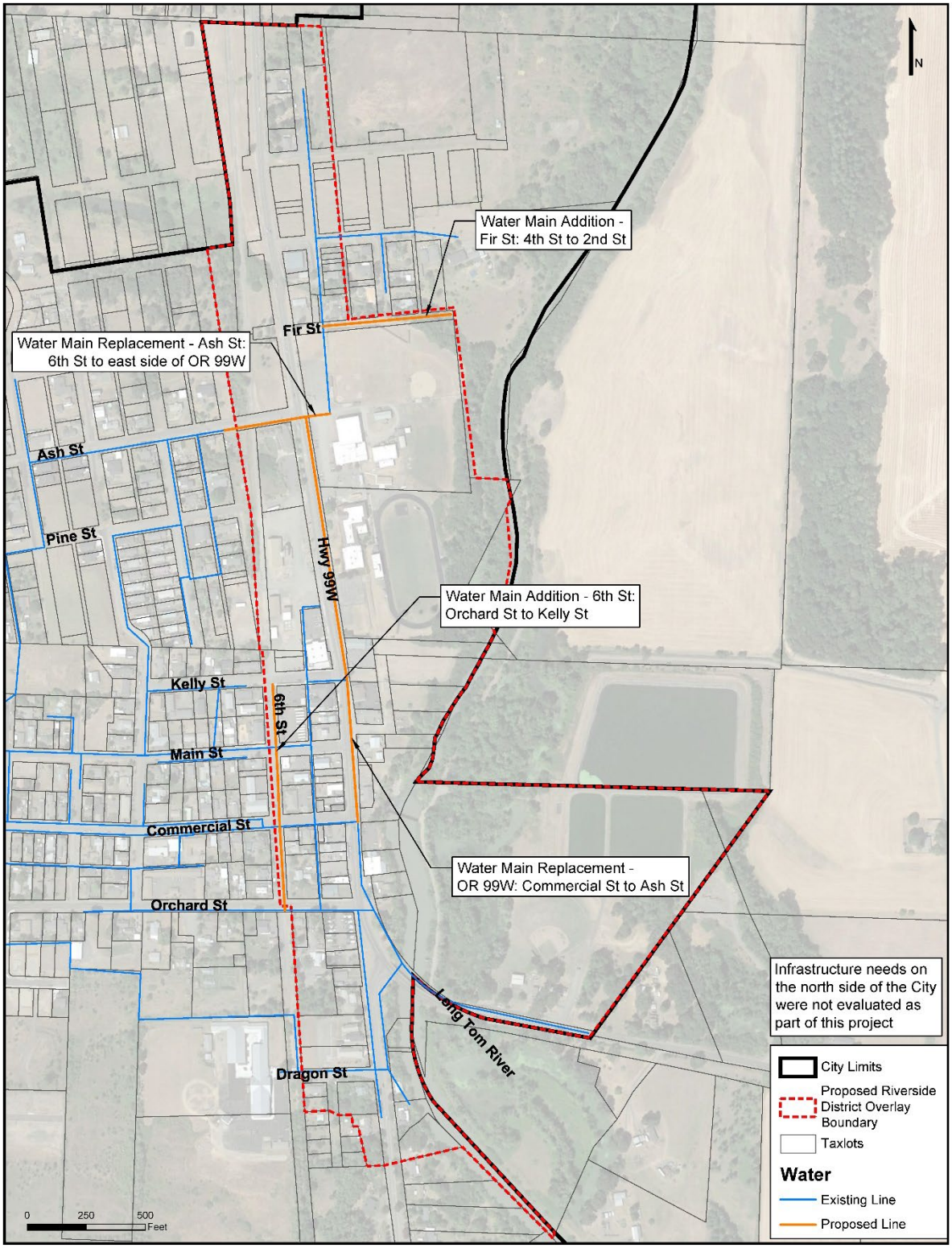
Estimated costs for each of the water system improvements described above are included in Table 2. These estimates are high-level and based on available information

TABLE 2. PLANNING LEVEL COST ESTIMATES FOR WATER SYSTEM IMPROVEMENT PROJECTS[6]

Project Name	Estimated Cost
Water Main Replacement - OR 99W: Commercial St to Ash St	$473,850
Water Main Replacement – Ash St: 6th St to east side of OR 99W	$96,530
Water Main Addition – Fir St: 4th St to 2nd St	$150,930
Water Main Addition– 6th St: Orchard St to Kelly St	$274,905
Water Supply Improvements Option A– Kyle Springs reconnection	$3,792,370
Water Supply Improvements Option B – new well	$2,220,080
Water Treatment Plant Improvements	$1,035,450

[6] Note that these are planning-level costs based on 2020 costs. Construction costs were estimated, and base percentages were assumed for the following additional costs: design (15%), permitting (5%), and construction engineering (15%). Costs for ROW acquisition were not estimated, due the high-level nature of this exercise.

FIGURE 26. WATER SYSTEM IMPROVEMENTS



Wastewater System Improvements

There are a number of deficiencies with the existing wastewater system within the Riverside District. These include undersized sewer mains, mains and laterals in poor condition, and excessive infiltration and inflow. Infrastructure needs associated with wastewater are largely focused on addressing these deficiencies, as well as providing for future growth. Recommended improvements within the study area are briefly summarized below. Estimated costs for each project are included in Table 2. Additional detail is provided in Appendix A: Public Improvement Plan.

- **Conveyance System Replacement – Pike St/OR 99W to Corvallis Street.** This project would involve replacing the existing 10 inch diameter sewer main with 160 feet of 12 inch diameter main.
- **Lift Station Improvements.** Improving the City's lift station would include retrofitting the existing wet well and valve vault, as well as replacing the existing pumps, drives, and generators located at the lift station.
- **Force Main Replacement.** This project would include replacing the existing 1,633 feet of 6 inch welded steel force main.
- **Wastewater Treatment Plant Headworks Upgrades.** These upgrades will reduce the facility's high maintenance costs.
- **Stabilization Lagoon Improvements**. There are a wide range of possible aeration improvements to improve the functioning of these lagoons, each with a wide range of costs (construction and long-term operational costs).

Recommendations & Estimated Costs

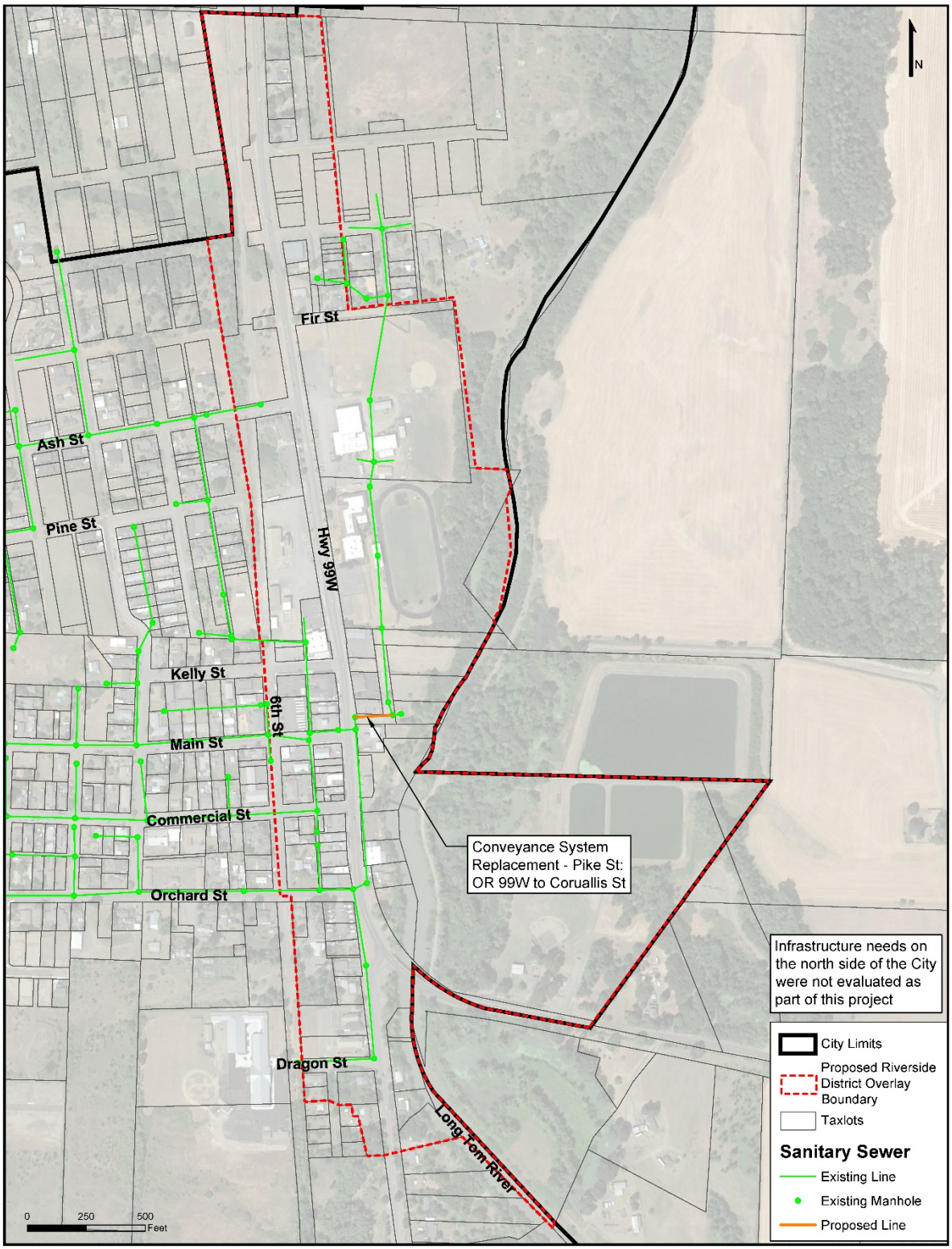
The City should prioritize improvements to the Wastewater Treatment Plant's Headworks and lagoon. The projects will greatly optimize its function and reduce maintenance and operation needs – and thus ongoing costs.

Estimated costs for each of the wastewater system improvements described above are included in Table 3 below. Note that these are planning-level costs based on 2020 costs. Construction costs were estimated and base percentages were assumed for the following additional costs: design (15%), permitting (5%), and construction engineering (15%). Costs for right-of-way acquisition were not estimated, due the high-level nature of this exercise.

TABLE 3. PLANNING LEVEL COST ESTIMATE FOR WASTEWATER SYSTEM IMPROVEMENT PROJECTS

Project Name	Priority	Estimated Cost
Conveyance System Replacement – Pike St: OR 99W to Corvallis St	High	$61,430
Lift Station Improvements	Medium	$656,370
Force Main Replacement under Long Tom River	Medium	$499,140
Headworks Upgrades	High	$421,200
Stabilization Lagoon Improvements	High	$26,330

FIGURE 27. WASTEWATER SYSTEM IMPROVEMENTS



Stormwater System Improvements

Deficiencies with the existing stormwater system within the study area include undersized storm mains and outfalls, sediment build-up, and ponding. Recommended stormwater improvements address these deficiencies and provide for future changes to developing areas. Figure 28 provides a map identifying the improvements. Additional detail is provided in **Appendix A: Public Improvement Plan.**

- **Outfall Pipe Replacement – East of Pine Street along Ash Street.** This project would replace the existing 24-inch outfall pipe and install two 60 inch diameter manholes. The new system would have capacity to convey runoff from a 25-year storm event, which is currently lacking.
- **System and Outfall Pipe Replacement and Area Drain Addition – North of Kelly Street.** This project would replace the existing undersized and install three 60 inch diameter manholes and add an area drain on the west side of Corvallis Street.
- **Pipe Replacement – Commercial Street: 6th Street to alleyway between 6th and 5th Street.** This project would replace the existing undersized pipe with This part of the system is within the most densely populated residential area, which lacks the capacity to convey a 25-year storm event.
- **Quality Standards.** The City's stormwater runoff ultimately enters the Long Tom River; for the most part it is not treated, nor is it flow attenuated to reduce erosion and scouring at the outfall. The Long Tom River and the surrounding landscape would greatly benefit from stormwater receiving water quality treatment and flow control. While the City's resources are limited and retrofit of existing facilities for water quality and flow control would be expensive, the City should consider requiring flow control and water quality treatment for all new development. This would be in accordance with Goal 2 of the 2020-2040 Monroe Comprehensive Plan, directing the City to address water quality issues and improve the functions of natural drainageways.
- **Stormwater Recommendations & Cost Estimates.** It is strongly recommended that the City consider implementing flow control and stormwater quality standards. This does not need to be a high-cost project and can be done incrementally. By adopting stormwater quality standards, the City will be saving money down the road in managing large volumes of untreated stormwater runoff during peak storm events. In addition, the City should consider the two outfall replacement projects as high priority in order to reduce maintenance costs and prevent flooding.

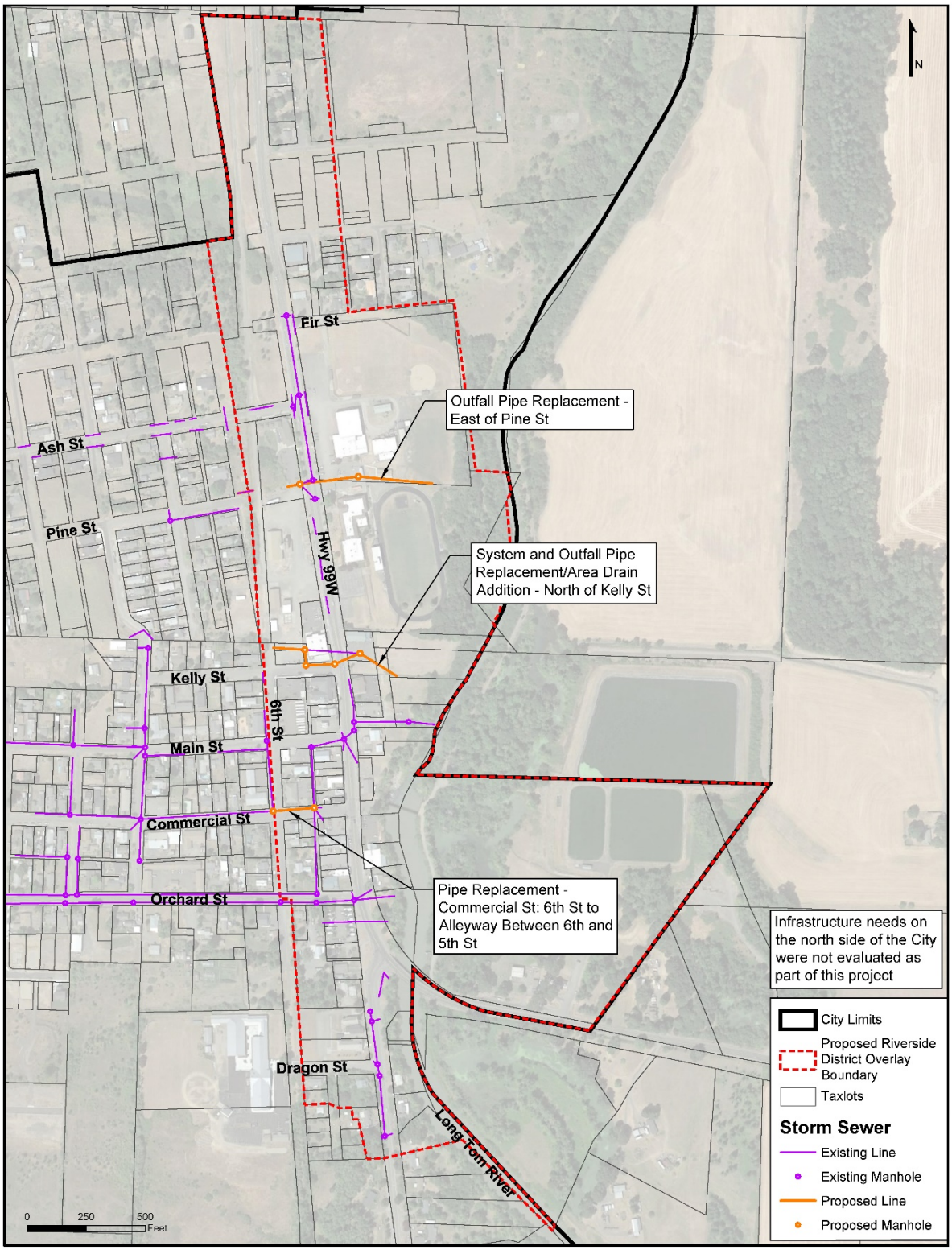
Estimated costs for each of the stormwater system improvements described above are included in Table 4. Note that these are planning-level costs based on 2020 costs. Construction costs were estimated, and base percentages were assumed for the following additional costs: design (15%), permitting (5%), and construction engineering (15%). Costs for ROW acquisition were not estimated, due the high-level nature of this exercise.

TABLE 4. PLANNING LEVEL COST ESTIMATES FOR STORMWATER SYSTEM IMPROVEMENT PROJECTS

Project Name	Priority	Estimated Cost
Outfall Pipe Replacement – East of Pine St	High	$397,880
Outfall Pipe Replacement/Area Drain Addition – North of Kelly St	High	$404,900
Pipe Replacement – Commercial St: 6th St to alleyway	Medium[7]	$94,080

[7] If there are system failures or degradation within this project, then it should be moved to high priority.

FIGURE 28. STORMWATER IMPROVEMENTS



IV. Implementation and Funding

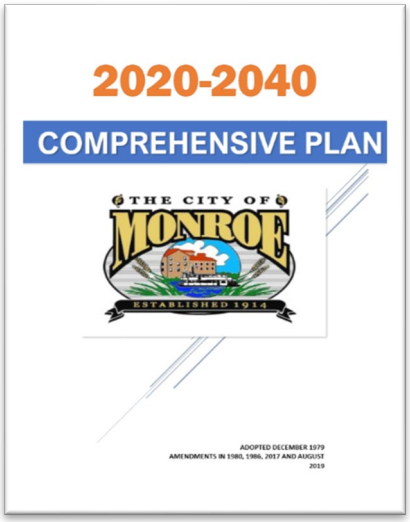
The City's vision for the Monroe Riverside District will be implemented over time through a combination of public investment and private development. Infrastructure improvements, transportation connections, and new and enhanced open spaces will need public investment or public/private partnerships, subject to the discretion and approval of the City's elected and appointed officials. On the private side, the City of Monroe's Comprehensive Plan and Development Code provisions will guide the development and redevelopment of properties in the district to take advantage of, and contribute to, these investments.

This section includes:

- A summary of recommended Comprehensive Plan amendments
- A summary of recommended Development Code amendments
- Funding options for identified projects

Recommended Comprehensive Plan Amendments

The City of Monroe updated its Comprehensive Plan in 2019, and the amendments described here are only minor changes to implement the Riverside District Master Plan.



The Comprehensive Plan lays out the City's over-arching policy for zoning districts and overlays. The policy basis for Riverside District Overlay will be added, and other language amended as needed, for example removing "Currently Underway" from references to this Master Plan effort. These changes are summarized below and described in detail in **Appendix B.**

Recommended changes include:

- Removal of the existing "Highway Corridor Overlay (HCO)" language and replacing with "Riverside District Overlay (RDO)."

> **New Policy to Establish the Riverside District Overlay (RDO):**
>
> The Riverside District Overlay (RDO) is intended to provide development standards, use standards, and other requirements intended to create a vibrant Riverside District that is an amenity to the Monroe Community and an attraction for visitors. The district is intended to take advantage of visual and physical access to the Long Tom River, traffic on Highway 99W, proximity to nearby cities, and the needs and desires of the Monroe community.

- Replacement of the Zoning Map on Page 18 with an updated figure (Master Plan Figure 2) to show the Riverside District Overlay.
- Minor text changes to Policy LU 3.5 (Community Plans), Policy LU 3.7 (Riverside District), Policy LU 8.2 (Land Use Classifications)
- Policy PRF 1.1 (Utilizing Natural Assets) – addition of language to provide multi-modal connections between City Park and the Riverside District.

- Policy ED 2.3 (Support Riverside District Activities) – More general language that is not tied to specific event names.
- Tables LUPP-1 and LUPP-2 – updates to reference this Riverside District Master Plan and associated ordinances.

Recommended Development Code Amendments

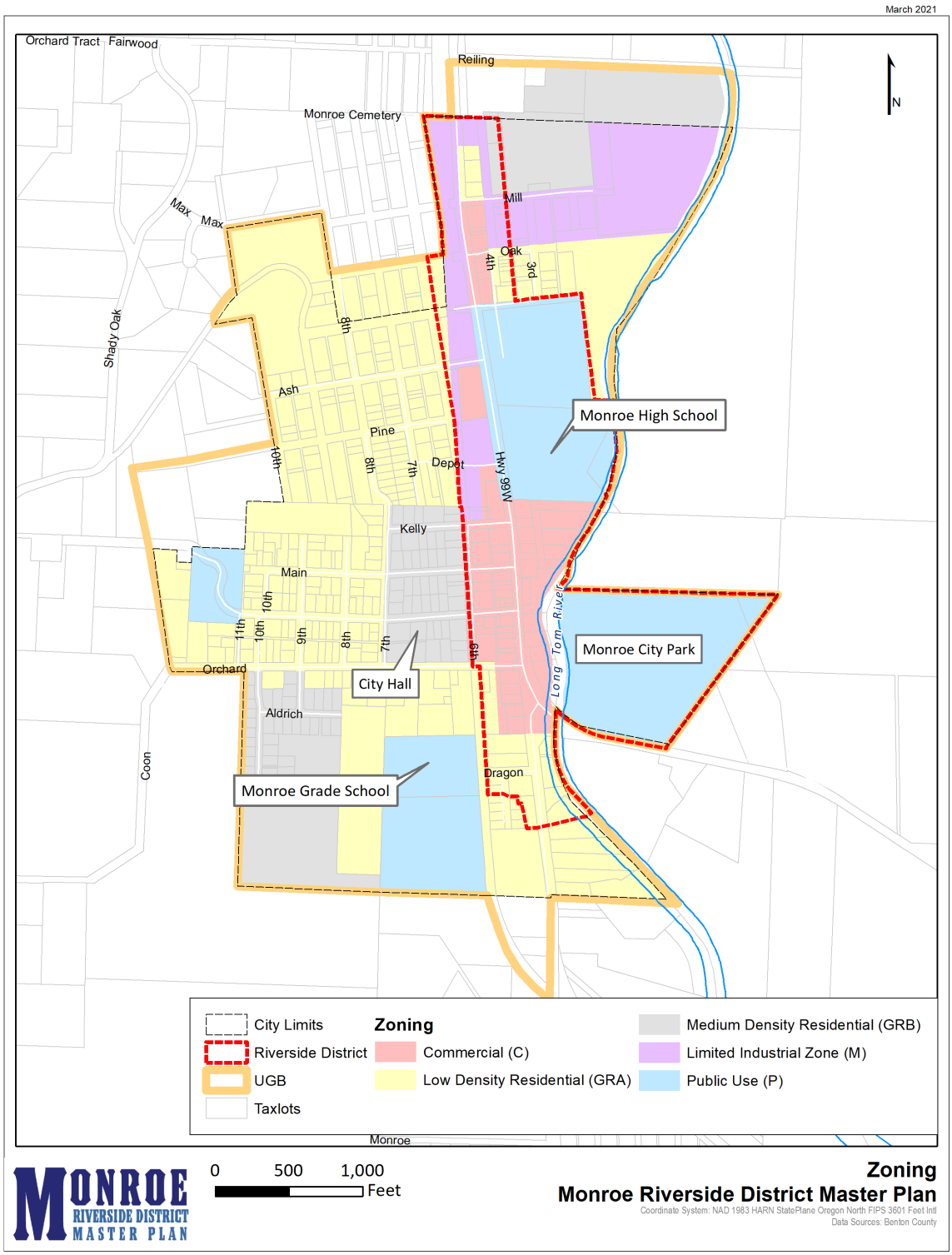
Development and redevelopment of property within the Riverside District is subject to the provisions of the Monroe Land Use Development Code, last updated in 2009. Recommended changes to the code are summarized below; adoption-ready language is included in **Appendix C.**

Base Zones and Overlays

The specific development and land use standards within the Riverside District will apply to land use proposals on parcels within the new "Riverside District Overlay Zone." Requirements of the overlay zone modify the underlying zoning regulations that apply to specific parcels. The location of this overlay and its relationship to existing zoning are shown in Figure 29.

This overlay is intended to replace the City's existing Highway Corridor Overlay Zone, as it includes the same properties and better addresses the community's vision for the district.

FIGURE 29. RIVERSIDE DISTRICT OVERLAY



Development Standards

For the most part, implementing code language is located within the new Riverside District Overlay Zone, though a few changes are recommended to other code sections. The recommended changes address development standards and design characteristics for the Riverside District. They generally address how the District looks and how the public realm is experienced by people on foot, on bicycles, and in automobiles. Changes are focused on:

1. **Building Orientation and Design.** New overlay language requires pedestrian-friendly orientation and design for new development in the district, including locating parking lots behind buildings, build-to lines to enhance the streetscape, and façade articulation.
2. **Access, Circulation, and Parking**. Within the Riverfront District, proposed regulations require access to riverfront-related open spaces as properties on the East side of Highway 99 are developed/redeveloped. Public dedication requirements should reference and reflect planned trails, open space, and other public areas to ensure public amenities are provided through the development process. Modestly reduced parking requirements are recommended, based on the requirements of communities such as Independence, OR. Flexibility to count on-street spaces for some uses is also recommended.
3. **Landscaping, fencing, screening, lighting, and signage.** Other requirements to enhance the design and function of the Riverside District, consistent with the Land Use and Regulatory Framework.

FIGURE 30. CODE GRAPHIC: BUILD-TO LINE

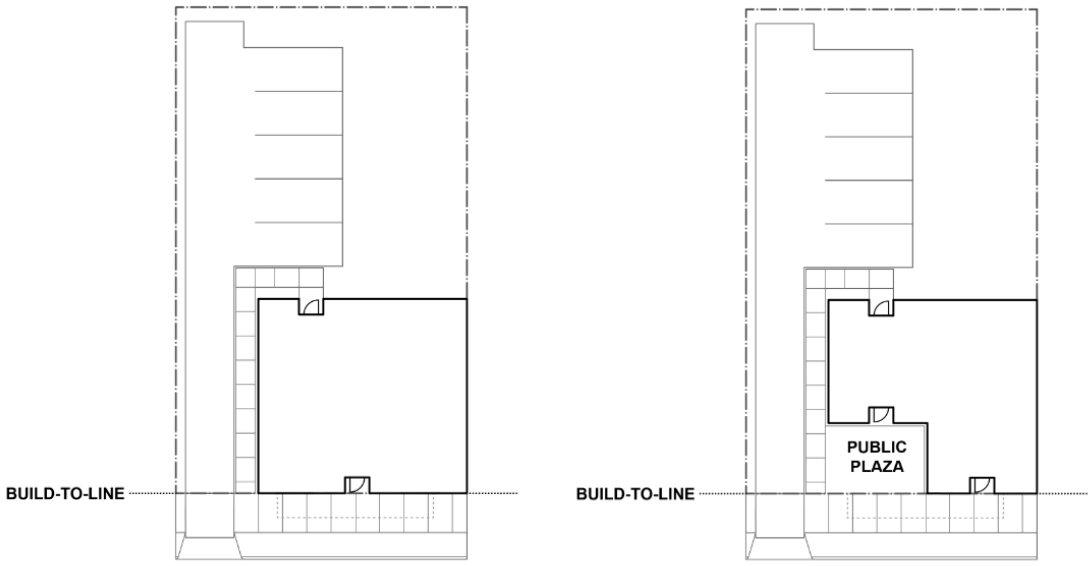


FIGURE 31. CODE GRAPHIC - GLAZING REQUIREMENTS

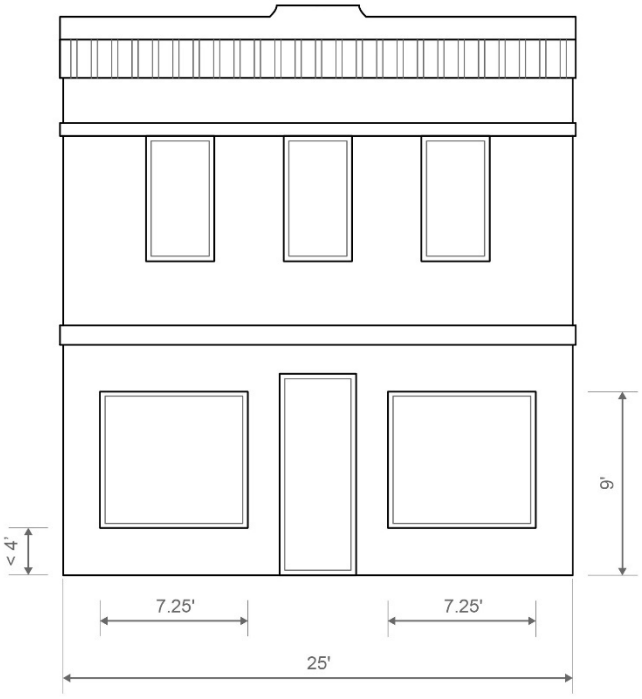
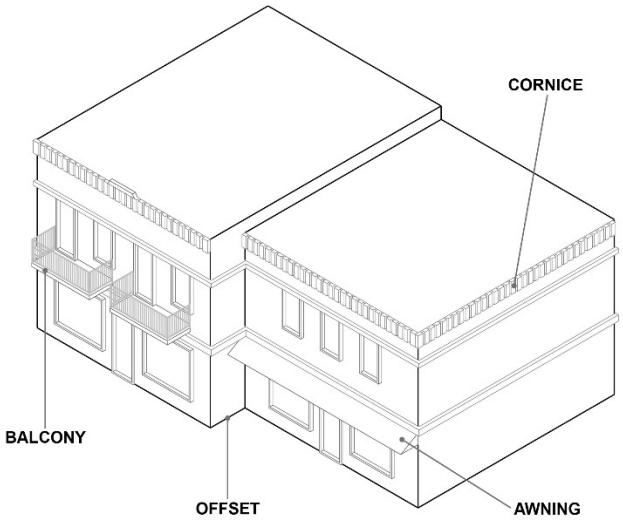


FIGURE 32. CODE GRAPHIC - FACADE ARTICULATION



Use Standards

Proposed Development Code amendments address what may be done with property within the Riverside District, subject to specific development standards. They generally address the kinds of activities, businesses, and housing development that can occur. Again, the implementing code language applies to development within the new Riverside District Overlay Zone; proposed requirements are located in the new overlay chapter.

1. **Housing and Mixed Use.** These recommendations enable residential development as part of commercial developments in the Riverside District (either above or behind the commercial use). Current comprehensive plan policy supports densities up to 18 net units/acre in areas with good transportation connections.
2. **Mixed Employment.** This recommendation adds use standards that allow a mix of light scale manufacturing and commercial activity, such as a winery with a tasting room, to occur on all commercially and industrially zoned land within the Riverside District. The overlay also requires some public-facing activity for industrially zoned land, such as a retail location or restaurant, that is accessory to the primary employment use. This would impact the area zoned Limited Industrial along OR 99W (see Figure 2), allowing industrial activity while contributing to an active Riverfront District that connects along OR 99W throughout the City.
3. **Temporary Uses and Festivals.** These provisions are intended to encourage festivals such as Monroe Fest while requiring permit applications that include details such as duration, health and safety measures, parking, etc.

Other Code Amendments

The set of recommendations necessary to implement the Master Plan include a variety of changes to bring the Development Code into compliance with the Oregon Transportation Planning Rule (OAR 660-012-0060). These changes were recommended as part of the City of Monroe Transportation System Plan (TSP), which was developed as part of the Benton County TSP Update Project in 2019. Changes include:

1. Adding transportation uses to the definitions section
2. Updating access management, street design, and development standards for consistency with the adopted TSP
3. Adding bicycle parking standards for new development and enhancing current pedestrian/bicycle requirements to make them consistent with the adopted TSP
4. Adding a traffic impact analysis requirement for proposals that meet certain thresholds

Funding & Development Incentives

A range of funding mechanisms are available that can help the City achieve the goal of a vibrant city center by incentivizing business growth and private development in the area. Funding sources discussed here are all subject to different revenue generating potential, competitive processes, and timelines.

The following table lists funding mechanisms and presents a priority level for each tool and a suggested timeline for implementation. A brief discussion of each tool follows the table.

TABLE 5. FUNDING AND INCENTIVE TIMELINE

Funding and Incentives	Near Term 1-5 Years	Mid-Term 5-10 years	Long Term 10+ Years	Priority
Current Funding Mechanisms				
SDC's	On-going			High
State Highway Trust Fund	On-going			High
Grants & Partnerships	On-going			High
Alternative Funding Mechanisms				
General Obligation Bonds	Study			Medium
Local Option Levy	Study			Medium
Tax Increment Financing		Study		Low
Improvement District				Low
Construction Excise Tax (CET)				Low
Development Incentives and Tools				
SDC or Fee Waiver, Deferral	Study			Low
Streamline Permitting	Study			Medium
Tax Exemptions & Abatements		Study		Low

Source: Johnson Economics, Memo 6 Potential Funding Strategies

Current Funding Mechanisms

The current funding tools are key to supporting the City's ongoing programs and improvements and are expected to do so going forward. The commonly used funding mechanisms for capital improvement projects in Monroe are System Development Charges (SDCs), state and county funds, and grant programs.

- **SDC's**: These charges are assessed to new construction projects for accessing and expanding demand on the city's infrastructure systems. In Monroe, SDC's are assessed for water, sewer, stormwater, transportation, and parks, plus an administration fee.

  Annual funds from SDC's will vary based on the amount of development in a given year. Forecasted population growth suggests that funds from SDC's will be positive, but modest over the plan period.

  Priority: High

- **State Highway Trust Fund:** This statewide fund receives revenue from the fuel tax, registration and other fees, and trucking fees. Funds are distributed to Oregon cities on a per capita basis for use on road-related projects, including walking and biking in the public right-of-way. Like many small cities, Monroe receives modest but steady funding from the Trust Fund. These funds will take many years to accrue to pay for major infrastructure projects. In 2017, the Trust Fund was forecasted to provide an average of nearly $31,000 per year, or $615,000 over 20 years.

  Priority: High

- **Grants and Partnerships:** The City of Monroe and its community organizations have had much success in seeking outside funds from a variety of state and non-profit agency partners. In recent years, the city has received funding from ODOT, Business Oregon, Travel Oregon, the Willamette Valley Visitors Association, Ford Family Foundation, Corp of Engineers and others. These grants have contributed to a wide range of initiatives including capital improvements, economic development, open space improvements, planning and staffing. Grants have been a good source of funding to move initiatives forward when regular revenues have been modest and should remain a high priority.

  Priority: High

The total resources raised through these traditional mechanisms can help contribute to funding the projects prioritized in the Riverside District Master Plan. However, they are unlikely to be sufficient to fund all identified projects. Additional funding and incentive programs may be helpful in achieve Plan goals, as discussed more below.

Alternative Funding Mechanisms

- **General Obligation Bond:** General Obligation (GO) bonds are secured by a taxing jurisdiction's ability to levy an increased property tax sufficient to pay the bond. The additional property tax is dedicated solely to repaying the bonds and cannot be used for other purposes. The amount and rate of the tax are "unlimited" so a jurisdiction may levy whatever amount is necessary to collect enough taxes to pay the bonds. They are usually issued as long-term, fixed-rate bonds, but they can be issued as short-term bonds, or variable rate bonds as well.

  The total amount of general obligation bonds that a jurisdiction has outstanding is limited to three percent of the jurisdiction's real market value. Bonds that finance local improvement district improvements, water supply, treatment or distribution; sanitary or storm sewage collection or treatment; hospitals or infirmaries; gas, power or lighting; or off-street motor vehicle parking facilities may exceed this three-percent limit. The City should study the possibility of seeking either a bond or levy option to pay for the high-priority projects identified in the Riverside District Master Plan. These may be the best choices for securing a sufficient amount of funding to complete Riverside District projects efficiently and concurrently.

  Priority: Medium

- **Local Option Levy:** A local option levy is a time-limited property tax (five years for operations and 10 years for capital projects), that is subject to voter approval. It is levied in addition to a taxing jurisdiction's permanent rate to pay for specified programs, operations or capital projects.

  The City of Monroe currently has a general obligation bond levy that goes towards debt service on a bond issued more than two decades ago. The levy rate of this bond is similar to the City's permanent levy rate, making it a significant portion of the total local levy. Because new levies require voter approval, a well laid out set of popular projects to undertake is helpful to gain support.

  The City should study the possibility of seeking either a bond or levy option to pay for the high-priority projects identified in the Master Plan. These may be the best choices for

securing a sufficient amount of funding to complete projects efficiently and concurrently rather than in a piecemeal fashion.

Priority: Medium.

- **Tax Increment Financing:** The Tax Increment Financing mechanism (TIF), traditionally known as "urban renewal" can be a powerful tool for generating funds for making public improvements in a district. TIF works by "freezing" the current property tax base in a defined district and assigning the future tax growth to the district itself to pursue projects identified in an adopted plan.

  The current local taxing jurisdictions (city, county, schools, fire districts, etc.) continue to receive tax revenue on the "frozen" tax base throughout the life of the district. However, as the property tax base within the district grows over time, the tax revenue on the new assessed value (above the frozen base) accrues to the TIF district to fund its activities.

  In a successful district, the public improvements incentivize new private development that greatly increases the tax base over time. At the end of the TIF district's duration, all taxing jurisdictions enjoy a tax base that is higher than might have occurred without the facilitation of the TIF projects.

  Urban Renewal funds must generally be used for physical improvements to infrastructure and property, which may be public or private. In support of these goals, the UR agency can contribute to related actions such as direct acquisition or pre-development phases such as feasibility and design. TIF Districts must undergo a feasibility and planning process to determine the boundaries, projects, and revenue potential of the district, and it must be adopted in an Urban Renewal plan.

  Priority: Low. This tool may become more useful in Monroe after some of the Plan projects are implemented and development momentum builds.

- **Construction Excise Tax (for affordable housing):** This tool may be used to achieve new development in the study area if it includes affordable housing. The construction excise tax (CET) is a tax on construction activity of new structures or additional square footage to an existing structure to pay for housing affordable at 80% of the area median income (AMI) or less. Cities or counties may levy a CET on residential construction of up to 1% of the permit value, or on commercial and industrial construction with no limit on the rate.

  The CET is fairly straightforward to administer, with 4% of funds to cover the added administration costs. This administrative set-aside can also help pay the administration costs for related policies adopted for use with this program, such as fee and SDC waivers or tax abatements. While this funding is most typically used to benefit households with incomes at 80% AMI or less, the funds from a commercial CET allow for more flexibility to apply to middle-income housing. In a low-development environment, the CET is an additional cost for developers that will likely disincentivize development further. This source also requires time to build substantial funds in low-development environments. This type of program might be reconsidered in the long-term.

  Priority: Low.

Improvement Districts

Improvement districts assign all or a portion of the cost of infrastructure improvements on the properties that will directly benefit from them. These costs to property owners are in addition to the standard assessed property taxes, but typically substitute for SDCs.

- **Local Improvement District:** A local improvement district (LID) is a method for a group of property owners to pay for improvements that will provide collective benefits to them all. One challenge for using the LID is that the cost of system development is ultimately borne by the property owners in addition to standard assessed property taxes. While it may be logical for the property owners to pay for improvements that will directly benefit them, it can nonetheless hamper future development in an area by adding burdensome costs prior to achieving the planned development.

  Priority: Low. This mechanism is likely to be burdensome to current landowners if they do not have an immediate future buyer/developer identified.

- **Reimbursement District:** Reimbursement districts are similar to an LID but allow for property owners to pay a prorated share of the improvement cost at the time they take advantage of it (i.e. connect to services). The districts are usually smaller in scaleand are often used to connect previously rural residential areas to the municipal water or sewer system. Reimbursement district revenues are contingent on the property owners actually connecting to the services. If they do not connect for a period of 10 years, they do not pay reimbursement.

  Priority: Low.

Development Incentives and Tools

The following are market-based strategies that can provide incentives to encourage developers to build new projects in the community. In general, these incentives help to reduce some of the costs of development that the public sector can influence. All of these incentives come at some cost to the public through waived revenue from fees and taxes and/or staff costs. Therefore, these programs should be carefully calibrated to balance revenue loss vs. public benefit.

- **SDC or Fee Waiver, Exemption or Deferment:** These programs directly reduce the soft costs of development to applicants for desired development types. Development fees are not regulated by state law and cities have significant leeway to waive, reduce, or defer these fees. The City can adopt policies for what types of development are desirable enough for public goals to warrant forgoing these fees. In most cases, fees amount to a smaller cost to the developer than SDCs and therefore are a more modest incentive.

  Cities can reduce their portion of SDCs or negotiate with partner agencies for greater reductions. SDCs and fees can add significant cost to a development project and reducing them can reduce development costs by 3% or more. These reductions can be a significant factor in the cost of development and financing.

Priority: Low. SDCs are a key part of the City's ongoing funding for new and extended services while other funding sources are limited. At this juncture, a reduction program is unlikely. However, the City might consider implementing these incentives in the future if other funding sources such as TIF became available to backfill the lost fees to the City and its partners.

- **Streamline Permit and Review Process:** Jurisdictions can search for ways to reduce time and costs in the review and permitting process to developers building desired housing types. This incentive can be accomplished by reducing review times, consolidating steps in the process, and reducing or simplifying submittal requirements. In few industries is the adage that "time is money" more true than in the development industry. Any reduction in process time translates into reduced costs and greater certainty to the developer and their partners.

  Streamlining the process can also involve an internal audit of the process to ensure it is efficient for both City staff and applicants. This might involve providing clear and accessible information on requirements, and potentially also building in enough flexibility to consider innovative or new forms of development.

  While Monroe already has an efficient and streamlined permitting process, and a relatively low volume of permit requests, a routinely scheduled reexamination may find further efficiencies.

  Priority: Medium.

- **Tax Exemptions or Abatements:** Alleviating property taxes offers another financial incentive to developers that can improve the long-term economic performance of a property and improve its viability. This can be a substantial incentive, but a city or county will forego taxes on the property, generally for ten years. Other taxing jurisdictions are not included unless they agree to participate.

  Tax exemption programs are authorized by the state to incentivize specific development: Vertical Housing, Multiple-Unit Housing Exemption, and Non-Profit Low-Income Housing. Implementation of tax exemption programs requires adoption by local officials and establishment of program goals and policies. They can be a good incentive to focus housing development in key areas and encourage more density and mixed uses in town centers.

  Currently vertical or affordable housing is not as high of a priority in this relatively low-cost community as is providing more market-rate development. Also, the community seeks to maintain the tax base at this time. Policies to incentivize these housing types specifically may be reexamined in the future.

  Priority: Low.

V. Appendices

Appendix A: Public Improvement Plan

Appendix B: Comprehensive Plan Amendments

Appendix C: Development Code Amendments

Appendix D: Transportation Improvements

Appendix A

Public Improvement Plan

I. Introduction

The City of Monroe adopted a comprehensive plan update in 2019 that envisions the Riverside District as a place with "vibrancy and vitality" that is "an asset and source of pride for the whole community, as well as a significant attraction for visitors." The Riverside District Master Plan process has developed a set of goals and objectives based on the adopted vision, which are detailed in Memorandum 2.

This memorandum identifies potential public improvements that can help the City of Monroe achieve the goals and objectives identified for the Riverside District and provides a high-level feasibility analysis and planning-level cost estimates for potential improvements.

This memorandum is organized by infrastructure system as follows:

- Potable Water Improvements
- Wastewater Improvements
- Stormwater Improvements
- Transportation Improvements
- Natural Resource Enhancements
- Parks and Open Space Improvements

II. Potable Water Improvements

A number of deficiencies with the existing water system within the study area were discussed in Memo #3. These include leaking watermains, inadequate fire flow capacity in distribution and transmission mains, buried valves, inoperable hydrants, insecure water supply/production, and water treatment plant equipment shortcomings. Water system improvements include addressing these deficiencies, and also providing for future growth and potential changes to the City's predominant water supply. A map identifying a number of improvements is included as **Figure 1**. Recommended improvements within the study area are briefly summarized in the paragraphs below. Estimated costs for each water system project are included in **Table 1**, following these paragraphs.

Water Main Replacement - OR 99W: Commercial St to Ash St

This project would include replacing the existing undersized transmission water main on OR 99W between Commercial and Ash Streets with 1,600 feet of 10 inch main. Work would also include replacement of existing water services and hydrants.

This project will provide for growth as projected in the Water System Plan for a future population of 675 people. As of July 2018, Monroe's estimated population is 625 individuals.

Therefore, this project should be considered high priority in order to accommodate for current fire flow needs and near-term future projected water demand.

This project has the potential to be used as a local funding match for multiple transportation improvement projects, which are discussed later in this memorandum. These include the shared use path on OR 99W between Alpine cut-off and Kelly St, and the improved bicycle facility on OR 99W between Kelly St and Orchard Street.

Water Main Replacement – Ash St: 6th St to east side of OR 99W

This project would include replacing the existing undersized 6 inch transmission water main on Ash Street between 6th Street and OR 99W with 350 feet of 10 inch main. This work would also include replacement of existing water services.

This project will provide for fire flow water demand and should be accomplished as soon as practical.

This project has the potential to be used as a local funding match for a transportation improvement project, which is discussed later in this memorandum. This includes the improvement of the north side walk on Ash St from the railroad to OR 99W.

Water Main Addition – Fir St: 4th St to 2nd St

This project would include installing 600 feet of 8 inch PVC pipe on Fir Street between 4th and 2nd Streets, including water services and hydrants. This improvement is intended to increase the water system's reliability, as well as provide additional fire flow protection in the distribution system. This work would also include water services and hydrants.

Although not critical at present, this project will improve the system's reliability and allow for future water demand and development in the northeast portion of Monroe.

Water Main Addition– 6th St: Orchard St to Kelly St

This project would include installing 945 feet of 8 inch PVC pipe on 6th Street between Orchard and Kelly Streets, including hydrants and water services. This improvement is intended to increase the system's reliability, as well as provide additional fire flow protection in the distribution system.

Although not critical at present, this project will improve the system's reliability and allow for future water demand and development in northern half of Monroe.

This project has the potential to be used as a local funding match for multiple transportation improvement projects, which are discussed later in this memorandum. These include the modernization of 6th St with the addition of sidewalks, and the enhancements of the pedestrian crossing at the intersection of Orchard St and 6th St.

Water Supply Improvements

As discussed in Memo #3, the future of the City's potable water supply is insecure. Though the City recently obtained permission to withdraw water year round from the Long Tom River, the rate is limited and the City is currently facing pressure to find an alternative source of water. The future of the drop structure, which allows for current water supply capture, is uncertain and subject to long-range planning being undertaken by the Army Corps of Engineers (ACOE). Also, the City expects population growth and increased water demand. We suggest a two-pronged approach to meeting these challenges:

1) Utilizing alternative sources of water
2) Take a comprehensive water conservation approach

Alternative Water Sources

Use of existing wells appears to be the most feasible and least expensive alternative source of potable water, but will require improvements to the City's existing infrastructure. Well 1 and Well 2 could provide the majority of the City's current water demand. However, the chemical constituents of this well water requires treatment to meet drinking water requirements. The existing Water Treatment Plant (WTP) will require upgrades to treat this water, including a sand filter and coagulation basin. In addition, the City's existing wells require upgrades - specifically an emergency power supply and the addition of low water pump protection. These improvements have been identified in the City's Water System Master Plan, and discussed with City staff. They should be implemented as a high priority improvement.

Existing wells can provide a sustainable source for most – but not all – of the City's water demands. The City should work to maintain their water rights to the Long Tom River in the future with additional wells, or re-explore obtaining water from Kyle Springs. Proactively taking these steps will help ensure support from the Oregon Water Resources Department, the ACOE, and Benton County.

Comprehensive Water Conservation Approach

We also recommend taking a comprehensive water conservation approach. This will require strong political and community support, but has the potential to reduce water use and the economic burden on City ratepayers. We understand that the City has been proactive, and is already taking such steps as implementing a meter replacement program to better capture actual water use. We further recommend taking the following steps:

- Implementing fair water rate structures (affordable prices for those who use water efficiently, and significantly higher water rates for customers who use excessive amounts of water). The City currently has a tiered structure, with one rate for up to 400 CF, and a higher rate for over 400 CF. The This could be further broken up, with a lower base rate for lower water use to encourage lower consumption.
- Establish a toilet replacement program; higher efficiency toilets can save 12,000 gallons annually over older (pre-1992) models – per toilet. If possible, Monroe could talk to the

City of Corvallis to see if they would be willing to share their toilet rebate program with Monroe citizens. The cost of the toilet rebates could be covered by grant funding, if Corvallis was willing to help with administrative costs.

- Strive to educate the public. Even if the City does not ultimately implement a retrofit program, educating the public on the cost of their water can help reduce water demand (and the cost of water to the ratepayer). Even minor efforts can help, such as a booth at the farmer's market to talk about water conservation in terms of dollars and cents.

Water Treatment Plant Improvements

The existing Water Treatment Plant (WTP) has filter media and equipment which is nearing the end of its useful life, and currently lacks an emergency power supply. We recommend upgrades to replace filter media and equipment, and to install a generator to allow the WTP to work throughout a temporary loss of power.

Improvements would also include those necessary to treat well water to provide a sustainable water supply, as described earlier in this memorandum.

Making these upgrades is a high priority not only to meet current water demands, but also to support the community's future growth.

Recommendations

Given the criticality of ensuring a sustainable water supply, we strongly recommend that the Water Treatment Plant Improvements be considered a high priority project. By making these improvements to the City's Water Treatment Plant, the City would be able to utilize existing water wells. This would be seen as a movement in the right direction by the Oregon Department of Water Resources, and help reduce reliance on the existing drop structure on the Long Tom River.

We further recommend that the two water main replacements on OR 99W and on Ash Street be considered high priority. These two projects would provide adequate fire flow in case of emergency, and would also support future growth. If the City pursued street upgrades in the same area, the water projects could be used as a funding match for grant-funded street improvements, thus addressing multiple needs in the same area.

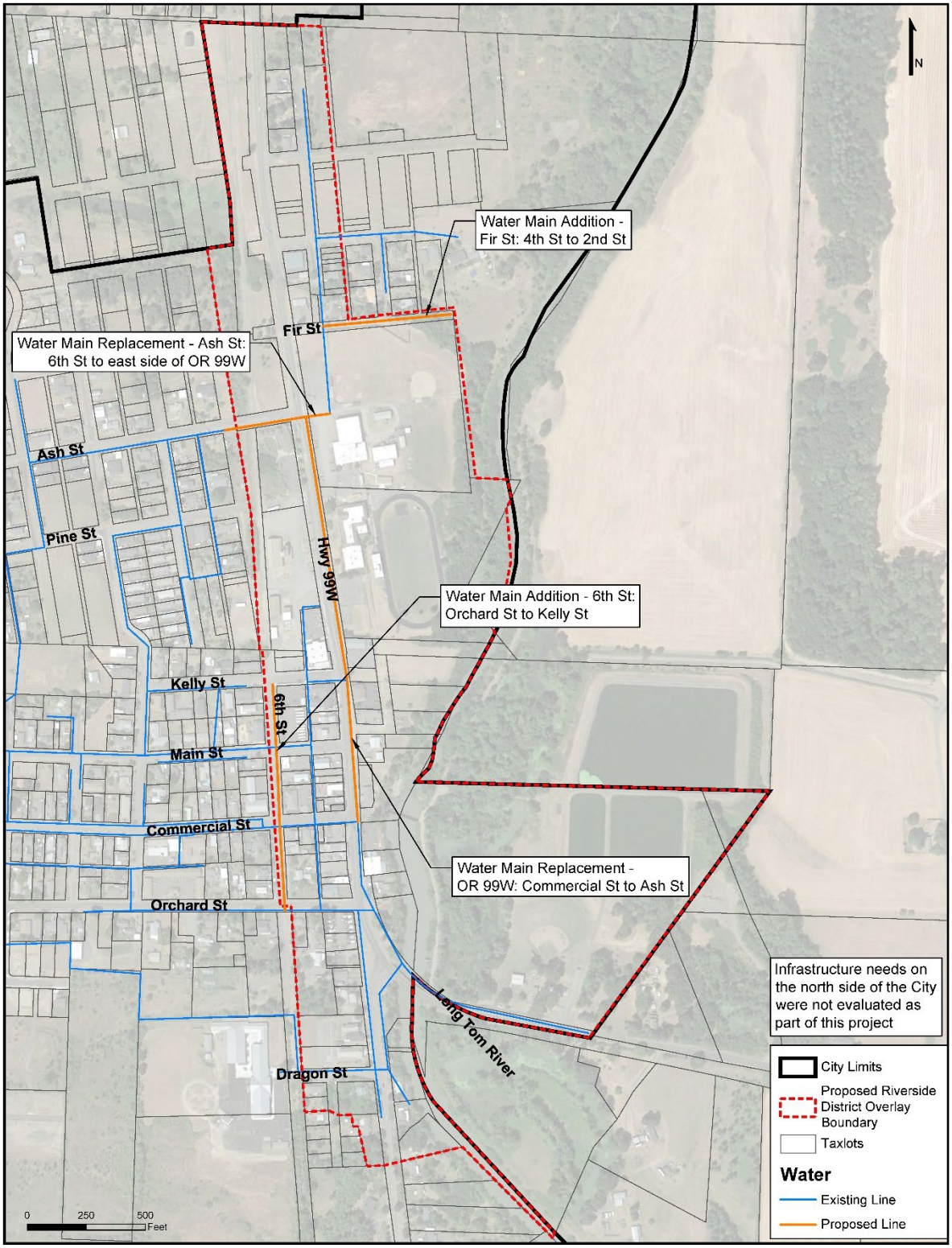
Estimated Costs

Estimated costs for each of the water system improvements described above are included in **Table 1**. Note that these are planning-level costs based on 2020 costs. Construction costs were estimated, and base percentages were assumed for the following additional costs: design (15%), permitting (5%), and construction engineering (15%). Costs for ROW acquisition were not estimated, due the high-level nature of this exercise.

Table 1: Planning Level Cost Estimate for Water System Improvement Projects

Project Name	Estimated Cost
Water Main Replacement - OR 99W: Commercial St to Ash St	$473,850
Water Main Replacement – Ash St: 6th St to east side of OR 99W	$96,530
Water Main Addition – Fir St: 4th St to 2nd St	$150,930
Water Main Addition– 6th St: Orchard St to Kelly St	$274,905
Water Supply Improvements Option A– Kyle Springs reconnection	$3,792,370
Water Supply Improvements Option B – new well	$2,220,080
Water Treatment Plant Improvements	$1,035,450

Figure 1: Water System Improvements



III. Wastewater Improvements

A number of deficiencies with the existing wastewater system within the study area were discussed in Memo #3. These include undersized sewer mains, mains and laterals in poor condition, excessive infiltration and inflow. Infrastructure needs associated with wastewater are largely focused on addressing these deficiencies, and also providing for future growth. Though there are other projects listed in the Wastewater Master Plan within the study area, these are not necessary to provide for the 20 year planning window according to current project populations, and are therefore not mentioned here. A map identifying the improvements is shown in **Figure 2**. Recommended improvements within the study area are briefly summarized below. Estimated costs for each project are included in **Table 2**, following these paragraphs.

Conveyance System Replacement – Pike St: OR 99W to Coruallis St

This project would involve replacing the existing 10 inch diameter sewer main with 160 feet of 12 inch diameter main. The existing pipe is undersized for existing flow, which could result in surcharges within manholes during peak flows and/or storm events. Installing adequately-sized, newer pipe will extend the life span of the sewer collection system and minimize I/I flows (resulting in lower costs for treating wastewater).

This project is high priority and should be completed when funding is available.

Lift Station Improvements

Improving the City's lift station would include retrofitting the existing wet well and valve vault, as well as replacing the existing pumps, drives, and generators located at the lift station. This will allow for the installment of new submersible pumps and new controls to meet pump capacity requirements. SCADA improvements should also be made to allow for remote monitoring and operation of the lift station.

According to the Wastewater System Master Plan, the lift station does not have capacity for actual peak instantaneous flow, which leaves the City of Monroe vulnerable to unauthorized discharges during peak flows. However, in conversation with City staff, the actual pump run times are relatively low, indicating that actual peak flows may be lower than projected. Therefore, this project should be considered moderate priority until such time as future development and greater sewage flows prompt upgrades.

Force Main Replacement

This project would include replacing the existing 1,633 feet of 6 inch welded steel force main with an 8 inch HDPE force main, installed with a combination of open trench and directionally drilled construction methods. The existing force main is routed under the Long Tom River and a slough region where it discharges into the first detention pond for treatment. The replacement

alignment should carefully consider the potential changes in grade due to future river restoration and scouring. Though directional drilling is traditionally more expensive, if a deeper vertical alignment is necessitated by future grade considerations, it may be preferable to open trench construction through native rock soils.

According to the Wastewater System Master Plan, the force main does not have capacity for the current peak flows. It should be noted that this may not be accurate given the actual pump run times experienced at the lift station. Though the forcemain is steel and over 50 years old, it should be noted that there are check valves at high points, so the main has relatively low likelihood of internal corrosion due to H2S.

Given the age and insufficient flow capacity of the existing force main, it is recommended that it be replaced when the lift station is upgraded. This project is considered a moderate priority in order to meet peak flow needs.

Wastewater Treatment Plant Headworks Upgrades

The existing headworks facility requires heavy maintenance due to inadequate screenings. To reduce these relatively high maintenance costs, we recommend installing an automated fine screen system with a manually cleaned bypass screen, and a modern washer/compactor system. This should be considered a high priority upgrade.

Stabilization Lagoon Improvements

Currently the existing wastewater treatment plant lagoons are not high-functioning, and have ongoing higher than typical costs in maintenance and operation of the lagoons. City staff desire to aerate the lagoons, changing their function from anaerobic to aerobic. This would decrease odor, increase mixing potential, and improve their function. The City intends to discuss this change with Department of Ecology at their next permit renewal.

There are a wide range of aeration improvements that the City could make, each with a wide range of costs (construction and long-term operational costs). The Wastewater Treatment Plant's current management is experienced and capable. We recommend that the City allocate operational budget to allow incremental aeration improvements to be made at the discretion of management. This project is considered a high priority.

Recommendations

We recommend that the City prioritize improvements to the Wastewater Treatment Plant's Headworks, and lagoon. The projects will greatly optimize function of the Plant, and reduce maintenance and operation needs – and thus ongoing costs.

Estimated Costs

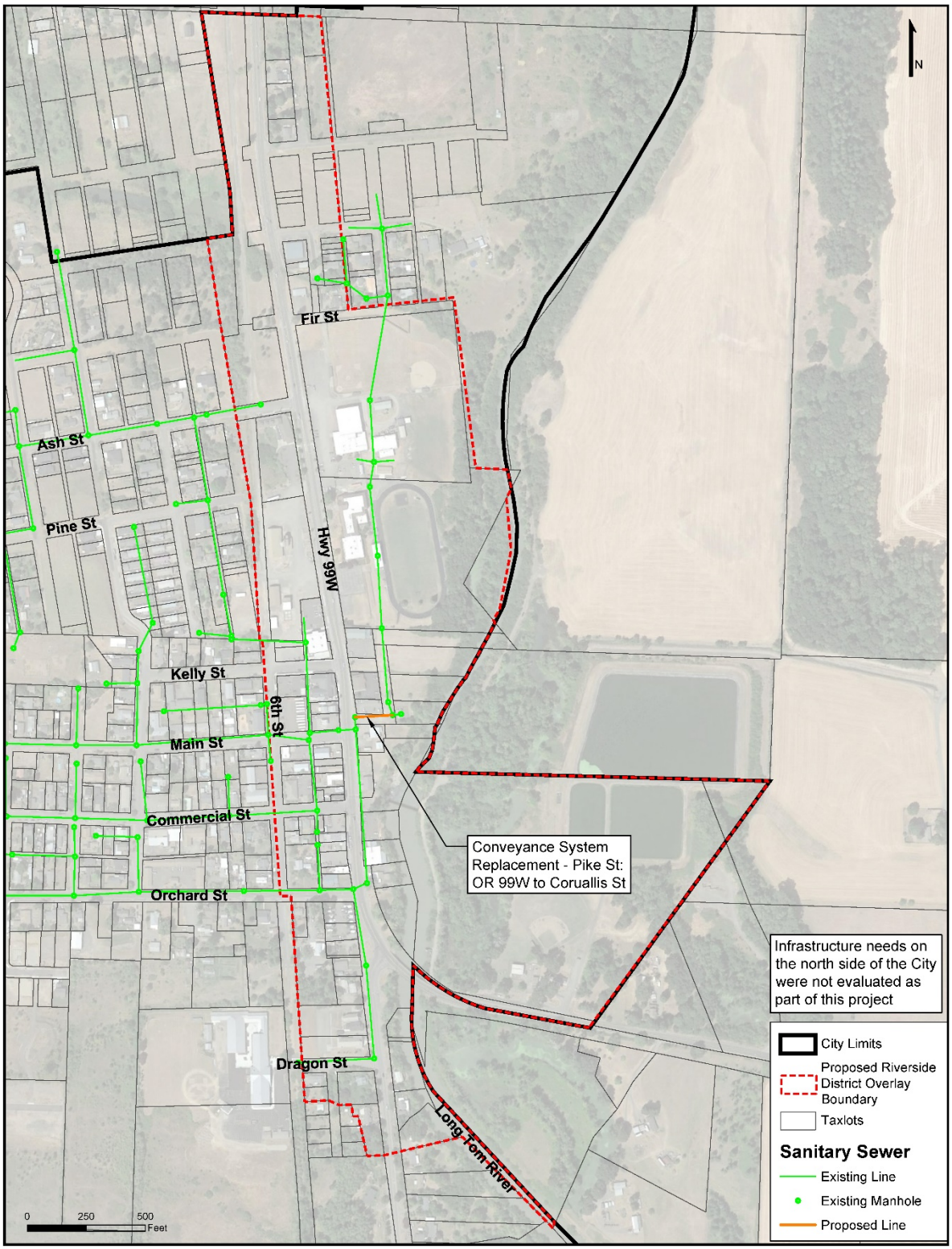
Estimated costs for each of the wastewater system improvements described above are included in **Table 2** below. Note that these are planning-level costs based on 2020 costs. Construction

costs were estimated, and base percentages were assumed for the following additional costs: design (15%), permitting (5%), and construction engineering (15%). Costs for ROW acquisition were not estimated, due the high-level nature of this exercise.

Table 2: Planning Level Cost Estimate for Wastewater System Improvement Projects

Project Name	Estimated Cost
Lift Station Improvements	$656,370
Force Main Replacement under Long Tom River	$499,140
Headworks Upgrades	$421,200
Conveyance System Replacement – Pike St: OR 99W to Coruallis St	$61,430
Stabilization Lagoon Improvements	$26,330

Figure 2: Wastewater Improvements



IV. Stormwater Improvements

A number of deficiencies with the existing stormwater system within the study area were discussed in Memo #3. These include undersized storm mains and outfalls, sediment build-up, and ponding. Stormwater improvements include addressing these deficiencies and provide for future changes to developing areas. A map identifying the improvements is given as **Figure 3**. Several improvements are summarized in the paragraphs below.

Outfall Pipe Replacement – East of Pine St: along Ash St

This project would replace the existing 24 inch outfall pipe with 90 feet of 30 inch and 614 feet of 34 inch RCP pipe, and install two 60 inch diameter manholes. The new system would have capacity to convey runoff from a 25-year storm event, which is currently lacking.

This project is high priority and should be completed as soon as adequate funding is available.

System and Outfall Pipe Replacement and Area Drain Addition – North of Kelly St

This project would replace the existing undersized 24 inch outfall pipe with 670 feet of 36 inch RCP pipe to address ponding, and install three 60 inch diameter manholes. An area drain would be added on the west side of Corvallis St with 93 feet of 8-inch PVC piping connecting it to the same drainage channel as the outfall pipe. This project would provide capacity for modeled storm events and eliminate the current sediment buildup at the inlet and outlet.

This project is high priority and should be completed as soon as adequate funding is available.

Pipe Replacement – Commercial St: 6th St to alleyway between 6th and 5th St

This project would include replacing the existing undersized pipe with 168 feet of 24 inch RCP piping and replacing two manholes with 60 inch diameter manholes. This part of the system is within the most densely populated residential area, which lacks the capacity to convey a 25-year storm event.

This project is not critical but should move to high priority once a high priority project is completed. If there is future development upstream of the system in west Monroe then this project must be completed to provide for future flow. If there are system failures or degradation within this project, then it should be moved to high priority.

Implement Flow Control and Water Quality Standards

We should note that currently, there are no planned projects to improve stormwater water quality or flow control within the City's Stormwater Master Plan.

Currently, the City's stormwater runoff ultimately enters the Long Tom River. For the most part, this runoff is not treated, nor is it flow attenuated to reduce erosion and scouring at the outfall. The Long Tom River and the surrounding landscape would greatly benefit from stormwater receiving water quality treatment and flow control. We understand that the City's resources are limited and retrofit of their existing facilities for water quality and flow control would be expensive.

That being said, the City should consider requiring flow control and water quality treatment for all new development. This would be in accordance with Goal 2 of the 2020-2040 Monroe Comprehensive Plan, to address water quality issues and improve the functions of natural drainageways. The cost of adding stormwater improvements is extremely low compared to the overall cost of new homes or other developments, especially in this region. Requiring developers to incorporate stormwater treatment and flow control should not appreciably increase the cost of new homes, and will improve the health of the river and surrounding natural resources.

Monroe's stormwater system is not regulated or required to operate under a Phase II MS4 system. The City is therefore free to craft their own version of stormwater standards, to meet the community's goals.

Recommendations

We strongly recommend that the City consider implementing flow control and stormwater quality standards. This does not need to be a high cost project, and can be done incrementally, by adopting other similar city's standards. By adopting such standards, the City will be saving themselves money down the road in managing large volumes of untreated stormwater runoff during peak storm events. We further recommend that the City consider the two outfall replacement projects as high priority, to reduce maintenance costs and prevent flooding.

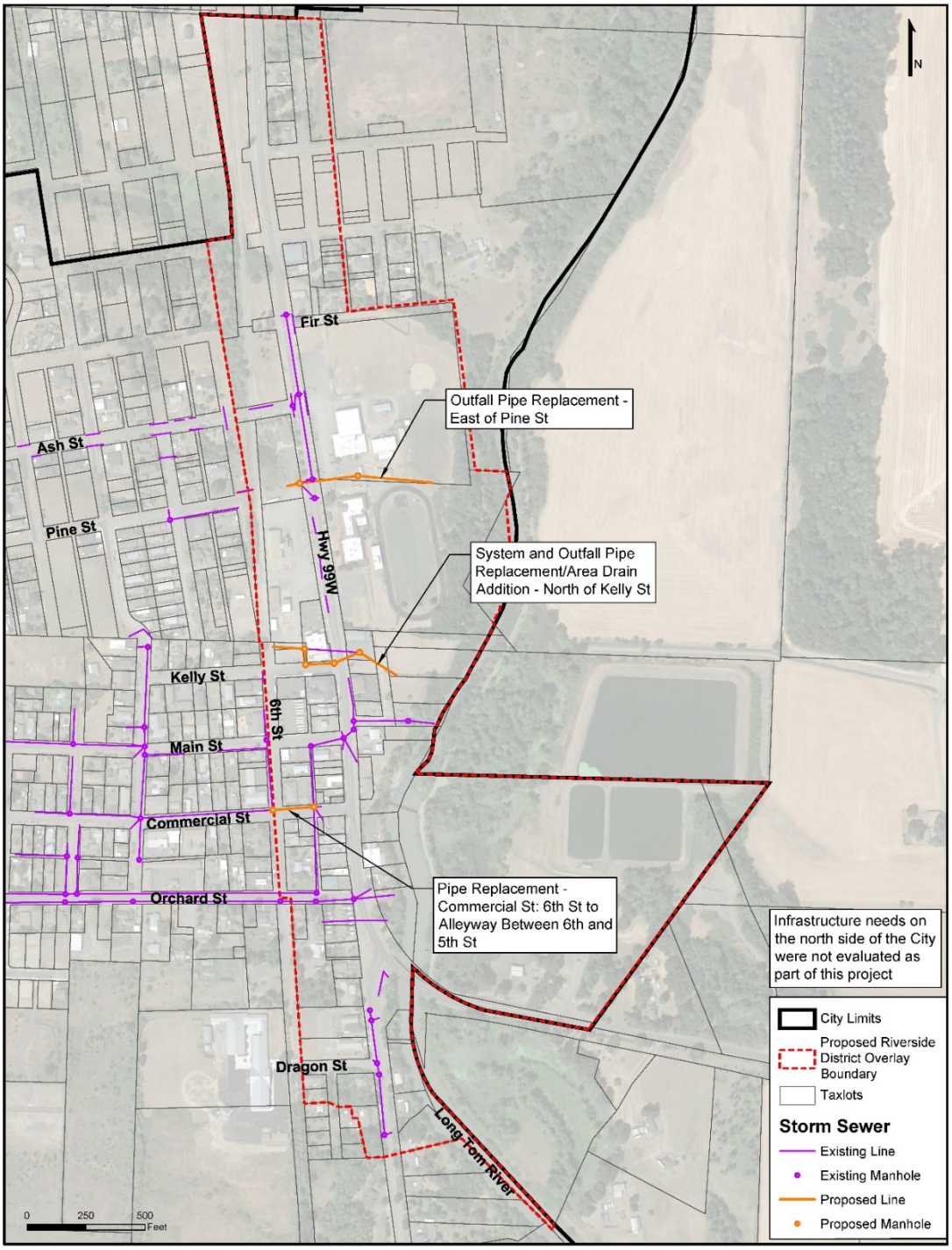
Estimated Costs

Estimated costs for each of the stormwater system improvements described above are included in **Table 3** below. Note that these are planning-level costs based on 2020 costs. Construction costs were estimated, and base percentages were assumed for the following additional costs: design (15%), permitting (5%), and construction engineering (15%). Costs for ROW acquisition were not estimated, due the high-level nature of this exercise.

Table 3: Planning Level Cost Estimate for Stormwater System Improvement Projects

Project Name	Estimated Cost
Outfall Pipe Replacement – East of Pine St	$397,880
Outfall Pipe Replacement/Area Drain Addition – North of Kelly St	$404,900
Pipe Replacement – Commercial St: 6th St to alleyway	$94,080

Figure 3: Stormwater Improvements



V. Transportation Improvements

The transportation system needs for the Monroe Riverside District (identified in Memorandum #3 Existing and Future Conditions) include:

- **Improved active transportation facilities** – Many blocks west of OR 99W need new or improved sidewalks. The bike lane along OR 99W has a gap between Kelly Street and Orchard Street and is narrow when crossing the Long Tom River bridge. These conditions result in impediments for active transportation users accessing the Riverside District.
- **Improved river access** – There is no access to the Long Tom River on the west side and the only connection to the City Park on the eastside is via the OR 99W bridge, which has narrow shoulders for walking and biking. A safe river crossing for people walking and biking is needed.
- **Improved transit access** – There is currently no fixed-route transit connecting Monroe with any neighboring cities but improvements can be made to existing infrastructure, such as access to the bus shelter, that will improve the quality of transit when service is restored.
- **No identified congestion issues** – Increased traffic in the future is not expected to cause congestion at any of the major intersections in Monroe including: OR 99W & Orchards Street, OR 99W & Territorial Highway, and 6th Street & Orchard Street.

The recommended transportation system improvements are broken down into five categories:

1. **Access from the West/South** – These projects improve active transportation facilities on streets that provide access between the OR 99W corridor and residential areas to the west and south, enhancing the overall walkability of Monroe.
2. **Improve OR 99W** – These projects improve active transportation facilities along OR 99W including projects that make it easier to cross the street (MRDP-7) and visual cues that encourage slower travel speeds by people driving (MRDP-8).
3. **Parallel Routes to OR 99W** – These projects improve streets and paths parallel to OR 99W. They connect the existing residential areas of Monroe with the Riverside District and provide comfortable alternative routes to the busier highway.
4. **River Access** – These projects improve active transportation access to the Long Tom River. They improve the visibility of the river (MAT-18) by providing public access on the west side and improve the accessibility of City Park (MAT-19).
5. **Transit Access** – These projects improve transit access to and from the commercial core. Improvements to transit accessibility enhance regional access to the Riverside District for people without vehicles or who cannot drive and also people with vehicles who may not want to drive.

Feasibility of Project Categories

- Access from the West/South, Parallel Routes to OR 99W, and Transit Access – feasibility in these categories is directly tied to cost. All projects in these categories can be completed within existing public right-of-way and are short segments of new sidewalk construction or restriping to provide bike lanes.
- Improve OR 99W – Projects in this category will require coordination with ODOT but will also be eligible to compete for additional statewide funding. Many of the projects in this category are low cost which will increase the feasibility of construction. However, the highest cost project, the improvement of the Long Tom River Bridge (MRDP-3), is in this category. Also, in this category is project CC-138, the improvement of the intersection of OR 99W and Orchard Street. ***Based on the rate of expected development this project will not be warranted in the next 20 years and may be the least likely to be funded and constructed within that timeframe.***
- River Access – Projects in this category will require right-of-way acquisition and environmental considerations due to proximity to the Long Tom River. They are also high cost projects and feasibility will be challenging.

Projects are listed in **Table 4** below, and shown in **Figure 4**.

FIGURE 4: TRANSPORTATION IMPROVEMENTS

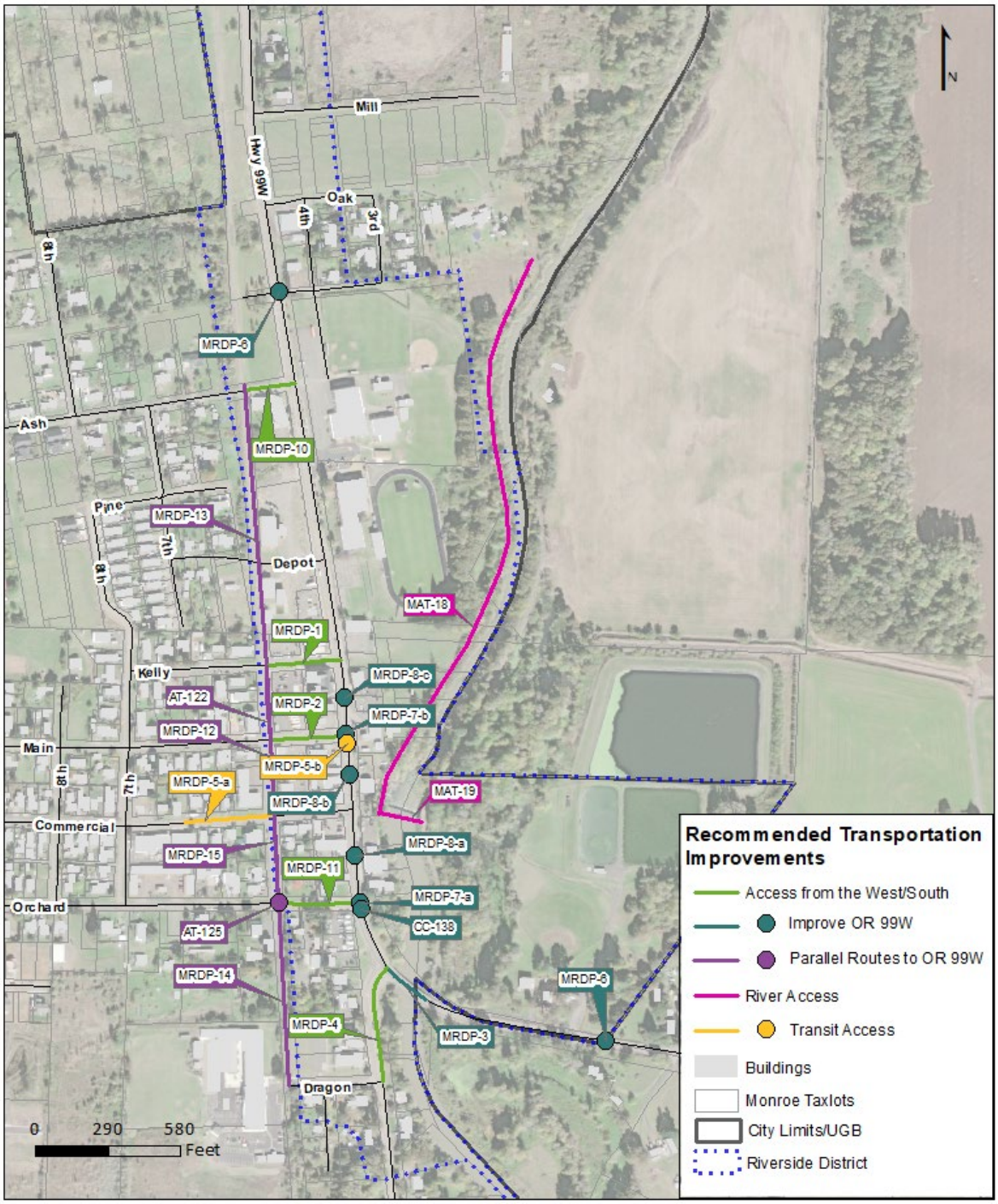


TABLE 4: RECOMMENDED TRANSPORTATION IMPROVEMENTS

Project ID	Project Name	Improvement Category	Existing TSP Project[8]	Cost[9]	Timing of Need
MRDP-1	Kelly Street Sidewalk Improvement	Access from the West/South	n/a	Medium	Medium-Term
Construct sidewalk on the north side of Kelly Street between 6th Street and OR 99w.					
MRDP-2	Main Street Sidewalk Improvement	Access from the West/South	AT-122	Medium	Medium-Term
Construct sidewalk on the north and south sides of Main Street between 6th Street and OR 99W (potential overlap with project AT-122 Monroe Cross Country Shared-Use Path).					
MRDP-3	OR 99W Long Tom River Bridge Improvement	Improve OR 99W	S-242	High	Short-Term
Improve the OR 99W/ Long Tom River Bridge to provide more comfortable facilities for people walking and biking. Improvement could include widening the bridge to provide wider bike lanes and sidewalks or constructing a parallel pedestrian/bicycle bridge on the north side. Project is subject to ODOT approval. Cost of project may make this difficult to fund in the short-term.					
MRDP-4	Territorial Highway Bike Lanes	Access from the West/South	n/a	Low	Short-Term
Stripe the west side of Territorial Highway from Dragon Drive to OR 99W with bike lanes. Bike lanes would replace on-street parking to avoid the need to widen the road. Project is subject to ODOT approval.					
MRDP-5-a	Commercial Street Sidewalk	Transit Access	n/a	Medium	Medium-Term
Improve Commercial Street from 6th Street to the bus stop and shelter opposite City Hall to Local Street cross-section standards. The priority is the construction of sidewalk along the north side to improve the accessibility of the bus stop (potential overlap with project AT-122 Monroe Cross Country Shared-Use Path). This project is an alternative to project MRDP-5-b.					

[8] Some projects overlap with those identified in the Monroe TSP (2019) but do not include the entire extent. These projects have new identification labels with the Monroe TSP ID included in this column. Projects that do match those identified in the TSP have not been relabeled.

[9] Low = $0-$50,000 Medium = $50,000-$250,000 High > $250,000

Project ID	Project Name	Improvement Category	Existing TSP Project[8]	Cost[9]	Timing of Need
MRDP-5-b	Bus Shelter Relocation	Transit Access	n/a	Low	Short-Term
Move the bus stop and shelter from Commercial Street across from City Hall to OR 99W to increase visibility and access to the commercial core. This project is an alternative to project MRDP-5-a.					
MRDP-6	OR 99W Gateway Treatments	Improve OR 99W	n/a	Low - Medium	Short-Term
Install gateway treatments on the north and south ends of the Monroe Riverside District to alert drivers that they are entering an urban area with a greater degree of non-motorized activity and to encourage slower travel speeds. These improvements could include signs, art, and landscaping. Project is subject to ODOT approval.					
MRDP-7	OR 99W Pedestrian Crossing Improvements	Improve OR 99W	n/a	Low	Short-Term
Improve pedestrian crossings at intersections on OR 99W at Orchard Street and Main Street. At Orchard Street improvements could include curb extensions on the north side, signage indicating pedestrian activity, and a marked crosswalk. At Main Street improvements could include curb extensions on the north side. Rectangular rapid flashing beacons (RRFBs) may be warranted at one location in the downtown area if aligned with a connection to the Long Tom River Trail and Long Tom Foot Bridge. Coordinate with MRDP-11 to provide safe connections with bicycle facilities. Project is subject to ODOT approval.					
MRDP-8	OR 99W Mid-block Curb Extensions	Improve OR 99W	n/a	Low	Short-Term
Construct mid-block curb extensions or “parklets” between Orchard Street and Kelly Street along OR 99W to provide traffic calming, especially at times when there are few parked cars present to help encourage slower speeds. Parklets are sometimes used by adjacent businesses as outdoor seating using a converted parking space but can also just be additional green space. Project is subject to ODOT approval.					
MRDP-10	Ash Street Improvement	Access from the West/South	MAT-17	Medium	Medium-Term

Project ID	Project Name	Improvement Category	Existing TSP Project[8]	Cost[9]	Timing of Need
Improve Ash Street between OR 99W and the railroad to Minor Collector cross-section standards, including sidewalk and bike lanes with optional planter strip. Priority is the construction of sidewalk on the north side of the street.					
MRDP-11	Orchard Street Improvement	Access from the West/South	AT-177	Medium	Medium-Term
Improve Orchard Street to Minor Arterial cross-section standards between 6th Street and OR 99W. This includes sidewalk and bike lanes with optional planter strips on both the north and south sides. Priority is the infill of approximately 125 feet of sidewalk on the north side.					
MRDP-12	6th Street Improvement	Parallel Routes to OR 99W	MAT-22	Medium	Medium-Term
Improve 6th Street from Kelly Street to Monroe Grade School to Local Street cross-section standards including sidewalks and optional planter strips. The shared-use path constructed by projects AT-122 and MRDP-15 may replace the sidewalk on one side of the street.					
MRDP-13	Kelly to Ash Street Shared-use Path	Parallel Routes to OR 99W	AT-120	Medium	Medium-Term
Improve the gravel path along the old railroad alignment between Kelly Street and Ash Street to Shared-use Path cross-section standards. This project would construct a segment of the OR 99W Alpine Cut-off to Kelly Street Shared-Use Path (project AT-120 in the TSP).					
MRDP-14	6th Street Shared-Use Path Safe Routes to School	Parallel Routes to OR 99W	n/a	Low	Short-Term
Construct a shared-use path along 6th Street from Orchard Street to Monroe Grade School. This project is currently funded as a Safe Routes to School project.					
MRDP-15	6th Street Shared-Use Path from Main/ Commercial St. to Orchard St.	Parallel Routes to OR 99W	n/a	Medium	Medium-Term
Construct a shared-use path along 6th Street between Main Street/Commercial Street and Orchard Street. This will connect the Monroe Cross Country Shared-Use Path (AT-122) to the 6th Street Share-Use Path Safe Routes to School from Orchard Street to the Grade School (MRDP-14). Include bicycle wayfinding signage to support an alternative route to OR 99W between Kelly Street and Orchard Street.					

Project ID	Project Name	Improvement Category	Existing TSP Project[8]	Cost[9]	Timing of Need
CC-138	OR 99W & Orchard Street Intersection Improvement	Improve OR 99W	CC-138	High	Long-Term
Improve the intersection of OR 99W & Orchard Street. Project may construct a traffic signal or roundabout, if feasible, when warranted. Project is subject to ODOT approval. Projected traffic demand from assumed development indicates that this project will not be warranted in the next 20 years.					
AT-122	Monroe Cross Country Shared-Use Path (Kelly St. to Main St. or Commercial St. segment)	Parallel Routes to OR 99W	AT-122	Medium	Medium-Term
Construct a shared-use path along 6th Street from Kelly Street (end of project MRDP-13) to Main Street or Commercial Street. This is a segment of the larger Monroe Cross County Shared-Use Path. Include bicycle wayfinding signage to support an alternative route to OR 99W between Kelly Street and Orchard Street.					
AT-125	6th Street & Orchard Street Intersection Improvement	Parallel Routes to OR 99W	AT-125	Low	Short-Term
Intersection crossing improvements at Orchard Street and 6th Street. These improvements could include new striping, pedestrian and bicycle signage, and rectangular rapid flashing beacons (RRFBs). Coordinate with AT-122 and MRDP-15 to provide wayfinding signage and a safe connection for people biking. This project is currently funded as a Safe Routes to School project.					
MAT-18	Long Tom River Trail	River Access	MAT-18	High	Long-Term
Construct a shared-use path along the west side of the Long Tom River. This path could tie into the OR 99W Alpine Cut-off to Kelly Street shared-use path along the old railroad alignment. Coordinate with MRDP-3, MAT-19, MRDP-10 and MRDP-13.					
MAT-19	Long Tom Foot Bridge	River Access	MAT-19	High	Long-Term
Construct direct access to Monroe City Park via a foot bridge across the Long Tom River, somewhere between Commercial Street and Kelly Street.					

Three projects in **Table 4** have different alignment options that result in unique benefits and challenges. They are:

1. **MRDP-3 OR 99W Long Tom River Bridge Improvement** – There are two options to provide pedestrian access across the Long Tom River: adding a new pedestrian bridge across the river, or widening the existing OR 99W bridge across the river to accommodate a separated pedestrian area. Implementing a new pedestrian bridge would require approval and permitting through the Army Corps of Engineers, and permanent easements or public Right-of-Way on either end of the bridge. The construction cost of a pedestrian bridge ranges very widely, but they are typically in the territory of around $1M, depending on soil conditions, grade considerations, dimensions, and aesthetic considerations. Widening the existing OR 99W bridge is entirely subject to ODOT approval, as this is an ODOT facility. Implementing this option will likely have a longer timeframe, as it will require going through lengthy ODOT processes. In addition, structural analyses will be necessary in order to know if it is even feasible to widen this bridge. One consideration the City should be aware of: the administrative/permitting costs of widening this bridge will likely exceed the administrative and permitting costs of a new pedestrian bridge. The construction costs of the bridge widening option is difficult to estimate without knowing details of the existing bridge's structure and structural capacity. On the low end, the construction cost would likely be less than a new pedestrian bridge.

2. **MRDP-4 Territorial Highway Bike Lanes** – This project is envisioned as a low-cost restriping project where the existing parking on the west side of Territorial Highway is removed to provide space for a bike lane. However, parking could be maintained along the west side of Territorial Highway if the pavement surface is widened. The widening option would likely require additional right-of-way and the reconstruction of the existing sidewalk on the west side and would increase the cost from Low to High.

3. **MRDP-5 Transit Access Improvements** – This project could improve access to the existing bus shelter on Commercial Street by constructing sidewalk (MRDP-5-a) or relocating the bus shelter to OR 99W to increase visibility and shorten the access time for transit users destined for the Riverside District. Relocating the shelter adds to the urbanized character of the Riverside District but improving the connection to the existing shelter connects the Riverside District with City Hall and could serve to draw focus off of OR 99W.

Recommendations

It is recommended that Monroe focus early implementation efforts on projects that improve safety for people walking and biking along and across OR 99W, which has the highest volumes and speeds of motor vehicle traffic and divides the Riverside District. The recommended high-

priority projects for near-term implementation are listed below in Table 5. Many of these are also lower cost projects, making them easier to implement. Also, because these projects are directly on OR 99W or would benefit the highway, they may be eligible for funding from ODOT.

TABLE 5: RECOMMENDED HIGH-PRIORITY TRANSPORTATION IMPROVEMENTS

Project ID	Project Name	Cost[1]
MRDP-3	OR 99W Long Tom River Bridge Improvement	High
Benefit: Improves access to City Park. This project could be interchangeable with the Long Tom Foot Bridge project (MAT-19).		
MRDP-6	OR 99W Gateway Treatments	Low-Medium
Benefit: Helps achieve lower motor vehicle speeds on the highway.		
MRDP-7	OR 99W Pedestrian Crossing Improvements	Low
Benefit: Enhances the ability to cross the highway on foot and reduces the barrier effect of OR 99W.		
MRDP-8	OR 99W Mid-block Curb Extensions	Low
Benefit: Helps achieve lower motor vehicle speeds on the highway and creates an opportunity for streetscape improvements to enhance the appearance of the corridor.		
MRDP-14	6th Street Shared-Use Path Safe Routes to School	(already funded)
Benefit: This project has already secured funding and creates an extension of AT-122 and MRDP-15 that includes other improvements to 6th Street.		
MRDP-15	6th Street Shared-Use Path from Main/ Commercial St. to Orchard St.	Medium
Benefit: Creates an alternative route to OR 99W for people biking in the segment where no bike facilities are available on the highway.		
AT-122	Monroe Cross Country Shared-Use Path (Kelly St. to Main St. or Commercial St. segment)	Medium
Benefit: Creates an alternative route to OR 99W for people biking in the segment where no bike facilities are available on the highway.		
AT-125	6th Street & Orchard Street Intersection Improvement	Low
Benefit: Helps complete the alternative biking route to OR 99W (AT-122 and MRDP-15) and complements the safe route to school project (MRDP-14).		

[1] Low = $0-$50,000 Medium = $50,000-$250,000 High > $250,000

VI. Natural Resource Enhancements

The existing drop structure on the Long Tom River, which facilitates the City's current water supply, is aging. In addition, the Long Tom Watershed Council prioritizes the modification of this structure to remove fish passage barriers. The current structure channelizes the river at this location, and removal or changes to flow through this structure has the potential to significantly change the Long Tom River's hydrology and the nature of the riparian habitat along the river corridor. Planning for park and natural space improvements should be cognizant of the fact that the river's current flow patterns will likely change in the future.

Details of this process are being addressed in a separate process led by the Army Corps and the Long Tom Watershed Council, known as the "1135 Project."

VII. Parks and Open Space Improvements

There are a wide range of public park and open space improvements possible within the study area.

One particularly ideal location for these improvements is the City-owned parcel located immediately east of Highway 99, across the street from the end of Commercial Street. Improvements at this location could include a new community center, with a gravel-surfaced path extending from Commercial Street along the Long Tom River north past Monroe High School. There are three options discussed in the following paragraphs for the area around the community center, where the trail would begin from downtown.

Memorandum 4: Land Use Regulatory Analysis includes three "design concepts" for the Riverfront District, which vary in their land use focus and development opportunities. Each of the following parks and open space improvements would be well suited for any of the design concepts in Memorandum 4.

Trailhead

This improvement would consist of a small public trailhead area south of the new community center, with plantings, a parking area, and other improvements. A graphic illustrating this option is shown on the following page.

Mid-Block Lookout

This improvement would consist of a public plaza north of the new community center with plantings and other improvements. A graphic illustrating this option is shown on the following page.

Centrally Located Park

This improvement would consist of a public park south of the new community center with a new playground, plantings, parking area, a boardwalk, and other improvements. The park would connect to a boardwalk and new pedestrian bridge across the Long Tom River.

Recommendations

We recommend that the City prioritize construction of the trailhead project, due to the lower cost and the potential for this project to promote the riverfront as a viable place for redevelopment. Furthermore, this project will provide a central place for the community to gather, adjacent to the river.

Estimated Costs

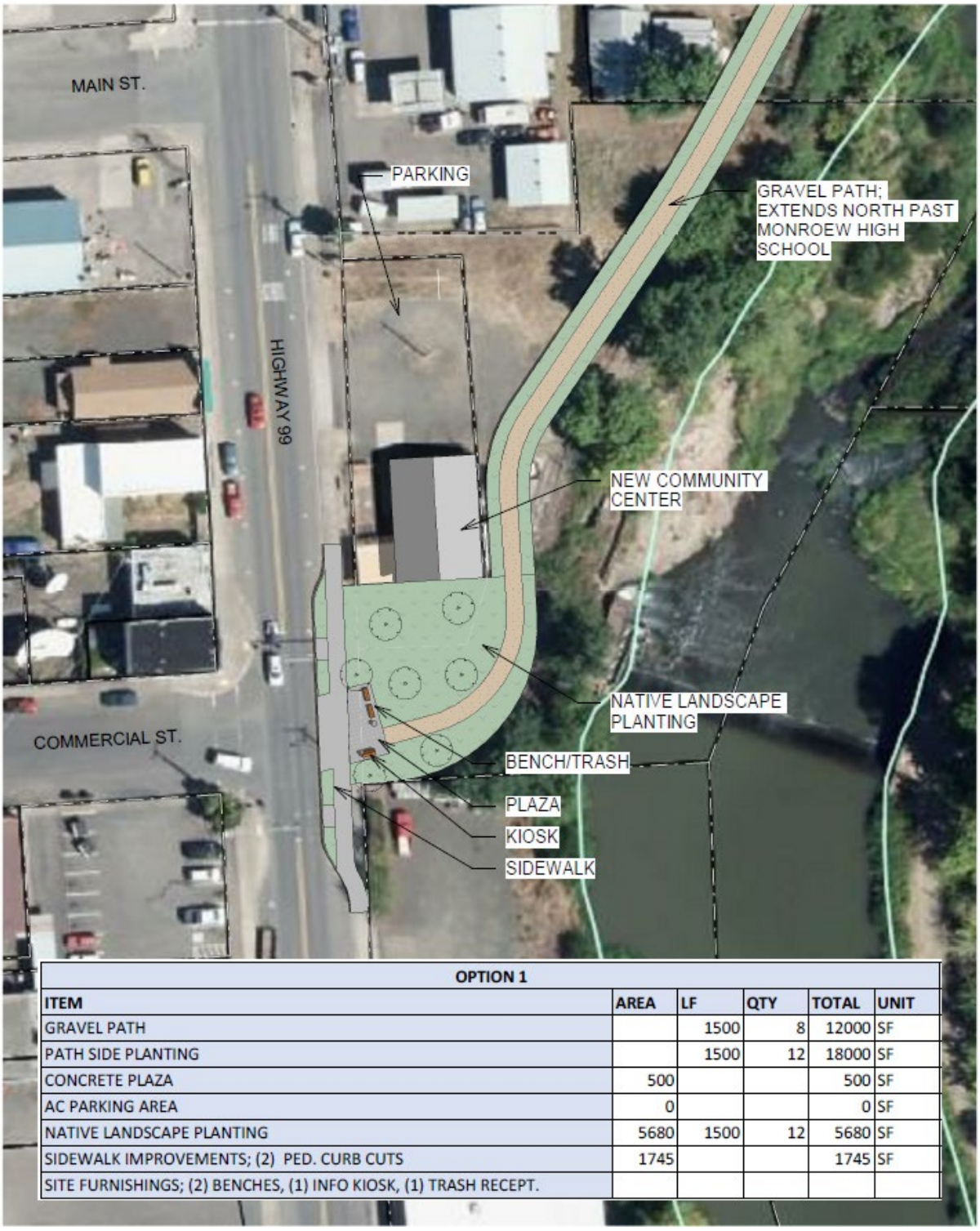
Estimated costs for each of the improvements described above are included in **Table 6**. Note that these are planning-level costs based on 2020 costs. Construction costs were estimated, and base percentages were assumed for the following additional costs: design (15%), permitting (5%), and construction engineering (15%). Costs for ROW acquisition were not estimated, due the high-level nature of this exercise.

TABLE 6: PLANNING LEVEL COST ESTIMATE FOR OPEN SPACE IMPROVEMENT PROJECTS

Project Name	Estimated Cost
Trailhead	$451,805
Mid-Block Lookout	$548,090
Centrally Located Park	$758,300
Gravel Path	$500,000
Community Center	unknown

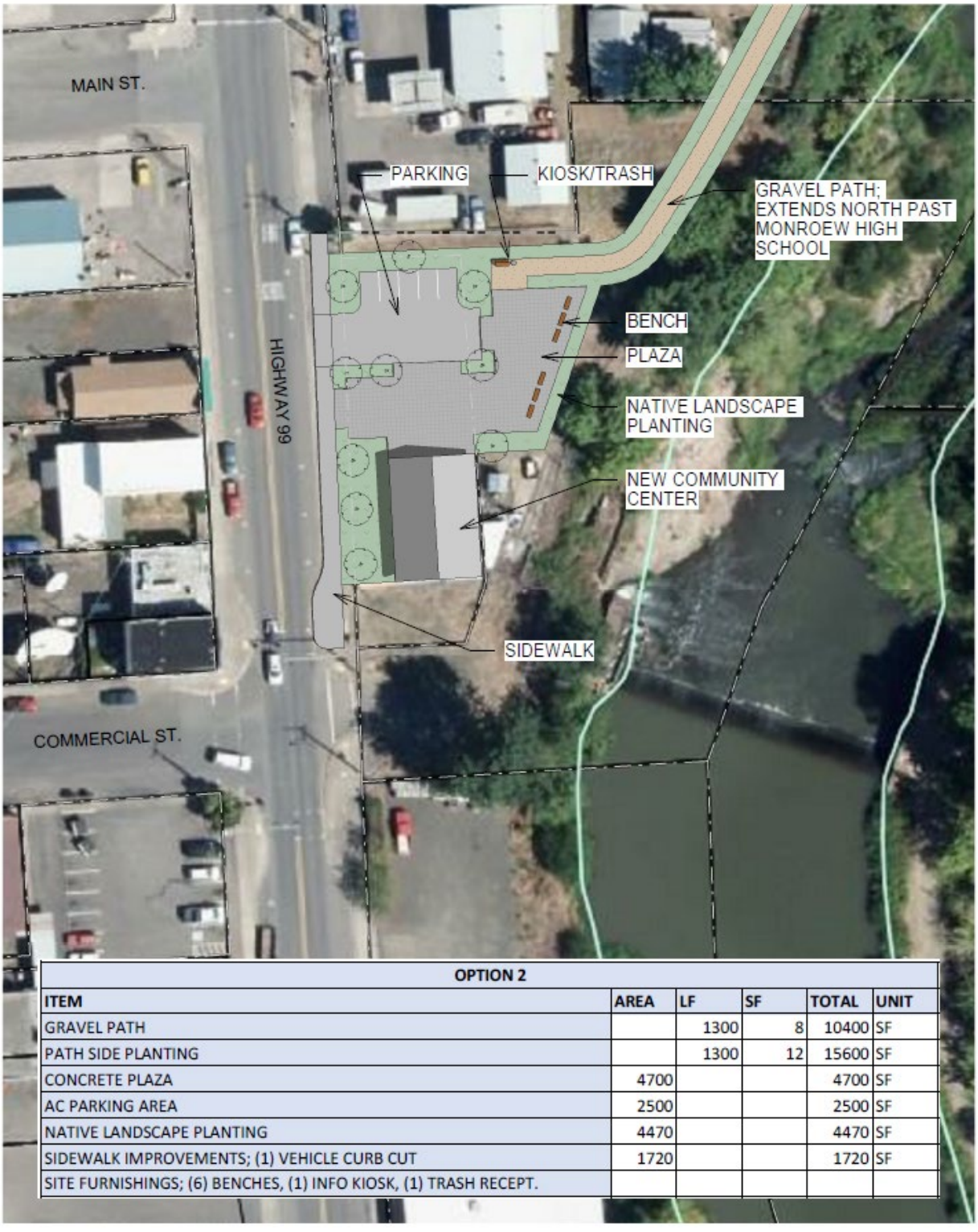
Illustrations of these potential improvements were created for the purposes of estimating the size and planning-level costs, and are shown in the figures included on the following pages.

FIGURE 5: ILLUSTRATION OF POTENTIAL TRAILHEAD IMPROVEMENTS



OPTION 1					
ITEM	AREA	LF	QTY	TOTAL	UNIT
GRAVEL PATH		1500	8	12000	SF
PATH SIDE PLANTING		1500	12	18000	SF
CONCRETE PLAZA	500			500	SF
AC PARKING AREA	0			0	SF
NATIVE LANDSCAPE PLANTING	5680	1500	12	5680	SF
SIDEWALK IMPROVEMENTS; (2) PED. CURB CUTS	1745			1745	SF
SITE FURNISHINGS; (2) BENCHES, (1) INFO KIOSK, (1) TRASH RECEPT.					

FIGURE 6: ILLUSTRATION OF POTENTIAL MID-BLOCK LOOKOUT



OPTION 2					
ITEM	AREA	LF	SF	TOTAL	UNIT
GRAVEL PATH		1300	8	10400	SF
PATH SIDE PLANTING		1300	12	15600	SF
CONCRETE PLAZA	4700			4700	SF
AC PARKING AREA	2500			2500	SF
NATIVE LANDSCAPE PLANTING	4470			4470	SF
SIDEWALK IMPROVEMENTS; (1) VEHICLE CURB CUT	1720			1720	SF
SITE FURNISHINGS; (6) BENCHES, (1) INFO KIOSK, (1) TRASH RECEPT.					

FIGURE 6: ILLUSTRATION OF POTENTIAL CENTRALLY-LOCATED PARK

OPTION 3					
ITEM	AREA	LF	QTY	TOTAL	UNIT
GRAVEL PATH		1425	8	11400	SF
PATH SIDE PLANTING		1425	12	17100	SF
CONCRETE PLAZA	2400			2400	SF
AC PARKING AREA	2370			2370	SF
NATIVE LANDSCAPE PLANTING	2900			2900	SF
SIDEWALK IMPROVEMENTS; (2) PED. CURB CUT, (1) VEHICLE CURB CUT	2500			2500	SF
BOARDWALK	1512			1512	SF
WOOD BRIDGE		250		250	LF
PLAYGROUND	260			260	SF
SITE FURNISHINGS; (7) BENCHES, (1) INFO KIOSK, (1) TRASH RECEPT.					

Appendix B

Comprehensive Plan Amendments

The City of Monroe updated its Comprehensive Plan in 2019. The following table identifies goals and policies that require amendments to implement the recommendations listed in Section 1, or directly support the Riverside District Master Plan.

Comprehensive Plan Goals and Policies

Policy Language	Discussion
Land Use Goals and Policies	
Policy LU 2.2 Mixed Use. Encourage the vertical and horizontal mixing of different land-use types in selected areas of the city where compatible uses can be designed to reduce the overall need for parking, create vibrant urban areas, create more business opportunities, and achieve better places to live.	Supports Recommendation 3-1. No changes.
Policy LU 2.3. Redevelopment Programs. Use redevelopment programs such as urban renewal to help redevelop underutilized commercial and industrial land.	Supports later implementation tasks – urban renewal (aka Tax Increment Financing or TIF) may be appropriate for the Riverside District.
Policy LU 3.5. Community Plans Implement Monroe's Vision Plan –Monroe Tomorrow and Monroe Riverside District Master Plan ~~(currently in development –2019) with~~ by implementing regulations and programs that support compatible and complementary mixed uses, including housing, hospitality services, restaurants, civic and institutional, offices, some types of industrial and retail uses, all at a relatively concentrated density.	Remove "currently in development"; will be outdated once Riverside District Master Plan is adopted.
Policy LU 3.7 Riverside District. Develop the Riverside District area through the implementation of the Riverside District Master Plan ~~(currently in development –2019)~~ to achieve a balance between the natural and built environments, including wildlife habitat, multi-family residential development, office and retail, and family recreation.	Remove "currently in development".
Policy LU 8.2 – Land Use Classifications.	Per Recommendation 1-2, strike Highway Corridor Overlay and add "Riverside District Overlay"
Parks and Recreational Facilities Goals and Policies	
Policy PRF 1.1 Utilizing Natural Assets. The City should continue to develop the existing City Park site east of the Long Tom River and provide multi-modal connections between the park and the Riverside District.	Revision mentions multimodal connections to the park.
Economic Development Policies	
Policy ED 2.3 Support Riverside District Activities. Support development, festivals, and improvements to the Long Tom River that benefit a vibrant Riverside District. ~~project activities in the Riverside District such as Monroe's Vino, Vintage, & Victory Wine Festival, the Holiday Light Parade, the 1135 Continuing Authorities Project with the U.S. Army Corps of Engineers and more to come~~	Revised policy is more general.

Housing Goals and Policies	
Policy HG 2.1 Variety of Housing Choice. Employ development standards that allow the opportunity for development of housing types such as single-family residences, single-story single-family housing, multi-family, mixed-use, accessory dwellings units, duplexes, apartments, attached and detached single family residences, condominiums, townhouses, government-assisted affordable housing, and manufactured housing.	Support for Recommendation 3-1
Policy HG 4.4 High Density Residential Development. High-density residential development, not to exceed 18 units per net acre (not including right-of-ways), will be dispersed throughout the city including around the central commercial area or in areas with good access to collector or arterial streets.	Support for Recommendation 3-1
Policy HG 4.5 Medium Density Residential Development. Medium-density residential development, with a range of two to twelve units per net acre (not including right-of-ways), will be dispersed throughout the city including around the central commercial area or in areas with good access to collector or arterial streets.	Support for Recommendation 3-1
Policy HG5.4 Reasonably Increased Densities. Leverage development and redevelopment potential to reasonably increase densities with respect to existing or planned neighborhoods and infrastructure.	Support for Recommendation 3-1
Policy HG 5.5 Density to Support Transit. Foster the development of housing at densities that support transit and in areas near existing or planned transit.	Support for Recommendation 3-1
Policy HG5.6 Compatible Development Patterns. Establish development patterns that combine residential with other compatible uses in mixed-use areas as appropriate, such as downtown, Riverside District, etc.	Support for Recommendation 3-1
Policy HG 6.1 Innovative Housing Types. Support innovative design techniques that allow the opportunity for varied housing types such as, but not limited to, cottages, accessory dwelling units, single story units, and extended family and multi-generational housing.	Support for Recommendation 3-1
Transportation Goals and Policies	
Policy TR 2.3 Low-Stress Alternatives. Develop pedestrian and bicycle-friendly alternatives to arterials and collectors for multi-modal travel to improve connectivity and serve local needs.	Support for Recommendation 2-2
Urbanization Policies	
Policy UR 1.3 Compact, Mixed-Use Development in Centers and Along Highway 99W Corridor. Focus higher density, pedestrian-oriented, and transit-supportive mixed-use development near Transit Stations, the Riverside District, schools and neighborhood centers, and along the Highway 99W corridor.	Support for Recommendation 2-1, 3-1, 3-2.
Planning and Procedural Coordination Policies	

Table LUPP-1	Community Plans table. Add Riverside District Master Plan.
Table LUPP-2	Add ordinances associated with this planning effort.

Comprehensive Plan Land Use Designations

The Comprehensive Plan lays out the City's over-arching policy for zoning districts and overlays. The policy basis for Riverside District Overlay will be added, and other language amended as needed.

OVERLAY ZONES

> ~~**Highway Corridor Overlay (HCO).** Provides architectural, design, and color thematic standards along the Highway 99Wcorridor located between the Long Tom River and 6thStreet, from east to west, and stretching north to south along the city limits (Ord. 09-260).~~
>
> **Riverside District Overlay (RDO).** Provides development standards, use standards, and other requirements intended to create a vibrant Riverside District that is an amenity to the Monroe Community and an attraction for visitors. The district is intended to take advantage of visual and physical access to the Long Tom River, traffic on Highway 99W, proximity to nearby cities, and the needs and desires of the Monroe community.

In addition to the above text changes, the following figures will be replaced:

- Zoning Map (page 18)

Appendix C

Development Code Amendments

Development in the City of Monroe is regulated by the Monroe Land Use Development Code (Code), last updated in 2009. The following table identifies existing code language and recommended amendments in underline and ~~strikeout~~, as well as discussion and rationale where relevant.

Changes recommended in the TSP (Recommendation 4-1) are identified by a yellow box.

Other changes are discussed with a blue box.

SECTION 1.200 DEFINITIONS

(2) Definitions: The words and phrases used in this Code shall have the following meaning:

…

Public And Semi-Public Building or Use: A building or use owned or operated by a religious, charitable, or other nonprofit organization; a public utility; or any social agency such as a church, school, auditorium, meeting hall, library, art gallery, museum, fire station, utility substation, cemetery, park, playground, community center or similar use. *Transportation improvements that are consistent with the adopted Transportation System Plan are considered a public use.*

…

Street or Road: A public or private way that is created to provide vehicular ingress or egress for persons to one or more lots, parcels, areas or tracts of land and including the term "road," "highway," "lane," "drive" "avenue," "alley" or similar designations.

Principal Arterials: A roadway that carries regional traffic with origins and destinations outside the area. Territorial Highway and OR 99W are the only two principal arterials in Monroe.

Minor Arterial: A street that carries major local traffic between communities or nearby areas, or between community districts.

Collector: A street that carries major local traffic between communities or nearby areas, or between community districts. The Transportation System Plan designates two types of collector streets: Major Collectors and Minor Collectors.

Local Street: A street intended primarily to carry local traffic seeking access to adjacent property.

~~Arterial: A street of considerable continuity which is primarily a traffic artery for interconnection between large areas.~~

~~Collector: A street supplementary to the arterial street system and a means of interconnection between arterials; used for through traffic and access to small areas.~~

Cul-de-sac: A short dead-end street terminated by a vehicular turnaround.

Half Street: A portion of the width of a street, usually along the edge of a land division, where the remaining portion of the street could be provided in another tract.

Frontage Access Street: A minor street, protected from through traffic, providing access to abutting properties that is parallel and adjacent to a major arterial street.

~~Local Street: A street intended primarily for access to abutting properties.~~

Activity Center: Uses or buildings that are open to the public, have a civic or community function, and/or attract visitors. Uses include public parks, public buildings (e.g., post office, library, city offices, schools), elder care facilities, and shopping centers.

Shared-use Path: A transportation improvement that supports multiple recreation and transportation opportunities, such as walking, bicycling, and rolling (e.g., skateboarding, inline skating, etc.). Shared-use paths conform to adopted City standards, are separated from vehicular traffic, and are located either within the public right-of-way or a public easement.

Discussion & Rationale: These new and updated definitions are from the Transportation System Plan (TSP Recommendation 1). Other definitions are included below.

Flood plain. The area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks. See special definitions in Section 4.300 Flood Hazard Overlay District.

Significant Tree. Excluding Invasive and/or Noxious Vegetation, a Significant Tree is a living, standing woody plant that is of a trunk size that is six inches or greater in caliper at four feet above existing grade.

Slope. Slope is the deviation of a surface from the horizontal, usually expressed in percent or degrees.

Temporary Use. A use that is seasonal, directed toward a planned specific event, or necessitated by an unforeseen event, such as a natural disaster.

Topographical Constraint. Where existing slopes, landforms (e.g., streams, canals, rock outcropping, etc.) or existing man-made feature (e.g., embankment or berm) make conformance with a Code standard impracticable.

Wetlands. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. The prolonged presence of water creates conditions that favor the growth of specially adapted plants and promote the development of characteristic wetland (hydric) soils

Discussion & Rationale: These new and updated definitions are recommended to implement the Riverside District Master Plan.

SECTION 2.500 CONDITIONAL USES

…

(3) Decision Conditions

…

(b) Regulating the height, location, and orientation of buildings.

Discussion & Rationale: Additional conditions available to require pedestrian-oriented development as part of conditional use permit.

(c) Controlling the location and number of vehicle access points to better comply with the standards in the adopted Transportation System Plan, consistent with Section 5.122 and the adopted Transportation System Plan.

Discussion & Rationale: Updated provision per the recommendations of the TSP.

SECTION 2.700 AMENDMENTS

…

(2) Decision Criteria

(f) The amendment will ~~not have an undue adverse impact on transportation.~~ be consistent with the adopted Transportation System Plan and will conform with Subsection (i).

…

(i) Proposals to amend the Comprehensive Plan or Zoning Map shall be reviewed to determine whether they significantly affect a transportation facility pursuant to Oregon Administrative Rule (OAR) 660-012-0060 (Transportation Planning Rule - TPR). Where the City, in consultation with the applicable roadway authority, finds that a proposed amendment would have a significant effect on a transportation facility, the City shall work with the roadway authority and applicant to modify the request or mitigate the impacts in accordance with the TPR and applicable law.

Discussion & Rationale: Updated provision per the recommendations of the TSP.

SECTION 4.450 RIVERSIDE DISTRICT OVERLAY

Discussion & Rationale: This new overlay district implements Recommendation 1-2, 2-1, 2-2, 2-3, 3-1, 3-2, and 3-3.

(1) Purpose. The Riverside District Overlay implements the City of Monroe's adopted vision for the Riverfront Area and the Monroe Riverside District Master Plan. It is the intent of this overlay to:

- Encourage development and redevelopment within the Riverside District that supports a vibrant pedestrian environment enjoyed by residents and visitors alike.
- Provide visual and physical access to the Long Tom River.
- Create multi-modal connections to businesses, public uses, open space, and natural areas within Monroe.
- Capitalize on the District's location to support economic development in the City of Monroe.

(2) Applicability. The Riverside District Overlay applies to the parcels shown in [Figure X]. Where the requirements of the base zoning and the overlay differ, the overlay provisions shall govern.

(3) Use Standards

(A) Commercial Requirement for Limited Industrial (M) Zone. Within the Riverfront District, a portion of any development within the Limited Industrial (M) zone must include a commercial or public-serving component no less than 25% of the development's gross square footage.

Discussion & Rationale: This section implements Recommendation 2-1 and 3-2. It requires industrially-zoned land within the district to be developed with a portion of the site dedicated to commercial or other public-facing use in order to support activity within the district. A figure showing the extent of the overlay district will be created as part of the draft Master Plan.

(B) Artisanal and Light Manufacture Uses within the Riverfront District.

1. Purpose. The following provisions are intended to encourage mixed-use development and a vibrant Riverfront District, including cottage industries and business incubators, by integrating small-scale manufacturing with commercial uses. For the purposes of this section, artisanal uses are those that blend manufacturing and retail uses such as brewpubs, winery tasting rooms, artist studios, furniture makers, and similar uses, on the same site.

2. The following standards apply for manufacturing and commercial uses within the Riverfront District. The standards are applied through Site Plan Review (2.400) or Conditional Use Permit (Section 2.500) review, as applicable.

a. Manufacturing uses are permitted in the Commercial (C) zone only in conjunction with a primary commercial use.
b. Manufacturing uses shall not exceed the floor area of the primary commercial use.
c. Manufacturing uses shall be wholly enclosed in a building, unless unenclosed operations are authorized by an approved Conditional Use Permit.
d. Where a proposed manufacturing use is located within 100 feet of a residential zone, hours of operation of the industrial uses shall be limited to between 7:00 a.m. and 9:00 p.m.
    i. Hours may be extended through an approved conditional use permit.
    ii. A conditional use application must include documentation that sound will not exceed [X dB] and a lighting plan will be a requirement of the submittal.
e. Commercial uses are permitted in the Limited Industrial (M) zone only in conjunction with the primary industrial use and shall not exceed the floor area of the primary industrial use.

Discussion & Rationale: This section implements Recommendation 3-2 by allowing a mix of light manufacturing and commercial in the district. A specific sound threshold (in dB or other measure), or a more general statement will be recommended. The language is adapted from the Model Development Code and User's Guide for Small Cities (Model Code).[10]

(C) Residential Uses within the Riverfront District. The following residential developments are allowed in the Riverfront District, subject to Section 2.500 Conditional Use.

1. Residential uses in the Commercial (C) zone:
    a. Shall only be permitted as part of a vertical or horizontal mixed-use development. No stand-alone residential developments will be permitted in non-residential zones within the Riverside District.
    b. New residential uses fronting Main Street, Commercial Street, or OR 99W shall be permitted only above a ground floor space containing a permitted non-residential use.

Discussion & Rationale: These provisions require new residential units to be constructed either above non-residential uses (i.e. commercial) or fronting streets other than Main, Commercial, or OR99W. An alternative would be to allow "live-work" units on the ground floor, or allow multifamily alone in the C zone within the district.

(D) Temporary Uses. Temporary uses are characterized by their short term or seasonal nature and by the fact that permanent improvements are not made to the site. Temporary uses include, but are not limited to: temporary carnivals and fairs, parking lot sales, retail warehouse sales, seasonal sales such as Christmas tree sales and vegetable stands, and similar uses. The City shall approve, approve with conditions, or deny a temporary use application based on the following criteria:

1. The use is permitted in the underlying zone and does not violate any conditions of approval for the property (e.g., prior development permit approval).
2. The use occurs only once in a calendar year and for not longer than 30 consecutive days.
3. The applicant, if different than the property owner, has proof of the owner's permission to place the use on the property.
4. Ingress and egress are adequate and do not raise safety concerns when the proposed use is combined with the other uses of the site, pursuant to Section 5.122 Access and Clear Vision Areas.
5. The use does not conflict (i.e., create a nonconformity) with the provisions of Section 5.134 Landscaping, Fencing and Screening.
6. There is sufficient parking to accommodate the temporary use and other uses existing on the site, pursuant to Section 5.120 Parking.

[10] https://www.oregon.gov/lcd/TGM/Pages/Model-Code.aspx

7. The use is adequately served by sewer or septic system and water, as applicable.
8. The use does not create adverse off-site impacts including vehicle traffic, noise, odors, vibrations, glare, or lights that affect an adjoining use in a manner in which other uses allowed outright in the district do not affect the adjoining use.
9. The applicant shall be responsible for maintaining all required licenses and permits.

(4) Development Standards

(A) **Building Orientation.** The following standards apply to new buildings and building additions that are subject to Site Plan Review (Section 2.400).

1. Buildings subject to this Section shall conform to the applicable front setback build-to line standard of 0 feet. The standard is met when at least 75 percent of the abutting street frontage has a building placed no farther from at least one street property line than the build-to line of 0 feet. The City may waive the build-to line standard where it finds that one or more of the conditions in subsections (a)-(g) occurs.

a. A proposed building is adjacent to a single-family dwelling, and an increased setback promotes compatibility with the adjacent dwelling.

b. The standards of the roadway authority preclude development at the build-to line.

c. The applicant proposes extending an adjacent sidewalk or plaza for public use, or some other pedestrian amenity is proposed to be placed between the building and public right-of-way.

d. The build-to line may be increased to provide a private open space (e.g., landscaped forecourt) between a residential use in a mixed-use development and a front or street property line.

e. A significant tree or other environmental feature precludes strict adherence to the standard and will be retained and incorporated in the design of the project.

f. A public utility easement or similar restricting legal condition that is outside the applicant's control makes conformance with the build-to line impracticable. In this case, the building shall instead be placed as close to the street as possible given the legal constraint, and pedestrian amenities (e.g., plaza, courtyard, landscaping, outdoor seating area, etc.) shall be provided within the street setback.

g. An expansion is proposed on an existing building that was lawfully created but does not conform to the above standard, and the building addition moves in the direction of compliance where practicable.

Discussion & Rationale: A build-to line of 0' ensures development occurs adjacent to the sidewalk (unless other pedestrian amenities are provided), creating a strong pedestrian experience. Material adapted from the Model Code. As an alternative, a build-to line of 5-10 feet would be similar to some existing buildings along the corridor (such as Long Timber Brewery)

2. All buildings shall have at least one primary entrance (i.e., tenant entrance, lobby entrance, breezeway entrance, or courtyard entrance) facing an abutting street (i.e., within 45 degrees of the street property line); or if the building entrance must be turned

more than 45 degrees from the street (i.e., front door is on a side or rear elevation) due to the configuration of the site or similar constraints, a pedestrian walkway must connect the primary entrance to the sidewalk.

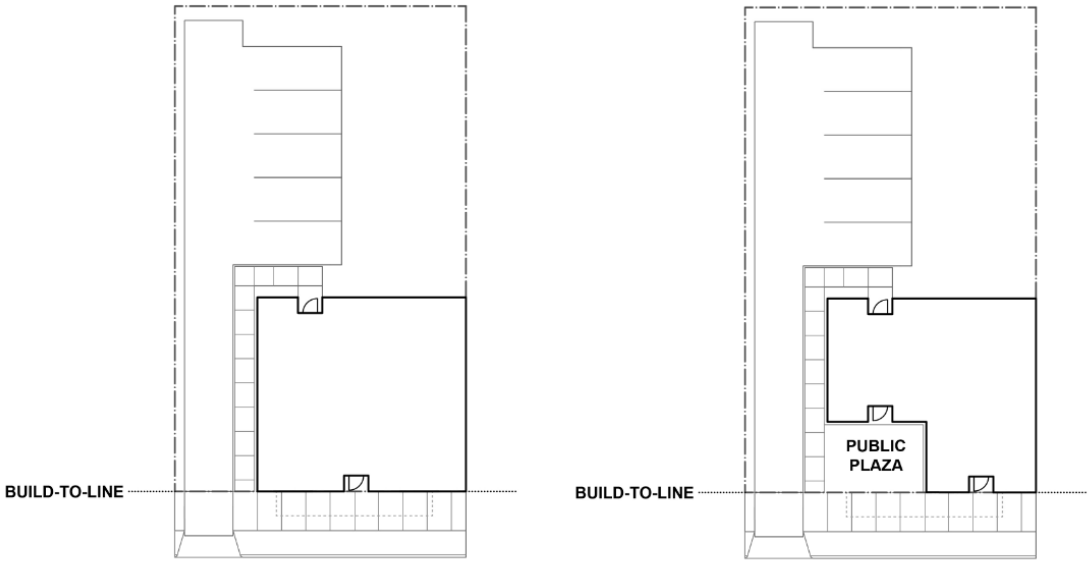
3. Minimum Pedestrian Shelter Coverage. Permanent awnings, canopies, recesses, or similar
pedestrian shelters shall be provided along at least 75 percent of the ground floor elevation(s) of a building where the building abuts a sidewalk, civic space, or pedestrian access way. Pedestrian shelters used to meet the above standard shall extend at least five feet over the pedestrian area; except that the Planning Commission, through Site Plan Review (Section 2.400), may reduce the above standards where it finds that existing right-of-way dimensions, easements, or building code requirements preclude standard shelters. In addition, the above standards do not apply where a building has a ground floor dwelling, as in a mixed-use development or live-work building, and the dwelling has a covered entrance.

3. Off-street parking, trash storage facilities, and ground-level utilities (e.g., utility vaults), and similar obstructions shall not be placed between building entrances and the street(s) to which they are oriented. To the extent practicable, such facilities shall be oriented internally to the block and accessed by alleys or driveways.

4. Off-street parking shall be oriented internally to the site to the extent practicable, and shall meet the Access and Circulation requirements of Section 5.122, the Landscape and Screening requirements of Section 5.134, and the Parking and Loading requirements of Section 5.120. Where a development contains multiple buildings and there is insufficient street frontage to meet the above building orientation standards for all buildings on the subject site, a building's primary entrance may orient to a plaza, courtyard, or similar public or open space containing pedestrian amenities. With this orientation, the primary entrance(s), plaza, or courtyard shall be connected to the street by a pedestrian walkway.

Discussion & Rationale: Material adapted from the Model Code. These provisions aim to further improve the pedestrian realm by requiring entrances and limiting obstacles to pedestrian activity in the district.

[Code Graphic – Building Orientation, Build-To line, Primary Entrances]



(B) **Ground-Floor Windows.** Exterior walls on the ground level that face a street lot line or other public right-of-way must have windows at least 50 percent of the length and 25 percent of the ground-level wall area. Ground-level wall areas include all exterior wall areas up to nine feet above the finished grade. To qualify as ground-floor windows, window sills must be no more than four feet above exterior grade. The ground-floor window requirement does not apply to the walls of residential units. Qualifying window features must be either windows or doors that allow views into working areas or lobbies, pedestrian entrances, or display windows set into the wall.

[Code Graphic - Ground Floor Windows]

(C) **Façade Articulation.** All building elevations that orient to a street or civic space must have breaks in the wall plane (articulation) of not less than one break for every 30 feet of building length or width, as applicable, as follows:

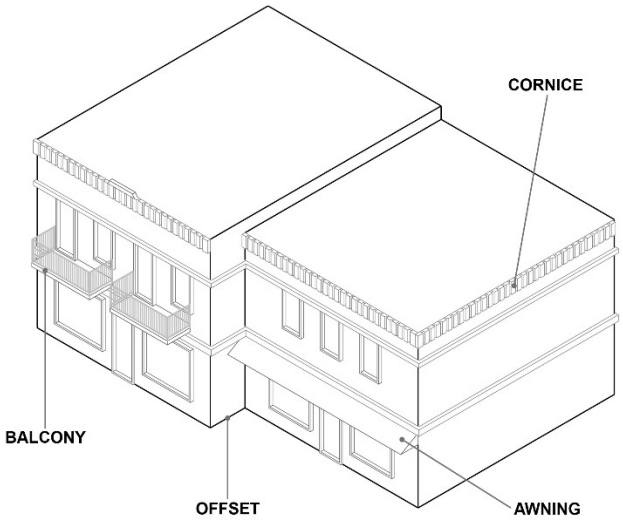
i. A “break” for the purposes of this subsection is a change in wall plane of not less than 24 inches in depth. Breaks may include but are not limited to an offset, recess, window reveal, pilaster, frieze, pediment, cornice, parapet, gable, dormer, eave, coursing, canopy, awning, column, building base, balcony, permanent awning or canopy, marquee, or similar architectural feature.

ii. The City may approve detailing that does not meet the 24-inch break-in-wall-plane standard where it finds that proposed detailing is more consistent with the architecture of historically significant or historic-contributing buildings existing in the vicinity.

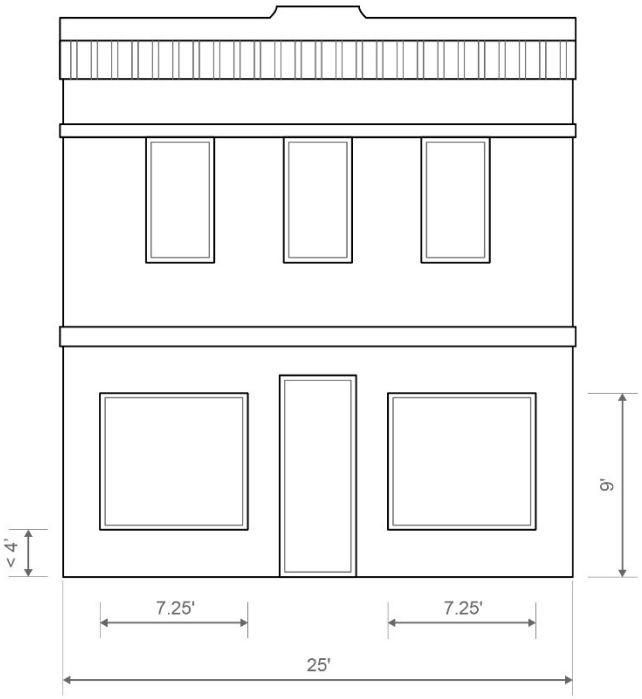
iii. Changes in paint color and features that are not designed as permanent architectural elements, such as display cabinets, window boxes, retractable and similar mounted awnings or canopies, and other similar features, do not meet the 24-inch break-in-wall-plane standard.

iv. Building elevations that do not orient to a street or civic space need not comply with the 24-inch break-in-wall-plane standard but should complement the overall building design.

[Code Graphic – Façade Articulation, Awnings]



[Code Graphic – Ground Floor Windows]



Discussion & Rationale: Material adapted from the Model Code. Glazing and façade articulation enliven the pedestrian experience by preventing large expanses of blank walls adjacent to sidewalks.

(D) **Exterior Display and Activities.** The following exterior activities shall be allowed in the Riverfront District, provided that they leave a five (5) foot clear pedestrian path for unrestricted movement and are an extension of the interior use:

a. Outdoor eating or gathering.
b. Outdoor produce markets and flower stands.
c. Temporary displays of merchandise or wares, limited in duration to one week.
d. Temporary seasonal signs and decorations, subject to Section 5.136 Signs.

Discussion & Rationale: Exterior display provisions adapted from Independence, OR. City should consider requiring a permit for exterior uses and displays.

(E) Access and Circulation. In addition to access standards of Section 5.122, development within the Riverside District are subject to the following:

i. On properties east of OR 99W, proposed development shall provide physical and visual access to the Long Tom river and any adjacent open space or trails identified in the City's adopted plans by:

a) A dedicated public right-of-way or easement, as required by the Planning Commission.
b) Incorporating visual connections to the Long Tom river as part of the proposed site layout and/or building design.

ii. Properties west of OR 99W shall provide physical access to the Monroe Cross Country Shared-Use Path through a dedicated public right-of-way or easement, as required by the Planning Commission.

iii. Dedication of open space may be required by the City to implement planned public amenities, such as the Long Tom River Trail, pedestrian footbridge, and other public projects identified in adopted long-range plans.

Discussion & Rationale: This section requires consistency with adopted plans, including the Riverside District Master Plan.

(F) Parking. Within the Riverside District, the following parking standards apply:

i. Residential Uses – minimum 1 space per unit.

ii. Commercial Uses – One space per 400 sq. ft. of floor area

iii. Industrial Uses – One space per 700 sq. ft of floor area

iv. On-Street Parking. When approved through Site Plan Review (Section 2.400) as applicable, on-street parking may be counted toward the minimum requirements listed above when it is on the block face abutting the subject site. An on-street parking space must not obstruct a required clear vision area and it must not violate any law or street standard.

Discussion & Rationale: Modestly reduced parking requirements within the Riverside District may improve the feasibility of development by allowing more of the limited land in the area to be used for non-parking uses.

(G) Loading Areas.

1. Applicability. This section applies to uses that are expected to have service or delivery truck visits. It applies only to uses visited by trucks with a 40-foot or longer wheelbase, at a frequency of one or more vehicles per week. The Planning Commission shall determine through Site Plan Review (the number, size, and location of required loading areas, if any.

2. Standard. Where an off-street loading space is required, it shall be large enough to accommodate the largest vehicle that is expected to serve the use without obstructing vehicles or pedestrian traffic on adjacent streets and driveways. An application must include complete and accurate information about expected needs for loading areas. Approval may be conditioned on the restriction of public rights-of-way usage.

3. Placement, Setbacks, and Landscaping. Loading areas shall conform to the Building Orientation and Design standards, Access and Circulation standards, and the

Landscaping and Screening standards of this overlay. Where parking areas are prohibited between a building and the street, loading areas are also prohibited.

4. Exceptions and Adjustments. The Planning Commission, through Site Plan Review, may approve a loading area adjacent to or within a street right-of-way where it finds that loading and unloading operations are short in duration (i.e., less than one hour), infrequent, do not obstruct traffic during peak traffic hours, do not interfere with emergency response services, and are acceptable to the applicable roadway authority.

(F) Lighting.

1. Light poles, except as required by a roadway authority or public safety agency, shall not exceed a height of 20 feet; except that pedestal- or bollard-style lighting is the preferred method illuminating walkways. This limitation does not apply to flag poles, utility poles, and streetlights.

2. Where a light standard is placed over a sidewalk or walkway, a minimum vertical clearance of eight feet shall be maintained.

3. Outdoor lighting levels shall be subject to review and approval through Site Plan Review. As a guideline, lighting levels shall be no greater than necessary to provide for pedestrian safety, property or business identification, and crime prevention.

4. Except as provided for up-lighting of flags and permitted building-mounted signs, all outdoor light fixtures shall be directed downward, and have full cutoff and full shielding to preserve views of the night sky and to minimize excessive light spillover onto adjacent properties.

5. Lighting shall be installed where it will not obstruct public ways, driveways, or walkways.

Discussion & Rationale: Adapted from the Model Code.

SECTION 5.120 PARKING

…

(2) Location Standards for Parking Lots:

(a) Required off-street parking for single family homes and duplexes shall be provided on the development site. Required parking for other uses may be located within 500 feet of the use it serves, provided the City has approved the off-site parking. ~~or within 400 feet for commercial or industrial uses.~~

Discussion & Rationale: Allows a broader range of uses to use a separate lot for required parking (particularly useful for mixed-use housing). The 500' standard is used in Independence, OR.

…

(11) Bicycle parking. Bicycle parking spaces shall be provided with new development, a change of use, and building expansions.

(a) Multi-family dwellings of four units or more shall provide a minimum of one (1) covered bicycle parking space per unit.

(b) Commercial developments that are required to provide two or more vehicle parking spaces shall provide a minimum of one (1) covered bicycle parking space and an additional one (1) bicycle parking space for every five (5) vehicle parking spaces thereafter in a designated area for bicycle parking.

c) Industrial developments that are required to provide two or more vehicle parking spaces shall provide a minimum of one (1) covered bicycle parking space and an additional one (1) bicycle parking space for every ten (10) vehicle parking spaces thereafter in a designated area for bicycle parking.

(d) Transit transfer stations shall provide a minimum of one (1) covered bicycle parking space per bus route that is scheduled to arrive/depart from the station and park-and-ride lots shall provide a minimum of one (1) covered bicycle parking space per ten (10) vehicle parking spaces.

(e) Designated areas for parking that are not covered shall be located within 50 feet of a public entrance.

(f) Covered bicycle parking areas may be located in a garage or storage unit, or under an eave, independent structure, bicycle locker, or similar cover on site.

(g) Bicycle parking that is not required to be covered shall be accommodated by rounded or square style hoop racks that provide each bicycle parking space with at least two points of contact for a standard bicycle frame.

Discussion & Rationale: Bicycle parking provisions updated per the recommendations of the TSP.

SECTION 5.121 OFF-STREET PARKING REQUIREMENTS

Discussion & Rationale: Recommended changes to parking requirements are included in the new Riverside District Overlay Zone – currently no changes to off-street parking requirements that affect other parts of the city are recommended.

SECTION 5.122 ACCESS AND CLEAR VISION AREAS

1. Access:

(a) Every property shall abut a street other than an alley, for a minimum width of 12 feet, except where the City has approved an easement for access or where the easement existed prior to the adoption of this Code

(b) Except as provided by Section 5.122.1.d, the following minimum distances shall be maintained between all access points (public or private) to a roadway, measured from

center to center of adjacent access points on the same side of the roadway. Local street access spacing is measured from edge of driveway to edge of driveway.

Minor Arterial: 150 feet

Major and Minor Collector: 125 feet

Local Street: 10 feet

(d) Access spacing standards for OR 99W and Territorial Highway are determined by ODOT and are defined in the Oregon Highway Plan, OAR 734-051, and ODOT's Highway Design Manual.

(e) Exceptions and Adjustments. The Planning Commission may approve adjustments to the spacing standards of subsections (b), above, where an existing connection to a City street does not meet the standards of the roadway authority and the proposed development moves in the direction of code compliance. The Planning Commission through a Limited Land Use procedure may also approve a deviation to the spacing standards on City streets where it finds that mitigation measures, such as consolidated access (removal of one access), joint use driveways (more than one property uses same access), directional limitations (e.g., one-way), turning restrictions (e.g., right-in/right-out only), or other mitigation alleviate all traffic operations and safety concerns.

Discussion & Rationale: Updated provision per the recommendations of the TSP.

SECTION 5.123 STREETS

(1) The location, width, and grade of streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, and curves appropriate for the traffic to be carried considering the terrain. The arrangement of streets shall provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or

(2) ~~Street design shall conform to the design standards of the City of Corvallis adopted by the City of Monroe. Streets design shall include curb, gutters, sidewalks and utility easements unless specifically excepted by the Planning Commission.~~ The size, design, and location of streets shall be consistent with Section 8.100 Adopted Design and Construction Standards as well as the adopted Transportation System Plan (TSP).

(3) ~~Right-of-way and roadway widths. The width of streets and roadways shall be adequate to fulfill city specifications as provided for in Article 8 of this Code. Unless otherwise indicated on an adopted City Street Plan, streets should not be less than the recommended minimums:~~

~~Where conditions, particularly topography or the size and shape of the tract, make it impractical to otherwise provide buildable sites, narrower right-of-ways may be accepted, if necessary, and replaced with slope, sidewalk or utility easements dedicated on both sides of the right-of-way. Where topographical conditions necessitate cuts or fills for proper grading of streets, additional right-of-ways may be required.~~ Standard right-of-way and street widths shall be based on street classification and shall conform to the design standards of the City's adopted Transportation System Plan.

Discussion & Rationale: TSP recommendation 6 to replace the requirements of (2) and (3) in Section 5.123 Streets with reference to the adopted TSP street standards. Consider converting the subjective standards in (1) in this Section into a purpose statement.

…

(10) **Cul-de-sac:** ~~A cul-de-sac should have a maximum length of 500 feet but may be longer where unusual circumstances exist. A cul-de-sac shall terminate with a circular turnaround with a minimum right-of-way radius of 50 feet~~. A cul-de-sac street shall only be used where environmental or topographical constraints, existing development patterns, or compliance with other standards in this Code preclude street extension and through-circulation. Where the City determines that a cul-de-sac is allowed, all of the following standards shall be met:

(a) A cul-de-sac shall not exceed a maximum length of 500 feet, except where the City Planning Commission determines that topographic or other physical constraints of the site require a longer cul-de-sac. The length of the cul-de-sac shall be measured along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac. Approved cul-de-sac lengths will not exceed 900 feet.

(b) A cul-de-sac shall terminate with a circular turnaround with a minimum right-of-way radius of 50 feet.

(c) The cul-de-sac shall provide, or not preclude the opportunity to later install, a pedestrian and bicycle access way between it and adjacent developable lands.

Discussion & Rationale: Updated provision per the recommendations of the TSP (Recommendation 7).

SECTION 5.124 SIDEWALKS

(4) ~~Sidewalks in residential areas should be a minimum of 5 feet in width and shall be installed adjacent to the curb unless a planter strip of at least 4 feet in width is approved adjacent to the curb where sufficient right-of-way is available~~. Local streets are required to have minimum 5-foot sidewalks with 4-foot planter strips installed adjacent to the curb.

(5) Sidewalks adjacent to Collector or Arterial Streets shall be a minimum of 5 feet in width separated by a planter strip of 4 5 feet in width adjacent to the curb ~~where possible~~. Sidewalks may be approved adjacent to the curb where direct access is required. Sidewalks adjacent to the curb should be a minimum of 7 feet in width or a minimum of 10 feet in width adjacent to Commercial properties. Planter openings adjacent to the curb are encouraged within the 10 foot walks.

Discussion & Rationale: Updated provision per the recommendations of the TSP (Recommendation 9).

SECTION 5.125 BIKEWAYS

(1) Developments adjoining existing or proposed bikeways shall include provisions for connection and extension of such bikeways through dedication of easements or rights-of-way. The City may include bikeway improvements as conditions of approval for developments that will benefit from bikeways, consistent with the adopted TSP. ~~Where possible, bikeways should be separated from other modes of travel, including pedestrian ways.~~

(2) ~~Minimum width for bikeways shall be 5 feet per travel lane.~~ Collector and arterial streets shall include bike lanes. Required street improvements and right-or-way dedication shall be consistent with the adopted Transportation System Plan.

Discussion & Rationale: Updated provision per the recommendations of the TSP (Recommendation 9). The 2019 TSP does not envision separate bikeways, but rather shared-use paths that can accommodate both pedestrians and cyclists.

SECTION 5.137 SOLAR ENERGY ACCESS

(Strike section 5.137 in its entirety)

Discussion & Rationale: Solar Energy Access provisions may impact Riverfront District development, particularly if multiple-story structures in a walkable downtown development pattern are desired. Similar solar energy provisions have been found to be inconsistent with other community values in a number of cities and largely ineffective.

SECTION 7.150 TRAFFIC IMPACT ANALYSIS

(1) A traffic impact analysis shall be submitted to the City with a land use application when any of the following conditions apply:
   (a) Expected increase in trip generation of 100 or more daily trips as determined by using the most recent edition of the Institute of Transportation Engineer's Trip Generation Manual.
   (b) Potential impacts to roadways where congestion or safety problems have been previously identified in the adopted Transportation System Plan.
   (c) Changes in zoning designation.
   (d) An increase in use of adjacent roadways by vehicles exceeding 26,000 pounds gross vehicle weight.
   (e) The location of an existing or proposed access driveway does not meet minimum spacing or sight distance requirements or is located where vehicles entering or leaving the property are restricted, or such vehicles are likely to queue or hesitate at an approach or access connection, thereby creating a safety hazard.
   (f) Potential impacts to roadways identified as bicycle routes and safe routes to school.
   (g) A TIA is required by ODOT pursuant with OAR 734-051.

(h) As deemed appropriate by the City Planning Official in consultation with the City Engineer or, if expected impacts are to County roadways, the County Engineer.

(2) Preparation. A traffic impact analysis (TIA) shall be prepared by a professional engineer registered in the State of Oregon. The study scope and content shall be determined in coordination with the County Engineer. Preparation of the report is the responsibility of the land owner or applicant.

(3) Approval Criteria. When a TIA is required, a proposal is subject to the following criteria, in addition to all criteria otherwise applicable to the underlying land use proposal:

(a) The analysis demonstrates that transportation facilities exist or are planned pursuant to the adopted Transportation System Plan to serve the proposed development or identifies mitigation measures in a manner that is satisfactory to the City Engineer and, when State highway facilities are affected, to ODOT;

(b) For affected non-highway facilities, the TIA demonstrates that applicable performance standards established in the adopted Transportation System Plan have been met; and

(c) Proposed public improvements are designed and constructed to the street standards specified in Transportation System Plan and the applicable adopted design and construction standards, pursuant to Section 8.100.

(4) Conditions of Approval. The City may deny, approve, or approve with conditions a development proposal; approval may include conditions needed to ensure transportation safety and operations standards and to provide the necessary right-of-way and improvements to ensure consistency with the Transportation System Plan and future planned transportation system. Improvements required as a condition of development approval shall be roughly proportional to the impact of the development on transportation facilities. Findings in the development approval shall indicate how the required improvements are directly related to and are roughly proportional to the impact of development.

Discussion & Rationale: Updated provision per the recommendations of the TSP (Recommendation 8)

SECTION 7.300 REQUIRED IMPROVEMENTS

...

(10) Sidewalks: Sidewalks are required on both sides of a public street and in any pedestrian way extending through a development or land division, except that in the case of primary or secondary arterials, or special type industrial districts, the Planning Commission may approve a development or land division without sidewalks if alternative pedestrian routes are available.

(11) Bicycle Routes: If appropriate to the extension of a system of bicycle routes, existing or planned, the Planning Commission may require the installation of separate bicycle lanes within streets or separate bicycle paths.

(12) Pedestrian and Bicycle Access. New partitions and subdivisions shall provide safe bicycle and pedestrian connections to adjacent existing and planned residential areas, transit stops, and activity centers. Non-motorized connectivity can be provided through sidewalks, shared-use paths, and striped and/or signed bicycle facilities on local roadways.

Discussion & Rationale: Updated provision per the recommendations of the TSP (Recommendation 9)

SECTION 7.400 PUBLIC USE DEDICATIONS

…

(3) Where a proposed park, trail, playground, or other public use shown in a plan adopted by the City is located within or adjacent to the subject site, the City may require the dedication or reservation of this area, provided that the impact of the development on the City park system is roughly proportionate to the dedication or reservation being made.

(4) The City may purchase or accept voluntary dedication or reservation of areas that are suitable for the development of parks and other public uses; however, the City is under no obligation to accept such areas offered for dedication or sale.

Discussion & Rationale: Implements Recommendation 2-2. Provisions allow the City to require dedication for proposed parks and trails that are in an adopted plan (such as the Riverside District Master Plan). Language adapted from the Model Code.

SECTION 8.100 ADOPTED DESIGN AND CONSTRUCTION STANDARDS

~~The City of Monroe hereby adopts the latest edition of the Oregon Standard Specifications for Construction and the Oregon Standard Drawings for all public improvements including, but not limited to, improvements and extension of the water system, sanitary sewer system, storm sewer system, and streets, sidewalks, and driveways.~~

~~The City will maintain a current copy of the Design and Construction Standards together with all amendments and/or addendums published by the State of Oregon and those permanent modifications made in accordance with Section 8.200 (2) below.~~

Construction of city roadways within the UGB must be consistent with the cross-sections standards in the City's adopted Transportation System Plan.

Discussion & Rationale: Updated provision per the recommendations of the TSP (Recommendation 6).

SECTION 8.300 APPLICABILITY OF BENTON COUNTY STANDARDS

~~For public improvements that are constructed within the public rights-of-way owned and controlled by Benton County, coordination is required with Benton County Public Works Department and required permits must be obtained. In the event of a conflict between the City of Monroe's adopted Design and Construction Standards and those of Benton County, Benton~~

~~County standards will take precedence unless jointly agreed upon by Benton County Public Works Department and the City of Monroe.~~

In the event of a conflict between the City of Monroe's adopted Design and Construction Standards and those of Benton County, City standards will take precedence unless otherwise specified through a joint agreement between Benton County Public Works Department and the City of Monroe.

Discussion & Rationale: Updated provision per the recommendations of the TSP (Recommendation 6).

Appendix D

Transportation Projects

Appendix D: Transportation Projects

All proposed projects are listed in **Table D-1** and shown in **Figure D-1**.

FIGURE D-1: TRANSPORTATION IMPROVEMENTS

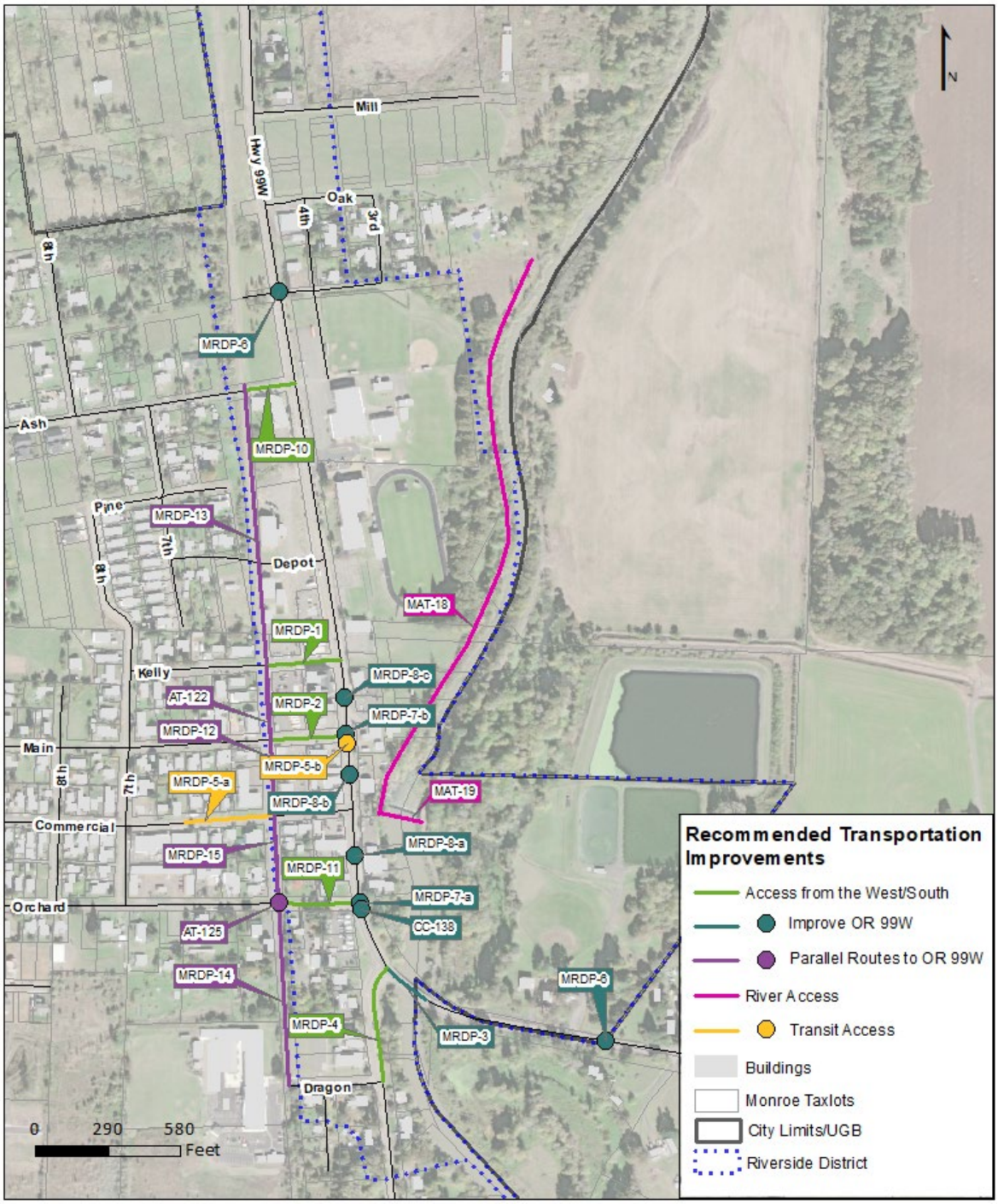


TABLE D-1: RECOMMENDED TRANSPORTATION IMPROVEMENTS

Project ID	Project Name	Improvement Category	Existing TSP Project[11]	Cost[12]	Timing of Need
MRDP-1	Kelly Street Sidewalk Improvement	Access from the West/South	n/a	Medium	Medium-Term
Construct sidewalk on the north side of Kelly Street between 6th Street and OR 99w.					
MRDP-2	Main Street Sidewalk Improvement	Access from the West/South	AT-122	Medium	Medium-Term
Construct sidewalk on the north and south sides of Main Street between 6th Street and OR 99W (potential overlap with project AT-122 Monroe Cross Country Shared-Use Path).					
MRDP-3	OR 99W Long Tom River Bridge Improvement	Improve OR 99W	S-242	High	Short-Term
Improve the OR 99W/ Long Tom River Bridge to provide more comfortable facilities for people walking and biking. Improvement could include widening the bridge to provide wider bike lanes and sidewalks or constructing a parallel pedestrian/bicycle bridge on the north side. Project is subject to ODOT approval. Cost of project may make this difficult to fund in the short-term.					
MRDP-4	Territorial Highway Bike Lanes	Access from the West/South	n/a	Low	Short-Term
Stripe the west side of Territorial Highway from Dragon Drive to OR 99W with bike lanes. Bike lanes would replace on-street parking to avoid the need to widen the road. Project is subject to ODOT approval.					
MRDP-5-a	Commercial Street Sidewalk	Transit Access	n/a	Medium	Medium-Term
Improve Commercial Street from 6th Street to the bus stop and shelter opposite City Hall to Local Street cross-section standards. The priority is the construction of sidewalk along the north side to improve the accessibility of the bus stop (potential overlap with project AT-122 Monroe Cross Country Shared-Use Path). This project is an alternative to project MRDP-5-b.					
MRDP-5-b	Bus Shelter Relocation	Transit Access	n/a	Low	Short-Term

[11] Some projects overlap with those identified in the Monroe TSP (2019) but do not include the entire extent. These projects have new identification labels with the Monroe TSP ID included in this column. Projects that do match those identified in the TSP have not been relabeled.

[12] Low = $0-$50,000 Medium = $50,000-$250,000 High > $250,000

Project ID	Project Name	Improvement Category	Existing TSP Project[11]	Cost[12]	Timing of Need
Move the bus stop and shelter from Commercial Street across from City Hall to OR 99W to increase visibility and access to the commercial core. This project is an alternative to project MRDP-5-a.					
MRDP-6	OR 99W Gateway Treatments	Improve OR 99W	n/a	Low - Medium	Short-Term
Install gateway treatments on the north and south ends of the Monroe Riverside District to alert drivers that they are entering an urban area with a greater degree of non-motorized activity and to encourage slower travel speeds. These improvements could include signs, art, and landscaping. Project is subject to ODOT approval.					
MRDP-7	OR 99W Pedestrian Crossing Improvements	Improve OR 99W	n/a	Low	Short-Term
Improve pedestrian crossings at intersections on OR 99W at Orchard Street and Main Street. At Orchard Street improvements could include curb extensions on the north side, signage indicating pedestrian activity, and a marked crosswalk. At Main Street improvements could include curb extensions on the north side. Rectangular rapid flashing beacons (RRFBs) may be warranted at one location in the downtown area if aligned with a connection to the Long Tom River Trail and Long Tom Foot Bridge. Coordinate with MRDP-11 to provide safe connections with bicycle facilities. Project is subject to ODOT approval.					
MRDP-8	OR 99W Mid-block Curb Extensions	Improve OR 99W	n/a	Low	Short-Term
Construct mid-block curb extensions or “parklets” between Orchard Street and Kelly Street along OR 99W to provide traffic calming, especially at times when there are few parked cars present to help encourage slower speeds. Parklets are sometimes used by adjacent businesses as outdoor seating using a converted parking space but can also just be additional green space. Project is subject to ODOT approval.					
MRDP-10	Ash Street Improvement	Access from the West/South	MAT-17	Medium	Medium-Term
Improve Ash Street between OR 99W and the railroad to Minor Collector cross-section standards, including sidewalk and bike lanes with optional planter strip. Priority is the construction of sidewalk on the north side of the street.					

Project ID	Project Name	Improvement Category	Existing TSP Project[11]	Cost[12]	Timing of Need
MRDP-11	Orchard Street Improvement	Access from the West/South	AT-177	Medium	Medium-Term
Improve Orchard Street to Minor Arterial cross-section standards between 6th Street and OR 99W. This includes sidewalk and bike lanes with optional planter strips on both the north and south sides. Priority is the infill of approximately 125 feet of sidewalk on the north side.					
MRDP-12	6th Street Improvement	Parallel Routes to OR 99W	MAT-22	Medium	Medium-Term
Improve 6th Street from Kelly Street to Monroe Grade School to Local Street cross-section standards including sidewalks and optional planter strips. The shared-use path constructed by projects AT-122 and MRDP-15 may replace the sidewalk on one side of the street.					
MRDP-13	Kelly to Ash Street Shared-use Path	Parallel Routes to OR 99W	AT-120	Medium	Medium-Term
Improve the gravel path along the old railroad alignment between Kelly Street and Ash Street to Shared-use Path cross-section standards. This project would construct a segment of the OR 99W Alpine Cut-off to Kelly Street Shared-Use Path (project AT-120 in the TSP).					
MRDP-14	6th Street Shared-Use Path Safe Routes to School	Parallel Routes to OR 99W	n/a	Low	Short-Term
Construct a shared-use path along 6th Street from Orchard Street to Monroe Grade School. This project is currently funded as a Safe Routes to School project.					
MRDP-15	6th Street Shared-Use Path from Main/ Commercial St. to Orchard St.	Parallel Routes to OR 99W	n/a	Medium	Medium-Term
Construct a shared-use path along 6th Street between Main Street/Commercial Street and Orchard Street. This will connect the Monroe Cross Country Shared-Use Path (AT-122) to the 6th Street Share-Use Path Safe Routes to School from Orchard Street to the Grade School (MRDP-14). Include bicycle wayfinding signage to support an alternative route to OR 99W between Kelly Street and Orchard Street.					
CC-138	OR 99W & Orchard Street Intersection Improvement	Improve OR 99W	CC-138	High	Long-Term

Project ID	Project Name	Improvement Category	Existing TSP Project[11]	Cost[12]	Timing of Need
Improve the intersection of OR 99W & Orchard Street. Project may construct a traffic signal or roundabout, if feasible, when warranted. Project is subject to ODOT approval. Projected traffic demand from assumed development indicates that this project will not be warranted in the next 20 years.					
AT-122	Monroe Cross Country Shared-Use Path (Kelly St. to Main St. or Commercial St. segment)	Parallel Routes to OR 99W	AT-122	Medium	Medium-Term
Construct a shared-use path along 6th Street from Kelly Street (end of project MRDP-13) to Main Street or Commercial Street. This is a segment of the larger Monroe Cross County Shared-Use Path. Include bicycle wayfinding signage to support an alternative route to OR 99W between Kelly Street and Orchard Street.					
AT-125	6th Street & Orchard Street Intersection Improvement	Parallel Routes to OR 99W	AT-125	Low	Short-Term
Intersection crossing improvements at Orchard Street and 6th Street. These improvements could include new striping, pedestrian and bicycle signage, and rectangular rapid flashing beacons (RRFBs). Coordinate with AT-122 and MRDP-15 to provide wayfinding signage and a safe connection for people biking. This project is currently funded as a Safe Routes to School project.					
MAT-18	Long Tom River Trail	River Access	MAT-18	High	Long-Term
Construct a shared-use path along the west side of the Long Tom River. This path could tie into the OR 99W Alpine Cut-off to Kelly Street shared-use path along the old railroad alignment. Coordinate with MRDP-3, MAT-19, MRDP-10 and MRDP-13.					
MAT-19	Long Tom Foot Bridge	River Access	MAT-19	High	Long-Term
Construct direct access to Monroe City Park via a foot bridge across the Long Tom River, somewhere between Commercial Street and Kelly Street.					