



APPENDIX A: Park and Facility Inventory

APPENDIX A: PARK AND FACILITY INVENTORY

Appendix A provides an overview park classifications used in the analysis (Tables A.1 and A.2). It presents the City’s 2016 park inventory (Table A.3), as well as other natural and recreation resources in Forest Grove (Table A.4).

TABLE A.1: CITY PARK DEFINITIONS

Type of Park	Definition	Size and Service Area	Examples
Community Park	Larger parks that provide active and passive recreational opportunities for all city residents. Accommodates large group activities.	<ul style="list-style-type: none"> • 20 to 50 acres • ¾ to 1 mile 	<ul style="list-style-type: none"> • Lincoln Park • Thatcher Park
Neighborhood Park	Small parks located within biking and walking distance of users.	<ul style="list-style-type: none"> • 1/2 to 7 acres • ¼ to ½ mile 	<ul style="list-style-type: none"> • Hazel Sills Park • Joseph Gale Park • Rogers Park • Talisman Park
Special Use Park	Parks, recreation facilities, or sites designed around a singular purpose, such as recreation centers, plazas, historic properties, sports complexes, etc.	<ul style="list-style-type: none"> • Dependent on use • Variable 	<ul style="list-style-type: none"> • Forest Grove Aquatic Center • Forest Grove Senior Center
Open Space, Greenways and Trails	Natural areas, waterways or linear corridors established for resource protection, recreation and/or trail use.	<ul style="list-style-type: none"> • Dependent on use • Variable 	<ul style="list-style-type: none"> • B Street Trailhead • B Street Trail • Old Towne Loop Trail
Undeveloped Parkland	Land acquired for future parks. The site’s use and function will be determined when it is developed.	<ul style="list-style-type: none"> • Variable • Not assigned 	<ul style="list-style-type: none"> • A.T. Smith Park • Kyle Park • Rueter Farm Park • Saucy Park • Stites Park

TABLE A.2: OTHER RECREATION RESOURCES

Type of Recreation Resource Area	Definition	Size and Service Area	Examples
Natural Resource Areas	Natural areas provided by others for resource protection, recreation and/or trail use.	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Fernhill Wetlands • Metro Wetlands
Schools	Outdoor recreation space at school sites that is accessible to the public for use.	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Joseph Gale Elementary School • Neil Armstrong Middle School • Forest Grove High School
Special Use Sites	Other sites in Forest Grove that support community recreation activities. These may or may not be publicly accessible.	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Cannery Field • Stoller Center

TABLE A.3: FOREST GROVE PARKS & FACILITY INVENTORY BY CLASSIFICATION (Acreage Owned or Maintained by City)

CITY PARKS	Acres	ATHLETIC FACILITIES					OUTDOOR RECREATION FACILITIES					PARK AMENITIES			Notes	
		Baseball Field	Softball Field	Soccer Field	Basketball Court	Tennis Court	Horseshoes	Playground	Skateboard Park	BMX Track	Trail/Path	Off Leash Area	Restrooms	Barbecue/Grills		Picnic Shelter
Community Parks																
LINCOLN PARK	25.8	1	1	2	1	1	1	1	1	1	1	1	1	1	1	Stadium, sand volleyball court. 3 acres of Lincoln Park is undeveloped
THATCHER PARK	25.5	1	1	1						1	1	1	1	1	1	8.5 acres of Thatcher Park is undeveloped; 1 acre (the dog park) is on land owned by the Fire District.
<i>Community Parks Subtotal</i>		51.3	2	2	3	1	1	1	2	1	1	2	1	2	2	
Neighborhood Parks																
BARD PARK	2.8				2			1			1			1	1	Ball wall
HAZEL SILLS PARK	0.5							1						1	1	
JOSEPH GALE PARK	3.8	1					3	1					1	1		
KNOX RIDGE PARK	0.4							1								1
ROGERS PARK	3.7				1	2	1	1			1		1	1	1	Gazebo
TAILSMAN PARK	2.3							1			1			1	1	
FOREST GLEN PARK (UPPER)	0.9							1								
FOREST GLEN PARK (LOWER)	5.3	1			2						1					Ball wall
<i>Neighborhood Parks / Play Lots Subtotal</i>		19.7	2	0	0	5	2	4	7	0	0	4	0	2	5	5
Special Use Parks																
FOREST GROVE AQUATIC CENTER	3.0															Lap pool, warm water pool, hot tub, sauna and outside spray park
FOREST GROVE SENIOR CENTER	1.3															Two conference/class rooms, dining hall, kitchen, outdoor picnic area
<i>Special Use Parks Subtotal</i>		4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Open Space, Greenways and Trails																
B STREET TRAILHEAD	0.9										1					Seating area, viewpoint. Total length of trail is 0.17 miles or 880 feet.
B STREET TRAIL *	0.9										1					Bridge. Total length of trail is 0.57 miles or 3,020 feet.
FERN HILL ELEMENTARY SCHOOL TRAIL*	1.0										1					Total length of trail is 0.4 miles or 2250 feet.
FERNHILL WETLANDS TRAILHEAD	0.9										1	1		1		Parking, interpretive signage
FOREST GLEN TRAIL AND OPEN SPACE	45.1										1					Total length of trail is 0.59 miles or 3,120 feet.
HIGHWAY 47 TRAIL*	9.1										1					Benches. Total length of trail is 3.8 miles or 19,900 feet.
OLD TOWN LOOP TRAIL*	1.3										1					Total length of trail is 0.53 miles or 2,800 feet.
<i>Open Space, Greenways and Trails Subtotal</i>		59.2	0	0	0	0	0	0	0	0	7	0	1	0	1	
Totals for Existing Parks		134.4	4	2	3	6	3	5	9	1	1	13	1	5	7	8
Undeveloped Parkland																
A.T. SMITH PARK	3.2															Adjacent 2.2 acres are owned by Friends of Historic Forest Grove
KYLE PARK	7.5															
REUTER FARM PARK	2.1															
SAUCY PARK	0.5															
STITES NATURE PARK	10.9															
<i>Undeveloped Parkland Subtotal</i>		24.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals for All Parks		158.7	4	2	3	6	3	5	9	1	1	13	1	5	7	8

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TABLE A.4: FOREST GROVE NATURAL RESOURCE AREAS AND SCHOOL SITES INVENTORY

RECREATION RESOURCES	Acres	ATHLETIC FACILITIES					OUTDOOR RECREATION FACILITIES					PARK AMENITIES			Notes	
		Baseball Field	Softball Field	Soccer Field	Basketball Court	Tennis Court	Horseshoes	Playground	Skateboard Park	BMX Track	Trail / Path	Off Leash Area	Restrooms	Cooking Facilities		Picnic Shelter
Natural Resource Areas																
FERNHILL WETLANDS	80.7										1		1		1	CWS has plans to build a future interpretive center
METRO PROPERTY	39.7										2					Acreage includes the B Street Trail and Old Town Loop Trail, which are maintained by the City
<i>Natural Resource Areas Subtotal</i>	120.4	0	0	0	0	0	0	0	0	0	1	0	1	0	1	
School Sites																
CENTRAL ADMINISTRATION PLAYGROUND	1.4															
FERN HILL ELEMENTARY / NEIL ARMSTRONG																
MIDDLE SCHOOLS	42.9		4	4	1					1						track
FOREST GROVE COMMUNITY SCHOOL	0.2								1							
FOREST GROVE HIGH SCHOOL	56.9	2	2	2		6										track, football field
HARVEY CLARKE ELEMENTARY SCHOOL	9.8		1	1	1				1							
JOSEPH GALE ELEMENTARY SCHOOL	7.9	1	1		1				1							
TOM MCCALL UPPER ELEMENTARY SCHOOL	37.9		4	4				3		1						track
<i>School Sites Subtotal</i>	156.9	3	12	11	3	6	0	7	0	0	2	0	0	0	0	
Special Use Sites																
CANNERY FIELD (PACIFIC UNIVERSITY)	N/A			3												Rectangular fields used for multiple sports (e.g., soccer, rugby, lacrosse)
STOLLER CENTER (PACIFIC UNIVERSITY)	N/A															University athletic center with fitness/weight room, gymnasium, fieldhouse (with space for two basketball courts, two tennis courts and four volleyball courts), racquetball courts (3), wrestling room, sauna, team rooms, offices (95,000 sf)
<i>School Sites Subtotal</i>	0.0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	
Totals for Park Facilities	277.3	3	12	14	3	6	0	7	0	0	3	0	1	0	1	

Revised 7/06/16



APPENDIX B: Community Forest Management Plan



2016-2021

URBAN FOREST MANAGEMENT PLAN

◆
APRIL 2016
◆



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2016 – 2021

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Acknowledgements:

Urban Forest Management Toolkit

Executive summary

This document provides an overall framework for managing Forest Grove’s urban and natural forest resources (this plan does not include the Forest Grove City watershed). It is based on the condition of the forest in 2014 and an analysis of trends that have shaped Forest Grove's urban forest to date and will continue to influence it in the future. The major portions of this document are described below.

Tree resource assessment

This section discusses current condition, issues and trends that are likely to impact Forest Grove's tree resources over at least the next 25 to 50 years. Topics include:

- Canopy cover
- Street trees
- Facility trees
- Parking lot trees
- Park trees
- Register/Heritage trees
- Open space trees
- Hazard trees

Community values

This section presents the summary of stakeholder attitudes and perceptions about the urban forest and its management.

Strategic plan

Topics include:

- Issues, trends, and needs
- Goals
- Objectives
- Actions

Implementation plan

Topics include:

- Potential funding sources
- Proposed implementation strategy
- Monitoring plan

Appendix

This section presents several of the inventories and technical guides. Topics include:

- 2011 street tree inventory
- 2014 vegetation assessment and recommendations for City parks
- Tree planting standards
- City list of recommended street trees for planting
- Register of Historic and Significant (Heritage) trees list
- Tree related ordinances (Forest Grove Development Code Article 5 and Municipal Code Chapter 9)
- Chronological public involvement record
- Public survey questions and responses
- Other management plans

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Mission & Vision

Mission statement

The mission of the Forest Grove CFC is to work with the community and government to increase awareness about the importance and values of urban trees. To this end the City Council authorized the CFC to:

1. Maintain the Forest Grove Significant Tree Register (Tree Register) by:
 - a. Recommending to the City Council the designation of properties with significant trees that meet the criteria for designation.
 - b. Recommending removal of trees from the Register
2. Ensure that significant trees are protected and pruned appropriately
3. Review activities proposed by the City and other agencies that may seriously affect Register trees and advise on such matters
4. Perform other activities relating to community trees, including but not limited to:
 - a. Providing public education on the history and importance of the Register trees;
 - b. Providing advice to the City Council and other City boards on protection of trees in the community
 - c. Providing technical information on community tree issues
 - d. Making recommendations to the City Council for community forestry related programs
 - e. Periodically reviewing and making recommendations for updating the Significant Tree Register
 - f. Recommending to the City Council the acceptance of grant funds and donations towards the protection and planting of trees in the community

Vision statement

The Forest Grove Community Forestry Commission (CFC) believes that a healthy and expanding community forest is essential to our community's quality of life and to our environmental and economic wellbeing.

Vision for the Forest Grove Urban Forest in 2020

The health of this urban forest, a mosaic of the planted landscape and the remnant native forest, is a reflection of the city's health, well-being and livability. These trees and other plants are a vital part of the city character, giving it a special sense of place. Forest Grove continues to be recognized as a Tree City USA for the 25th consecutive year in 2015.

The urban forest canopy is cohesive, not fragmented, because development includes trees as part of the total vision for sustainable development. The air and water are cleaner because the trees and other plants remove pollution from the air and reduce runoff. Fish and wildlife have healthy habitats. Open spaces and urban stream corridors define a sense of space in our

communities while providing a quiet respite from hectic urban life. Tree-lined streets offer shade and protect us from inclement weather. Shoppers frequent shaded business districts where trees help save energy, reduce noise and soften the hard edges of structures and paved areas.

Coordinated management of the urban forest occurs because city agencies, businesses, civic organizations and residents have formed partnerships to make a place for trees in the city. Residents recognize trees as a vital, functioning part of the city's infrastructure and ecosystem and provide adequate, stable funding to maintain and enhance the urban forest.

We have achieved a healthy, sustained urban forest, carefully managed and cared for, which contributes to the economic and environmental well-being of the city.

Why we need a plan

Trees provide a variety of important benefits in the urban environment. These benefits include removing carbon from the atmosphere, reducing energy use, improving air quality, moderating storm water flows, protecting water quality, improving economic sustainability, supporting physical and mental health of residents, and providing habitat for wildlife.

The community's trees need to be managed in order to maintain this stream of benefits which are critical to the community's economic well-being and overall quality of life. Unlike most other urban infrastructure, the value of the urban forest generally increases over time. Benefits provided by the urban forest may take years to develop to desired levels, but tree resources can be adversely impacted over short time periods by a lack of timely management or poor management choices. An urban forest management plan helps a community protect the investment it has made in its community forest and provides a blueprint for enhancing and improving that asset to maximize the benefits provided while minimizing costs required to maintain the resource.

Whether for good or ill, the community's trees are being managed in some fashion whether a plan is in place or not. Without a vision and plan for the management of the urban forest as a whole, however, it is unlikely to thrive and provide the benefits that the community desires.

Many benefits provided by trees are listed below:

Benefits provided by trees

- Removing carbon from the atmosphere;
- Producing oxygen;
- Reducing energy use;
- Improving air quality;
- Moderating storm water flows;
- Protecting water quality;
- Improving economic sustainability;
- Increasing property values;
- Supporting physical and mental health of residents; and
- Providing habitat for wildlife

The City's street tree inventory completed in 2011 provided a glimpse into the benefits to the community as a result of our urban forest. For example street trees in Forest Grove remove nearly 8 million pounds of air pollutants per year.

Scope of the plan

This intent of this plan is to provide a strategic framework for managing the urban forest within Forest Grove. Other site specific plans may be developed that address the management of the urban forest in areas such as college campuses, office parks, historical sites, botanical gardens, recreation areas, or other large properties that contain significant amounts of tree canopy. These site specific plans would fit within the strategic framework of the urban forest management plan.

The following types of trees are included in this urban forest management plan:

- Street trees
- Facility trees
- Parking lot trees
- Park trees
- Register/Heritage trees
- Open space trees
- Hazard trees

Planning horizon

Efforts should be made to update the management plan every 5 years, or sooner if the need exists and resources are available.

Relationship to other planning documents

Cities and counties, as well as other public districts, typically have multiple layers of planning documents. This plan will incorporate elements from the following documents (this list will be expanded as necessary):

- Parks and recreation master plan
- Urban renewal plans
- Community sustainability element of the comprehensive plan
- Design and landscaping guidelines and development standards (Public Works Specifications)
- Ordinances, including the local tree ordinance
 - Forest Grove Development Code Article 5
 - Tree Protection
 - Forest Grove Development Code Article 8
 - Landscaping, Screening and Buffering (Parking Lot Trees)
 - Municipal Code Chapter 5
 - Trees and Plants
 - Municipal Code Chapter 9
 - Boards and Commissions (Community Forestry Commission)
 - Street Trees

The Urban Forest

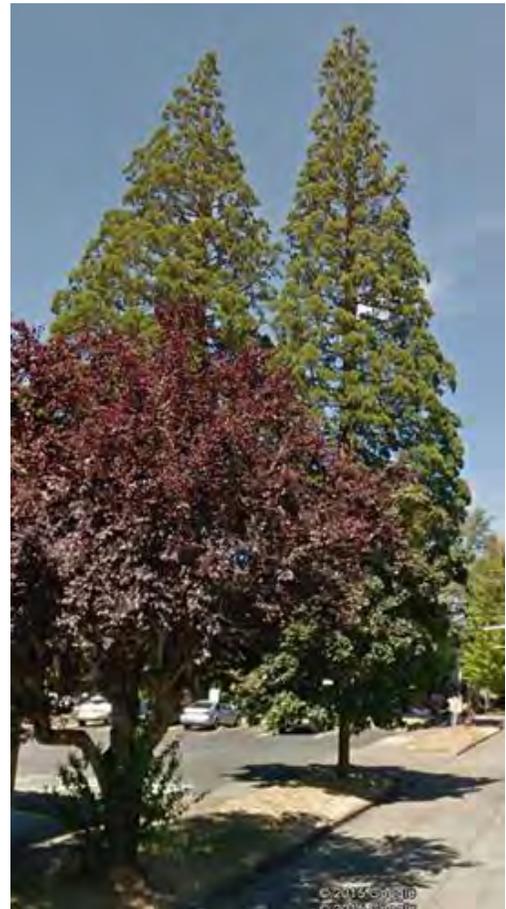
Historical context

Native Vegetation

At the time of European settlement, heavy forests covered most of the region. Stands of Douglas-fir, western hemlock, and western redcedar dominated the landscape. Deciduous bigleaf maple and red alder were intermixed. Wetlands and flood plains along the river supported Oregon ash, willows, and black cottonwood. Oregon white oak and Pacific madrone grew in drier uplands. Understory upland vegetation included vine maple, western hazel, oceanspray, snowberry, thimbleberry, Oregon grape, salal, red huckleberry, ferns and forbs. Wetland species included elderberry, Douglas spirea, dogwood, sedges and rushes.

Much of this forest was cleared for farming beginning in the mid 1800's. The earliest european settlers came to the Tualatin Valley of Oregon as farmers and missionaries in the 1840s. The Native Americans in the region were of various bands of the Tualatin Branch of the Kalapuya Indian Group. Several Native American villages were located along the banks of Gales Creek just south of present day Forest Grove (From Forest Grove Comprehensive Plan (1980) p. IV-1.).

In 1859 the name "Forest Grove" was officially recognized for the area around what is now Pacific University. The name probably referred to the grove of oak trees on and around the University grounds. Several of these trees exist today. According to historical accounts many of the large sequoia trees in Washington County were planted from seed by John R. Porter circa 1870. This includes the sequoia trees located on the Pacific University campus and elsewhere in Forest Grove.



Sequoias at 19th Avenue and Elm Street

Environmental context

Rainfall

Average annual precipitation is 45.12 inches (*Source: Western Regional Climate Center*). Northwest Oregon, including Forest Grove, is susceptible to strong winter storms that are carried along the Jet Stream over the Pacific Ocean. Heavy rain events are not uncommon during the fall, winter and spring months. Such events pose potential risk to the urban forest especially mature Oregon white oak trees.

Temperature

Average Max: 63.6/Average Low: 41.6, Average Range 32.1 to 82.6 (*Source: Western Regional Climate Center*). Northwest Oregon, east of the Coast Range and west of the Cascades, typically experiences moderate temperatures during spring, fall and winter. Summers are characterized by warm to hot days and cool evenings. The summer months are typically dry which can cause considerable stress on certain trees especially non-native varieties.

Climate Zone

USDA Tree hardiness zone 8. USDA developed tree hardiness zones to guide plant selection with an eye toward those which are most likely to survive at a given location. The zones are based on the average annual minimum winter temperature. As the map below indicates, Washington County is located within tree hardiness zone 8.



The Arbor Day Foundation provides information on tree species suitable for the various tree hardiness zones. Popular trees suitable for zone 8 identified by the Arbor Day Foundation include:

- Eastern white pine
- Sugar maple
- Red maple
- Yoshino cherry
- Saucer magnolia
- Dogwood
- Northern red oak
- Black walnut

Soil conditions

Soils in this area are dominated by clays, silts, and loams partially as a result of historic flood events (Lake Missoula 15-20,000 years ago). Soil types found throughout the City have potential shrink-swell and low shear strength problems. Soil is an important factor contributing the growth of tree especially within urban or suburban environments. Research shows that soil compaction is a significant contributor to overall tree health.

Tree resource assessment

Canopy cover

Background

Tree canopy cover refers to the proportion of land area covered by tree crowns, as viewed from the air. Canopy cover is tied to many of the benefits provided by the urban forest.

Existing condition

The tree canopy cover in Forest Grove is estimated to be approximately 23.2 %. (*Source: Portland State University, Regional Urban Forestry Assessment and Evaluation for the Portland-Vancouver Metro Area, Revised June 2010*). This figure is estimated to have increased 2-5% in the past 20 years as former farmland has been developed into new housing areas and trees have been planted.

The organization American Forests recommends tree canopy coverage for urban and suburban areas. American Forests recommends 40% as the goal for urban areas overall and 50% for suburban residential areas in the Pacific Northwest. The City of Vancouver, Washington has set a canopy goal of 28% and the City of Tigard, Oregon has a goal of 32% canopy coverage by 2027.

The Community Forestry Commission recommends the following canopy coverage goals:

Goals/desired condition

- 30% canopy cover by 2025
- 40% canopy cover by 2035

Achieving these goals requires concentrated effort and a clear strategy. This plan provides a framework for setting our community on a path for realizing a viable and sustainable urban forest worthy of a city named Forest Grove.

Street trees

Background

Trees along streets are one of the most visible portions of the urban forest. Due to their location, street trees provide specific benefits not provided by other trees. Benefits include traffic calming and extending the life of roadway pavement. Streets shaded by trees contribute to "sense of place," which can also contribute to increased community pride and property values.

Street trees are often located in very constrained locations. Pavement and utility lines may limit growing space. Other management issues that may be important for street trees include:

- Trees are commonly subject to damage by vehicles and street construction activities.
- Conflicts with utilities, hardscape (especially sidewalks, curbs, and gutters) and other built infrastructure are common.
- Branch, trunk, and root failures commonly have a high potential to cause property damage and/or injury.
- Tree canopies typically need to be maintained for street and sidewalk clearance, visibility issues for motorists, and to minimize risk of branch failures.
- Falling leaves, seeds, and fruits may create hazards on sidewalks and contribute to storm drain clogging.
- Street trees may generate high numbers of service requests and complaints.

Because of these issues, species selection is often a primary consideration. The species used may be specified in a master planting plan or on an approved species list. The palette of potential street tree species may be limited, which can sometimes lead to low species diversity. Low species diversity can pose a risk to the urban forest if one or more common species develop serious problems.



Existing condition

The City of Forest Grove Community Development Department manages the street tree planting program within newly developed areas. Historically, street tree planting was left to home builders. Many trees, however, did not fare well due to improper tree selection and planting in less-than-desirable locations. To address this problem, the City now selects trees with input from homeowners and manages tree planting to ensure proper placement. The street tree planting program is funded through an assessment at time of building permit issuance. The Street Tree Fund contained in the City budget is the collection of these assessments.

A street tree inventory was completed for Forest Grove in 2011 (see appendix). Findings include:

- Over 150 different tree species were found in Forest Grove
- The three most abundant trees are Japanese maple, Japanese flowering cherry, and Norway maple
- Deciduous trees are the dominant tree type, comprising 69% of all street trees
- Greater than half (59%) of the trees are less than 12 inches in diameter
- Street trees comprise approximately 350 acres (10% of the total land area in the City)
- The total replacement value for the street trees is estimate to be \$148 million
- White oak, Douglas-fir, and Sequoia had a higher proportion of observations in the poor to fair condition class than the average for the average of all species surveyed.

Opportunities include

- Identification of unoccupied areas as potential future planting sites
- Include an assessment element of whether the inventoried tree is in an appropriate location (based on potential tree size, crown characteristics, overhead utility location, etc.) in future inventories
- Expand the sample size
- Intensive tree survey along heavy traffic corridors (19th Avenue, Pacific Avenue, B Street, Thatcher Road) to develop long-range management plan to replace aging trees in poor condition
- Identification of street trees causing problems for pedestrians or motorists

Goals/desired condition

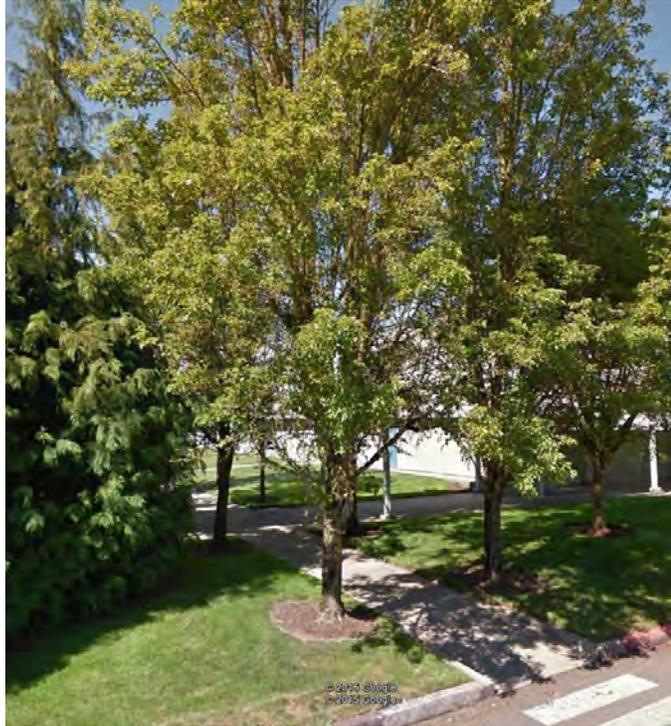
- Mixed age/size classes and species composition
- Retain tree species representing character of Forest Grove (White oak, Douglas-fir, bigleaf maple, sequoia)
- Resistant to insect, disease, environmental damage
- Minimal impact to adjacent utilities (including storm sewer)
- Safe environment for pedestrians, motorists, and home owners
- Efficient to maintain
- Non-invasive species suitable for Forest Grove's climate

Facility trees

Background

Many urban trees fall into the "facility tree" category. These are privately owned and maintained trees around buildings and other built facilities that are not adjacent to streets. Most trees in sites such as office parks or campuses are facility trees. Shade provided by trees near buildings can greatly reduce summer cooling costs. Facility trees also modify the visual impact of structures.

Most facility trees grow where soil volume is restricted by hardscape. They commonly occur in landscape beds near structures. These landscape beds can vary widely in size. Facility trees may also occur in small planters or cutouts in sidewalks or plazas.



Some potential management issues:

- Soil near buildings may be unfavorable due to severe compaction and alkaline residues from concrete, stucco, etc.
- Planting beds may have inadequate drainage or irrigation.
- Competition from other landscape plants may be excessive.
- Reflected heat or excessive shading from structures may affect tree growth and health.
- Pruning may be needed to maintain clearance from buildings and over walkways.
- Potential for root damage to foundations and walkways needs to be considered.
- Underground utility maintenance may damage tree roots.

Existing condition

Notable facility trees include the Oregon white oaks, and Douglas-firs on the Pacific University campus. The university has a draft vegetation management plan for the campus (55 acres) and has recently expanded non-irrigated areas near white oaks to improve tree health.

Goals/desired condition:

- Mixed age classes and species composition
- Resistant to insect, disease, environmental damage
- Minimal impact to adjacent buildings and utilities
- Safe environment for pedestrians, motorists, and home owners
- Efficient to maintain

Parking lot trees

Background

Parking lots can occupy large patches of the urban landscape. Trees in parking plots can help mitigate some of their undesirable characteristics:

- Tree shade helps cool pavement. This helps reduce the urban heat island effect that is associated with paved areas.
- Tree shade cools parked cars. Hydrocarbon vapors emitted by hot cars contribute to photochemical smog formation.
- Trees intercept and channel rainfall, reducing runoff and water pollution associated with runoff from paved surfaces.
- Trees screen and soften the visual blight that parking lots pose



Forest Grove High School Nichols Lane Frontage

Parking lots are typically poor areas for growing trees. Trees are often grown in small cutouts with compacted soils, poor irrigation, and inadequate drainage. Trees may be subject to heat damage from hot pavement and vehicle engines. Trees are also damaged by vehicles and shopping carts. Trees are pruned to provide vehicle clearance and avoid blocking parking lot lighting. Retailers sometimes have trees pruned inappropriately to enhance visibility of signs or buildings from the street. Trees in parking lots can also have undesirable effects such as dripping sap on cars or causing additional maintenance/cleaning of the parking surface.

Existing condition

The Forest Grove development code for parking lots requires:

- At least 8% of the interior parking lot area shall be landscaped (DC 10.8.415(E)(3)).
- One tree shall be required for every 1,600 square feet of interior parking lot area. Trees shall have a minimum 2-inch caliper and 6-foot branch height at time of planting (DC 10.8.415(E)(4)).
- Interior parking area landscaping and trees must be dispersed throughout the parking area. Some trees may be grouped, but the groups must be dispersed. Required trees may be planted within 5 feet of the edges of the parking area (DC 10.8.415(E)(5)).

Forest Grove has a variety of parking lots developed over time, some have trees planted in them, and some do not. The recent remodel of Forest Grove High School included the planting of trees within the reconfigured parking lot and along Nichols Lane. The photograph above shows some of the newly planted trees.

Opportunity

Inventory parking lots to identify potential areas for planting, as well as existing plantings that may be incompatible with goals/desired conditions.

Goals/desired condition:

- Mixed age classes and species composition
- Resistant to insect, disease, environmental damage
- Minimal potential impact to vehicles
- Safe environment for pedestrians and motorists
- Efficient to maintain



Example of Well-Maintained Parking Lot Trees



Example of Improper Pruning of Parking Lot Tree

Park trees

Background

Park trees include trees in public parks maintained by the City. Compared with street or facility trees, park trees may have fewer space constraints for both canopies and roots. This can allow the use of a wider range of species and larger trees overall. Tree care, however, may not receive high priority where turf or sports fields are primary uses. Other considerations:

- Trees in or near lawns need to tolerate high amounts of irrigation. Turf can also compete strongly with young trees.
- Soil compaction due to foot and equipment traffic on wet soils may impair root growth and drainage.
- Surface roots in turf may conflict with mowing equipment and may pose tripping hazards.
- Trees can be subject to damage from mowing equipment and park users. This can make it difficult to establish new trees.
- Hazard management may be a primary concern, especially in areas that are heavily used.
- Newly-developed parks often start with even-aged stands of trees. Phased tree replacement and interplanting may be needed to avoid a future replacement of the entire stand.
- Parks may include heritage trees or other old or unique trees with special maintenance needs.



Thatcher Woods



Rogers Park

Existing condition and opportunities

Forest Grove currently has over 20 park sites covering approximately 100 acres. Recent findings from the 2014 City park vegetation assessment include:

- The parks contain a wide variety of planted and native trees
- Significant tree maintenance is occurring
- Opportunities exist to plant additional trees, both to fill in unoccupied space, and to provide for future replacement of existing trees
- Some hazard abatement (dead branches) needs to occur
- May need a regular assessment schedule for overhead hazards?
- Opportunities exist to remove and replant a few smaller trees that appear to be too close to existing structures and utility wires
- Some past plantings need to be thinned to fewer trees on the site because of over crowding

Goals/desired condition:

- Safe environment for park visitors
- Mixed age classes and species composition
- Retain tree species representing character of Forest Grove (Oregon white oak, Douglas-fir, bigleaf maple, sequoia)
- Resistant to insect, disease, environmental damage
- Minimal impact to adjacent utilities
- Efficient to maintain (watering, mowing, etc.)
- Non-invasive species
- Greater coordination between the Community Forestry Commission and Parks and Recreation Commission regarding management of trees within the City's parks and open spaces.

Register trees

Background

Register/heritage trees are trees that are awarded special status due to their

1. Tree size, shape, or location;
2. Botanical significance;
3. Exceptional beauty;
4. Functional or aesthetical relationship to a natural resource.

In Forest Grove these trees are a reminder of the city’s namesake and offer historic, aesthetic, environmental, and monetary value to the community. Because these are special trees by definition, they may have special needs relative to tree care activities and inspections.



Register Tree (Goff Oak)

Existing condition

The register tree program in Forest Grove was initiated in the mid-1990s. Approximately 100 trees were identified. Protection ordinances were developed for the register trees. Yearly notices of pertinent tree care information or additional services are sent to homeowners with register trees on their property. The City of Forest Grove requires a permit for activities that will impact heritage trees.

Current summary of Forest Grove’s register trees:

Tree Type	Number
Oregon white oak	138
Douglas-fir	15
Giant Sequoia	19
Big leaf maple	2
Ponderosa pine	1
Umbrella tree	1
European beech	1
Western red cedar	2
Deodora cedar	2
Camperdown elm	1

Goals/desired condition

- Safe environment for home owners
- Retain tree species representing character of Forest Grove (White oak, Douglas-fir, Big leaf maple, sequoia)
- Minimal impact to adjacent utilities
- Provide for periodic health inspections
- Have adequate ordinances for protection
- Have adequate process for identification of new candidate register trees

Opportunities

- Increase public awareness of program
- Identification of potential Register tree candidates

Open space trees

Background

Open space trees are often remnants of the native forest found along creeks or on hills. In some areas, some or all of these trees may be exotic species. Management goals and needs will depend on what types of species are present, their condition, and their location.

Tree management in open spaces is usually less intensive than in other parts of the urban forest. In some areas, open space trees may be largely unmanaged. However, these stands can and will change over time. Active management may be needed to:

- Help maintain native stands that have low levels of natural regeneration
- Suppress exotic species that may crowd out native trees in riparian areas
- Replace flammable exotic species with lower risk trees such as native oaks

Existing condition

Open space areas in Forest Grove total approximately 350 acres. Examples of open space trees include:

- Area along Gales Creek near the B Street Trail

Goals/desired condition

- Maintain native species composition
- Maintain conditions reducing threat from wildland fires

Opportunities

- Additional tree plantings along Gales Creek and the B Street Trail.

Hazard trees

Background

Forest Grove is susceptible to strong wind weather events during the winter months. Many older iconic trees in the City are vulnerable to damage. An example of this occurred in March of 2012 when one of the large Oregon white oak trees located in downtown Forest Grove succumbed to the wind. (See photo at right.) Fortunately, the tree fell in the early morning hours and did not cause injury to persons or significant property damage.



Tree Hazard

Many communities have developed programs to mitigate safety risks to persons and property. Some communities perform hazard tree risk assessments based on criteria developed by the International Society of Arboriculture. Such an assessment takes into account factors including history of tree failure, topography, soil conditions, tree foliage, vigor and possible defects, crown size, wind exposure, and conditions of roots. Based on these factors likelihood of failure is categorized. Categories include improbable, possible, probable and imminent. Potential impact and consequences are also assessed.

Existing condition

Hazard trees exist throughout Forest Grove, primarily in the older sections of town, and include the Old Town and Forest Gale Heights neighborhoods.

Goals/desired condition

- Safe environment for residents.

Opportunities

- Develop a hazard tree mitigation program and assessment methodology
- Perform hazard tree assessments

Management of the tree resource

Background

Almost all processes needed to sustain the urban forest – establishment, growth, decline, death, and degradation of trees – require some level of active management. Urban forest managers typically:

- Plan and implement tree plantings
- Maintain existing trees
- Manage hazards associated with declining trees
- Remove trees that have reached the end of their useful life span
- Recycle or dispose of green waste and wood from pruning and removals

Urban forest managers must also deal with problems related to the urban environment. These may include:

- Utility line clearance
- Damage to sidewalks and other hardscape due to tree roots
- Complaints from pedestrians and motorists about trees causing safety (visibility) issues
- Construction damage to tree roots
- Exotic species invading natural areas
- Fire hazards at the urban-wildland interface

Existing condition

Tree maintenance falls to three departments: Public works, Parks and Recreation, and Light and Power. Tree planting is the responsibility of the department undertaking the project. The Community Development Department manages the street tree planting program, issues permits for pruning or removal of protected trees including street trees, Register trees and trees on development sites.

Roles and Responsibilities (*Forest Grove City departments*):

- *Parks and Recreation Department:*
Maintain trees in City parks and on City-owned property, provide tree inspections at request of other departments, and support Community Forestry Commission
- *Community Development Department:*
Manage street tree planting program; review development proposals potentially affecting trees, issue tree pruning and removal permits, enforce tree planting regulations, support Community Forestry Commission.
- *Public Works Department:*
Address tree/sidewalk conflicts, annual fall leaf pick-up, maintenance along rights-of-way to address tree/ public way signage conflicts
- *Light and Power Department:*
Prune trees potentially affecting overhead utilities.

- No lead department/person for coordination of tree related activities between departments .

Forest Grove tree pruning standards prescribe a maximum 20% of tree canopy or 10% of critical root zone system impact. Tree topping prohibited.

Goals/desired condition

- Have adequate ordinances, plans and policies in place to manage tree resource (tree planting standards, pruning standards, protection standards during construction, tree removal permits, street tree species planting list, invasive tree species list)
- Safe environment for pedestrians, motorists, and homeowners
- Recycle (urban forest salvage) or dispose of green waste and wood from pruning and removals
- Adequate training for city and private crews doing tree maintenance work
- Adequate budgets for maintaining city trees
- Adequate coordination between city departments involved with tree related work

Opportunities

- Update tree planting standards
- Update/develop pruning standards
- Develop protection standards for underground utility, sidewalk, or other work that affects tree roots
- Determine if there is adequate coordination between departments for tree maintenance activities
- Identify areas available for additional planting of trees
- Determine adequacy of budgets for current and future maintenance/removal of trees in declining health (especially large trees)
- Surveys to locate trees causing visibility issues for motorists and pedestrians

Community desires, values & concerns

Background

The desires, attitudes, and perceptions of stakeholders and decision-makers can have a large impact on this plan. These potential issues were developed from the results of a 2015 urban forestry survey of Forest Grove residents.

Forest Grove resident concerns/issues include:

- Where to find information on proper tree care
- Cost of planting trees
- Cost of maintaining trees (includes cost of disposing of green material)
- Safety concerns for overhead trees hazards when visiting parks
- Safety concerns when living near large trees

Goals/desired condition

- Adequate information on proper tree care
- Safe environment when recreating or living (includes motorists) near trees
- Cost efficient system for recycling or dispose of green waste and wood from pruning and removals
- Adequate information about tree related ordinances

Strategic Plan

The strategic plan summarizes the issues, trends, goals, objectives, and actions under appropriate topic headings, e.g. Tree Resources, Management, and Community.

Issues and needs categories

- ***Tree needs***
Needs related to the tree resource itself and processes that maintain the urban forest.
 - ***Street trees***
 - ***Facility trees***
 - ***Parking lot trees***
 - ***Register/heritage tree program***
 - ***Park and open space trees***
 - ***Hazard trees***
- ***Management needs***
Needs of the urban forest program and the people involved with the short- and long-term care and maintenance of the urban forest.
- ***Community needs***
Needs related to how the public perceives and interacts with the urban forest and the urban forest management program.

Goals

The goals in this plan are the general outcomes that are sought. Goals may address some or all of the needs identified. They can also address other concerns or desires of the stakeholders.

Objectives

Objectives provide more specificity by breaking goals into the components that make up each goal. Like goals, objectives are desired outcomes, but are more specific and limited in scope.

Actions

An action is something that is done to achieve an outcome - e.g. plant trees, conduct workshops, or enforce regulations.

Tree needs

Issue 1: *Wrong tree in the wrong location rather than right tree in the right location*

Goal

Have minimal conflict between trees and utility lines, buildings, etc.

Objective

Reduce conflicts and improve tree health

Actions

- Expand future street tree surveys to include assessment of whether a tree is in an appropriate location (locates potential sites for correction).
- Review street tree planting list for possible conflicts.
- Increase public awareness about street tree program through expanded information placed on City website (requirement for tree removal permit and recommended list of street trees).
- Review list of recommendations in 2014 parks vegetation survey for specific remedial actions (tree replacement, removal).

Issue 2: *Lack of diversity in Oregon white oak size and age class (Not enough young oaks)*

Goal

Increase the abundance and survival of young white oaks as an element of the urban forest in Forest Grove.

Objective

Continuation of the Oregon white oak as an iconic tree in Forest Grove.

Actions

- Utilize 2014 parks vegetation survey to locate planting sites (open non-irrigated sites).
- Increase public awareness about the health risk to white oaks from watering in the summer.

Issue 3: *Insufficient tree canopy within the city limits*

Goal

Strive to achieve an Increase in tree canopy from 23% to 30% by 2025 and 40% by 2035

Objective

Increase public and private community benefits of trees by increasing tree canopy.

Actions

- Seek funding opportunities to increase tree planting throughout the community
- Establish partnerships between the Community Forestry Commission and other agencies and organizations interested in planting trees in Forest Grove.

Street trees

Issue 1: *Reduce possible impact of disease affecting street trees*

Goal

Increasing street tree diversity and reduce the potential impact of tree diseases

Objective

Effective management of street trees

Actions

- The Community Forestry Commission in conjunction with appropriate City staff should develop street tree management plans for new subdivisions of the City. The management plans should address recommended tree species to plant in the neighborhood.
- Educate property owners about City policies regarding adjacent property owner responsibility for maintaining street trees.
- Prepare an estimate of cost to taxpayers if the City were to undertake complete responsibility for maintaining street trees. The estimate should address staffing levels and required expenditures. The analysis should address equity in terms of not all streets have street trees.
- Utilize grants to assess, plan, and implement tree removal and planting projects as needed.
- Develop risk/age/condition based mapping (GIS) of potential neighborhood needs.

Facility trees

Issue 1: *Educate property owners about proper care of facility trees*

Goal

Promote planting of facility trees and proper facility tree care including pruning

Objective

Improve condition of facility trees throughout the community.

Actions

- Educate property owners about proper tree care and pruning techniques
- Educate property owners about the economic benefits trees provide

Parking lot trees

Issue 1: *Many existing parking lots lack trees*

Goal

Increase tree canopy coverage in existing parking lots

Objective

Bring existing parking lots into compliance with current Development Code standards

Actions

- Educate property owners about the benefits of adding trees to parking lots including increasing pavement life cycle.
- Work with property owners to select appropriate parking lot trees to reduce ongoing maintenance costs
- Work with property owners regarding proper tree pruning techniques.

Register/Heritage Tree Program

Issue 1: *Lack of protection for tree groves*

Goal

Develop tree grove protection program

Objective

Improve the Register/Heritage tree program

Actions

- Improve standards and incentives for tree grove protection
- Preserve existing tree groves
- Create new tree groves

Issue 2: *Lack of recruitment of new register trees into the program*

Goal

Improve community outreach for Register Tree Program

Objective

Encourage property owners to nominate trees to include on the Register/Heritage Tree list

Actions

- Educate community about Register Tree Program and benefits of seeking Register Tree designation

- Implement a “Register Tree of the Year” recognition program

Park and open space trees

Issue 1: *Unfulfilled opportunities for new trees plantings in parks and open spaces*

Goal

Increase tree canopy within open space areas, and insuring “right tree in the right place”.

Objective

Promote trees as an important component of the City’s open space programs.

Action

- The Community Forestry Commission should work with the Parks and Recreation Commission to ensure tree canopy is considered as an integral part of community open space programs.
- Utilize the park vegetation inventory to locate potential opportunities.

Issue 2: *Lack of park specific tree management plans*

Goal

Have plans as needed.

Objective

Develop plans as needed.

Action

- Develop a tree management plan for Thatcher Park.

Management needs

Issue 1: *Survival of planted or maintained trees*

Goal

Have greater than 90 percent survival of planted/maintained trees.

Objective

Encourage proper tree planting and care practices to increase survival rate

Actions

- Update the tree planting standards used by City contractors.
- Develop pruning standards/practices

- Develop inspection schedule for maintenance of downtown street trees (checking metal grates, etc. near street tree boles.)
- Develop/review ordinances/standards for underground utility or other work affecting tree roots.

Issue 2: *Coordination between City departments when working near trees*

Goal

Minimize duplication of efforts and ensure proper techniques to reduce harmful impacts to trees resulting from construction activities.

Objective

Ensure survival of trees near construction areas.

Actions

- Identify lead person or department for coordination on tree related issues.
- Consolidate tree planting and management efforts among City departments
- Designate a lead City staff person to coordinate urban forest management efforts.

Issue 3: *Affordability of City managed trees (maintenance cost)*

Goal

Have an urban forest that is sustainable with a minimal level of investment.

Objective

Reduce costs associated with tree care.

Action

- Review program for activities that have a low cost/benefit ratio.

Issue 4: *Funding*

Goal

Secure ongoing and dedicated funding for the urban forest management program.

Objective

Identify and utilize potential funding sources for urban forestry related programs.

Actions

- Identify possible funding mechanisms to support the urban forest management program
- Seek grant opportunities to implement urban forestry initiatives

- Seek dedicated funding through the City budget process for tree planting efforts by documenting tree related benefits to street preservation, surface water management, and environmental sustainability.

Community needs

Issue 1: *Availability of information related to proper tree care, or tree ordinances*

Goal

Have tree related information readily available through a variety of media.

Objective

Improve the availability of tree related information.

Actions

- Post Forest Grove tree removal permit/ordinance on City website
- Post tree planting and pruning information on City website. (or link to OSU Extension website)
- Post recommended street tree planting list.
- Continue CFC sponsored pruning and planting workshops
- Evaluate need for a City urban forester or arborist

Issue 2: *Affordability of tree maintenance as trees grow larger and older*

Goal

Having an affordable means of managing mature landscaping.

Objective

Mitigate property owner costs associated with retaining large, mature trees

Actions

- Evaluate possibility of expanding street tree leaf pick up to also include leaves/trimmings from other trees (especially in light of possible elimination of backyard burning).
- Increase awareness of urban tree salvagers that may offset cost of total tree removal.
- Establish grant or assistance program for low income home owners for tree maintenance activities.

Issue 3: *Effectiveness of the fall leaf pick-up program*

Goal

Assist property owners with removal of fall leaves.

Objective

Encourage the proper removal of fall leaves. Determine effectiveness of current fall leaf pick-up program.

Action

- Encourage volunteer opportunities to assist property owners with removal of fall leaves, especially elderly property owners.
- Determine effectiveness of current fall leaf pick-up program, and develop alternative strategies if necessary.

Issue 4: *Safety of public while recreating, driving, or living near areas with trees*

Goal

Enhance safety to persons and property by identifying and mitigating potential tree hazards.

Objective

Identify potential tree hazards

Actions

- Develop and maintain criteria for what constitutes a tree hazard using the Tree Risk Assessment methodology available from the Pacific Northwest Chapter of the International Society of Arboriculture.
- Prior to acquisition of land for parks or public places conduct a tree hazard assessment
- Develop and implement a formal emergency response system for tree hazards on City streets, City parks, and greenspaces.
- Utilize 2014 parks vegetation assessment to locate areas needing overhead hazards removed (dead or comprised branches over trails or in heavily used areas).
- Develop schedule to assess and remove hazards.
- Survey to identify potential safety issues to pedestrians, motorists, or cyclists from trees (low hanging branches blocking visibility of signs or crosswalks etc..)
- Develop a hazard tree identification and abatement program

Implementation plan

Funding is a critical component of successful implementation. The following section identifies current and potential sources of funding for sustaining the urban forest.

Urban Forest Funding Sources

Grants

Grants have been used by the Community Forestry Commission to fund inspections of trees on the Register of Significant Trees, street tree infill planting, publication of a tree of the month calendar and publication of a tour of trees brochure. Potential grant funding opportunities include:

- Forest Grove Community Enhancement Program
- Oregon Community Trees
- Alliance for Community Trees
- American Forests

Street Tree Fund

The City's Development Code requires all subdivisions and partitions to install street trees. To prevent trees from being damaged, street trees are not installed until construction is completed. As a result, each development is assessed for the cost of acquisition, installation and one year of maintenance for the street trees required for a project. The Street Tree Fund is the collection of these assessments.

Surface Water Management Fund

The Surface Water Management Fund provides resources for the City's annual fall leaf pick up program. Approximately 1,400 cubic yards of debris is removed from the street to minimize flooding.

Parks and Recreation Fund

A portion of the Parks and Recreation Fund is used to provide landscaping around City facilities and some non-park areas. In addition, this fund is used for street plantings and trimming trees for street clearance.

Light and Power Fund

The Light and Power Department funds two journeyman tree trimmers with responsibility for tree care near overhead power lines.

Proposed Implementation Strategy

- Develop standards and procedures for tree code enforcement
- Develop standards and procedures for tree protection related to public improvement projects and subdivision development
- Develop and maintain as part of the City's GIS and permit systems a publicly accessible inventory of protected trees
- Develop a hazard tree identification and abatement program
- Improve coordination among City departments related to the urban forestry program
- Identify and secure long term funding sources for urban forestry projects.
- Take advantage of the Community Forestry Commission area of the City's website as a way to distribute educational information about tree selection, care and permit requirements.
- Improve public outreach related to the benefits of the Register Tree program
- Develop site specific park/open space plans as needed.
- Assess effectiveness of current leaf/limb removal program.
- Develop an inventory (condition & opportunity) and mapping (GIS) of potential areas for street tree improvement projects.

Monitoring plan

Monitoring is key to the success of any planning effort. Monitoring ensures desired outcomes are met or to make changes if something isn't working well.

Data will be collected as resources allow. Such resources include volunteer efforts, availability of grant resources, and how often data provided by outside organizations is updated. Whenever possible, field inventories should be conducted during the summer months

Register of Historic and Significant Trees

Inventory trees listed on the Register of Historic and Significant Trees as resources permit. The purpose of the inventory is to confirm the trees presence and identify general condition.

Street tree

Inventory street trees to determine overall health and viability of individual species. This data will be used to help guide selection of tree species used for street tree planting projects.

Park trees

Monitor the ongoing condition of trees located in the City's parks

Tree canopy

Assess tree canopy every two to five years. To minimize costs, tree canopy assessment should be based on data provided by regional, state or federal agencies.

Available tools

The City is in the process of developing an enterprise GIS system that could be used to advance the City's efforts to manage the urban forest. Integrating urban forest data with the GIS database will promote data sharing across departments and the general public. Data collection efforts should be done in a way that facilitates use of GIS.

A variety of free software tools, developed by the USDA Forest Service is available, at no charge, to anyone interested in analyzing forest resources. This tool, called I-Tree allows for assessment of tree canopy coverage using Landsat imagery. I-Tree allows for linking urban forest management activities with environmental quality and community livability. I-Tree provides a way to analyze data to demonstrate the value of the urban forest and set priorities for more efficient decision making.

Appendices

- Appendix A: Forest Grove park 2014 vegetation assessment
- Appendix B: Technical guides and standards
- Appendix C: Chronological record of public involvement
- Appendix D: Public survey questions and summary of results
- Appendix E: Summary of other related planning documents
- Appendix F: Ordinances
- Appendix G: Additional related resources

Appendix A:

2014 Forest Grove parks vegetation assessment and recommendations

Park and Trail Property Addresses

B Street Trail	1910 16 th Ave
Bard Park	2921 22 nd Avenue, 22 nd & Kingwood
East Entrance	Yew St between Adair and Baseline
Forest Glen Park – lower	101 Gales Creek Road, south end of Lavina
Forest Glen Park – upper	3250 Forest Gale Drive, corner of Circle Crest
Forest Glen Trail	101 Gales Creek Rd to Ridge Point Dr. Parallels Gales Creek Rd over an existing sewer easement
Hazel Sills Park	1627 Willamina Avenue
Joseph Gale Park	3014 18 th Avenue, 18 th and Maple
Knox Ridge Park	2422 Strasburg Drive, corner of Strasburg Drive and Kalex Lane
Lincoln Park	2725 Main Street, Between Main and Sunset Drive North of Aquatic Center
North Entrance	Beale Rd.
Reuter Farm Green Space	480 Willamina
Rogers Park	2421 17 th Avenue, 18 th and Elm
Stites Park (future)	2324 26 th Ave
Talisman Park	1210 Willamina Avenue
Thatcher Park	750 David Hill Road

B Street Trail

Size	.73 miles (16 th av to highway 47)
Location	1910 16 th Ave
Facilities (general overview)	Trailhead, paved bike and walking trail, tables, benches, pedestrian bridge over Gales Creek
Irrigated?	Yes, at trailhead
General vegetation overview	Mowed grass and planted young trees at trailhead. Planted trees along some of the trail. Natural vegetation along Gales creek portion of the trail (big leaf maple, ash, white oak, red osier dogwood, cottonwood)
Overstory trees	Young planted ash, red oak, cedar, locust at trailhead. A few planted cottonwood, Douglas-fir, willow along the trail

Understory trees	Douglas-fir, ash.
Understory shrubs	Snowberry, ribes, willow, beaked hazel
Past vegetation work (planting, thinning, etc.)	A variety of shrubs and trees were planted by Metro (about 2011) in the Gales Creek floodplain area east of the north portion of the trail. Species planted include: cottonwood, willow, dogwood, etc. Trees and grass/shrubs (ash, red oak, locust, cedar, grass, shrubs?) planted at the time of establishment of the trailhead (2010.)
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> • A few of the planted cedar along the fence at the trailhead are probably too close to the fence, and if so, it would be cheaper to replace them now instead of waiting until they are larger • There may be opportunities to plant additional cottonwood, willows, ash, Oregon white oak, Douglas-fir directly adjacent to the portion of the trail south of the Gales Creek bridge (will depend on how wide the right-of-way is)

Bard Park

Size	2.75 acres
Location	2921 22nd Avenue, 22 nd & Kingwood
Facilities (general overview)	Includes picnic shelter, tables play equipment, basketball court, paved trail
Irrigated?	Yes
General vegetation overview	Mowed and watered park grass with scattered mid-age planted trees
Overstory trees	Mid-age maples, Scotch pine, lodgepole/shore pine, sycamore, sequoia, and walnut
Understory trees	N/A
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	No recent plantings
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> • Continue lower crown pruning/lifting for access of mowing equipment • Monitoring for removal needs of dead branches in crown

East Entrance

Size

Location	Yew St between Adair and Baseline
Facilities (general overview)	No recreational structures in park. Entry sign for City of Forest Grove (other entities listed on sign?? Didn't write this down). Doesn't appear to get much use, just drive by viewing, no parking except along road
Irrigated?	Yes
General vegetation overview	Watered and mowed area indicating entry point into Forest Grove, several different species of planted trees
Overstory trees	<p>Generally younger-mid age planted trees including, small clump of birch, several Oregon white oak (planted in an area that doesn't appear to be watered- good job!), sequoia, cedar, spruce, lodgepole pine, Douglas-fir, small ornamental Nyuzen Japan (sister city) town tree along east edge of site- very poor condition- much of the cambium rotted away</p> <p>Several areas along the north edge are too crowded and very close to the utility lines. Douglas-fir along north edge competing with a young white oak; the fir should be removed</p>
Understory trees	N/A
Understory shrubs	Watered/mowed grass, clumps of fescue in bark mulched area, dogwood, vine maple, Japanese maple
Past vegetation work (planting, thinning, etc.)	Plantings at establishment of area. Some general maintenance and pruning of lower branches has occurred
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> • Check birch for top die back (birch bore?) • Evaluate dense band of trees along south edge for thinning to reduce density • Opportunity to remove several fir that are competing with the white oak • Several trees (lodgepole pine, Douglas-fir) under the utility lines should be removed or pruned

Forest Glen Park – lower

Size	11 acres
Location	Gales Creek Road, south end of Lavina
Facilities (general overview)	Open space park with a paved and gravel trail around perimeter. Basketball court, tables, benches, and baseball field. Very little parking other than adjacent side streets.
Irrigated?	No
General vegetation overview	Mowed (infrequent) grass with a few remnant walnut trees and large white oaks along park edge.
Overstory trees	A few walnut and white oak.
Understory trees	N/A
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	None
Existing maintenance needs/recommendations	<ul style="list-style-type: none">• Evaluate dead/rotten tree branches overhanging the paved trail along west edge of park

Forest Glen Park – upper

Size	
Location	3250 Forest Gale Drive, corner of Circle Crest
Facilities (general overview)	Small neighborhood park with play structure.
Irrigated?	Yes
General vegetation overview	Mowed and watered grass with a few planted trees.
Overstory trees	Mid-age big leaf maple, white oak, Douglas-fir, Ohio buckeye, flowering pears, ginko, young white oak.
Understory trees	N/A
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	Trees in the slump appear to have been planted
Existing maintenance needs/recommendations	<ul style="list-style-type: none">• Monitor slump along edge of park for movement• Monitor overstory trees along edge of park for overhead

hazard (dead/weak branches)

- Don't water the young white oak along west edge of the park

Forest Glen Trail

Size

Location	101 Gales Creek Rd to Ridge Point Dr. Parallels Gales Creek Rd over an existing sewer easement
Facilities (general overview)	Paved trail through a Steep wooded area along Gales creek road, which connects Ridge Point Drive and Lower Forest Glen Park. Also includes a low use gravel trail along a small drainage connecting Upper and Lower Forest Glen Park.
Irrigated?	No
General vegetation overview	Mixed species native trees
Overstory trees	Mature overstory of Douglas-fir, Oregon white oak, big leaf maple, Oregon ash. A few alder in the drainage bottom. Several dead trees and dead branches adjacent to, and hanging over the paved trail.
Understory trees	Bigleaf maple, cherry
Understory shrubs	Snowberry, service berry, beaked hazel, ocean spray, poison oak, black berry, ivy, Oregon grape.
Past vegetation work (planting, thinning, etc.)	The area along the lower portion of the drainage was planted (ponderosa pine, madrone, white oak, thimble berry, others.) in 2014 by SOLVE and Clean Water Services.
Existing maintenance needs/recommendations	<ul style="list-style-type: none">• Evaluate overstory along trail for hazard trees• Remove dead branches hanging over the trail, including several partially decayed large oak branches directly over the trail (eastern portion of the trail on the knob along the edge of Lower Forest Glen park• Continue spraying poison oak directly adjacent to trail• Blackberry spraying?• Ivy removal?• Opportunity for wood placement in drainage bottom to stop down-cutting• Opportunity to plant several white oak near the small grove of mature white oak along the eastern portion of the trail

Hazel Sills Park

Size	.5 acres
Location	1627 Willamina Avenue
Facilities (general overview)	Small neighborhood park. Play equipment.
Irrigated?	Yes
General vegetation overview	Mowed grass with a few recently planted trees
Overstory trees	Young ponderosa pine, maple, cedar
Understory trees	N/A
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	Removal of existing overstory Douglas-fir, and planting of new trees
Existing maintenance needs/recommendations	<ul style="list-style-type: none">• Pruning and shaping of young trees to facilitate mowing.

Joseph Gale Park

Size	3.6 acres
Location	3014 - 18 th Avenue, 18th and Maple
Facilities (general overview)	Developed park adjacent to Joseph Gale school. Includes play structures, ball fields, horseshoe pits, picnic tables, bathroom.
Irrigated?	Yes
General vegetation overview	Mowed grass with medium sized scattered trees
Overstory trees	Silver maples, sweetgum, spruce, Norway maple, lodgepole, sequoia, flowering plum, birch
Understory trees	N/A
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	
Existing maintenance needs/recommendations	<ul style="list-style-type: none">• Crown cleaning of dead branches (especially in the silver maples)

- Continued pruning of lower branches to facilitate mowing

Knox Ridge Park

Size	0.4 acres
Location	2422 Strasburg Drive, corner of Strasburg Drive and Kalex Lane
Facilities (general overview)	Small neighborhood park with play structures and picnic table
Irrigated?	Yes
General vegetation overview	Watered and mowed grass with a few young, planted trees
Overstory trees	Planted white cedar, maples, and flowering pears
Understory trees	N/A
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	Tree planting
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> • Pruning of lower branches • Evaluate cedar along edge of park for proximity to fence... looks too close to me. Evaluate for removal and re-planting of something else.

Lincoln Park

Size	18.9 acres (owned by city)
Location	2725 Main Street, Between Main and Sunset Drive North of Aquatic Center
Facilities (general overview)	Large City park with football/soccer/track field, toilet, skate board park, picnic tables and shelter structure. Paved walking trail around perimeter. Several parking lots.
Irrigated?	Yes
General vegetation overview	Scattered mid-age and mature trees with mowed and watered grass
Overstory trees	Cedar, lodgepole, scotch pine, red oak, ash, flowering pear, sycamore, basswood
Understory trees	N/A

Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	Tree planting
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> Continued pruning of lower branches to facilitate mowing and walking on path Continued evaluation of overhead hazard (dead branches) Possible opportunities for plantings as the open lot (recently acquired) to the north and east gets developed

North Entrance

Size	Less than 1 acre
Location	Beale Rd.
Facilities (general overview)	Entrance sign for north entrance to Forest Grove. Several ponds, sidewalk, viewing structure, and table/bench.
Irrigated?	
General vegetation overview	Wetland vegetation surrounding the ponds
Overstory trees	Young planted willow, big leaf maple, white pine, Douglas-fir, ponderosa pine, lodgepole pine
Understory trees	N/A
Understory shrubs	Willow, dogwood
Past vegetation work (planting, thinning, etc.)	Tree/shrub planting
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> Thin vegetation near the viewing area (trail/sidewalk and shelter) to improve views of the pond Needs a sign indicating the name of the park

Reuter Farm Green Space

Size	
Location	480 Willamina
Facilities (general overview)	Several picnic tables on the back side of the hill overlooking a pond
Irrigated?	No

General vegetation overview	Mature grove of Oregon white oak with a mowed grass understory
Overstory trees	Approximately twenty large mature white oak with an open, mowed (not watered) grass understory.
Understory trees	N/A
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	Removal of several overstory oaks. Trimming of lower branches that appear to have been decayed.
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> • Continue monitoring overstory oaks for overhead hazards (dead/decaying branches) • Possible opportunity to plant several white oaks along the edge of the park

Rogers Park

Size	3.6 acres
Location	2421 - 17 th Avenue, 18th and Elm
Facilities (general overview)	Heavily developed park. Includes play structures, tennis courts, picnic shelter and tables, portable toilets.
Irrigated?	Available but not used
General vegetation overview	Dominated by a grove of mature Oregon white oaks with a mowed grass understory
Overstory trees	Dominated by mature white oaks with a few Douglas-fir. Mature sweetgum trees along Elm Street. A few scattered yew, cedar, redwood, holly, Japanese maple.
Understory trees	Planted flowering plums, red oak, white oak, tulip tree
Understory shrubs	Mowed grass
Past vegetation work (planting, thinning, etc.)	Arbor Day tree plantings
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> • Opportunities to plant a few white oaks • Monitor overhead hazards in oaks • Install interpretative sign about white oaks and why the City is not watering the park?

Stites Park (This area was not visited. Access uncertain.)

Size	9.9 acres
Location	2324 26 th Ave
Facilities (general overview)	
Irrigated?	
General vegetation overview	
Overstory trees	
Understory trees	
Understory shrubs	
Past vegetation work (planting, thinning, etc.)	
Existing maintenance needs/recommendations	

Talisman Park

Size	2.5 acres
Location	1210 Willamina Avenue
Facilities (general overview)	Play structure, picnic table and shelter. Paved path around the park and connecting to Gales Creek Road.
Irrigated?	Yes
General vegetation overview	Former wetland that has been filled in and planted with a variety of trees
Overstory trees	One large, open grown white oak is a focal point for this park. A variety of other tree species (oaks, maples, etc.) have been planted along the perimeter of the park. Each of the trees has a numbered post at the base that corresponds to a list of the species.
Understory trees	N/A
Understory shrubs	Mowed and watered grass.
Past vegetation work (planting, thinning, etc.)	Tree planting. Tree pruning workshop site

- Existing maintenance needs/recommendations**
- Continue pruning of lower tree branches to facilitate mowing
 - Evaluate for overhead hazards
 - Update and re-post the numbered key to the tree species in this park

Thatcher Park

Size	15.4 acres
Location	750 David Hill Road
Facilities (general overview)	Baseball/soccer fields, paved walking path, un-paved path through the forested portion of park, picnic table and shelter, toilet, dog park.
Irrigated?	Partial (ball fields)
General vegetation overview	The park includes two different areas. One is a 5-10 acres heavily forested area with a walking trail. The second area is the heavily developed park with mowed lawn, planted young trees, and developed facilities.
Overstory trees	Overstory of mature Douglas-fir (80-90 percent), with scattered big leaf maple, white oak, and cherry. The overstory appears to be fairly even aged (age??). Approximately 25-50 percent of the Douglas-fir are infected with heart rot (species??... The understory trees include big leaf maple, cherry, and holly. Shrub species include snowberry, blackberry, holly, elderberry, ivy, beaked hazel, willow, serviceberry.
Understory trees	Mowed and watered grass with planted oak), ash, Douglas-fir.
Understory shrubs	
Past vegetation work (planting, thinning, etc.)	Removal of hazard trees. Holly removal. Blackberry spraying. Removal of brush in riparian area along east side.
Existing maintenance needs/recommendations	<ul style="list-style-type: none"> • Continued evaluation of Douglas-fir heart rot and potential overhead hazards • Removal of existing dead branches hanging over the forested portion of the trail • Blackberry and ivy removal? • Opportunities to convert portions (mostly along the forest edge) to white oak through planting

Appendix B:

Technical guides and standards

1. Field Guide for Hazard-Tree Identification and Mitigation on Developed Sites in Oregon and Washington Forests. 2014 USDA Forest Service. Forest Health Protection. Pacific Northwest Region. Portland, OR. R6-NR-TP-021-2013
2. Dunster, J. 2009. Tree Risk Assessment in Urban Areas and The Urban/Rural Interface. Course Manual. Silverton, OT. Pacific Northwest Chapter, International Society of Arboriculture
3. Urban Tree Risk Management (A community guide to program design and implementation). USDA Forest Service. State and Private Forestry. Northeastern Area. NA-TP-03-03.
4. Urban Forestry Best Management Practices for Public Works Managers. Urban Forest Management. APWA press.

Appendix C:

Chronological record of public involvement

January 2014	Initiate project
January 2014	Draft outline following Urban Forest Planning Toolkit
Early 2014	Gather background data and produce first rough draft
Spring 2014	Inventory parks and open areas, list opportunities
Summer 2014	Outreach to public at farmers market
Fall 2014	Second and third draft
Fall 2014	Outreach to city commissions (parks, sustainability, CCI)
December 2014	Develop survey questions
January 2015	Refine survey questions with CCI commission
March 2015	Send out survey in March utility bills and post on-line
March 2015	Outreach to newspaper to produce article about plan and survey
April 2015	Review survey and use to modify draft plan
May 2015	Meet with city departments (parks, planning, public works) about tree management
June-July 2015	Revised draft of plan
July-August 2015	Outreach to public at farmers market
September 2015	Next draft of plan
2016	Review plan with public during Parks/Recreation master plan update public meeting
April 2016	Review with city and council
2016	Final draft
2016	Final plan recommendations to city council

Appendix D:

Public survey questions and summary of results



CFC Urban Forest Management Planning Survey

The Forest Grove Community Forestry Commission (CFC) is working on a plan to guide and manage trees within the City. Trees provide a variety of important benefits in the urban environment. Without a vision and plan for the management of the urban forest as a whole, however, it is unlikely to thrive and provide the benefits that the community desires. We will look at **what we have now** for tree resources, determine **what we want** in the future, and make recommendations for **how we get there**. More details of the scope of the project can be found online at [Community Forestry Commission](#).

Trees included in an urban forest management plan may include the following:

- o Street trees (those directly adjacent to streets)
- o Heritage/special trees (those with special status)
- o Facility trees (those near public buildings)
- o Parking lot trees
- o Park trees
- o Open space trees (those in natural areas)

The Commission invites you to help develop the plan by answering the following questions. This survey is also available [online](#).

Questions 1-3 pertain to tree care in parks, trails, or open space areas. Please rank on a scale of 1 to 5 with (1) being "Very Satisfied" and (5) being "Very Dissatisfied".	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Dissatisfied
	1	2	3	4	5
1. How satisfied are you with the quantity and quality of trees in parks, along trails, or in open space areas?					
2. How satisfied are you with the care of trees in parks, along trails, and/or in open space areas?					
3. How satisfied are you with pedestrian safety near large trees?					
Questions 4 –13 ask how much you agree with a given statement regarding street trees, parking lot trees, register trees, and/or facility trees. Please rank on a scale of 1 to 5 with (1) being "Strongly Agree" and (5) being "Strongly Disagree".	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
	1	2	3	4	5
4. I am satisfied with the quantity and quality of street trees, parking lot trees, registry trees, or facility trees.					
5. I am satisfied with the care of street trees, parking lot trees, registry trees, or facility street trees.					
6. Trees positively contribute to the value of a home.					
7. More trees would be good for the City.					
8. I believe it would benefit the City if more resources were directed towards maintenance and protection of existing trees.					
9. The City should require the protection of old, healthy trees on sites that are being developed.					
10. The City should require the planting of new trees on sites that are being developed.					
11. The condition of the urban forest has improved over the last 10 years.					
12. The large oak trees in town are an important cultural element in Forest Grove.					
13. I am satisfied with the pruning of street trees for utility lines.					

Questions 14 – 18 ask about your awareness of City policy and programs relating to urban trees. Please rank on a scale of 1 to 3 with (1) being fully aware and (3) being unaware.	Fully Aware	Some what Aware	Unaware
	1	2	3
14. I have adequate information about how to maintain trees on my property.			
15. Property owners are responsible for care and maintenance of street trees.			
16. Property owners need to have a free City permit before pruning or removing street trees.			
17. A replacement street tree may need to be planted if one is removed.			
18. Forest Grove has a tree registry/significant tree program.			

The following questions encourage further comments about Forest Grove’s Urban Forest.

19. What could be done to improve the quantity or quality of trees in Forest Grove?

20. What are other issues related to trees?

21. What is the best method(s) to get you additional information about trees (website link, newsletter, email, other)?

Please return this survey with your utility bill payment or in person to Forest Grove City Hall, Community Development Department, at 1924 Council Street or by mail at PO Box 326, Forest Grove, OR, 97116. You may also email to driordan@forestgrove-or.gov. THANK YOU!

Please consider becoming a member of the Community Forestry Commission. Applications available online at www.forestgrove-or.gov/b&c or at City Hall.

Did you know that . . .

- The top three most abundant trees are Japanese maple (*Acer palmatum*), Japanese flowering cherry (*Prunus serrulata*), and Norway maple (*Acer platanoides*).
- The total replacement value for Forest Grove’s street trees is estimated at \$148,273,010.
- Street trees remove nearly 8 million pounds of air pollutants per year, a service worth more than \$72 thousand.
- Forest Grove residents save close to \$69,000 per year in avoided energy costs from the shading and wind calming effects of street trees.
- Street trees provide more than \$1.2 million in property resale value per year.

Survey Results

RESPONSE %					
	1	2	3	4	5
	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Dissatisfied
Q1	26.29%	52.99%	11.16%	7.97%	1.59%
Q2	26.10%	53.41%	13.65%	4.42%	2.41%
Q3	28.23%	49.60%	13.71%	6.05%	2.42%
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Q4	19.28%	48.19%	16.47%	14.46%	1.61%
Q5	21.58%	45.23%	18.26%	12.86%	2.07%
Q6	64.68%	24.60%	5.56%	2.78%	2.38%
Q7	50.40%	21.77%	16.13%	6.45%	5.24%
Q8	33.60%	38.40%	17.60%	6.40%	4.00%
Q9	56.75%	25.40%	9.92%	2.78%	5.16%
Q10	54.98%	26.69%	5.98%	5.58%	6.77%
Q11	9.29%	28.76%	49.12%	10.62%	2.21%
Q12	56.52%	28.85%	8.70%	3.56%	2.37%
Q13	25.59%	42.91%	17.32%	9.06%	5.12%
	Fully Aware	Somewhat Aware	Unaware		
Q14	31.20%	42.80%	26.00%		
Q15	38.31%	31.45%	30.24%		
Q16	31.30%	23.98%	44.72%		
Q17	34.55%	26.02%	39.43%		
Q18	22.95%	22.95%	54.10%		

Appendix E:

Summary of other related planning documents

Forest Grove:

- Parks and recreation master plan
- Urban renewal plans
- Community sustainability element of the comprehensive plan
- Design and landscaping guidelines and development standards (Public Works Specifications)

Other:

- Regional Urban Forestry Assessment and Evaluation for the Portland-Vancouver Metro Area. Portland State University. June 2009.
- Regional Conservation Strategy for the Greater Portland-Vancouver Region. The Intertwine Alliance 2012.
- Greenspaces Policy Advisory Committee. Vision, Outcomes, objectives and means. Metro. 2005.
- Protecting and Developing the Urban Tree Canopy. The United States Conference of Mayors. 2006.
- The Road to a Thoughtful Street tree Master Plan. University of Minnesota. 2008.
- Urban Forest Management Planning Toolkit. USDA Forest service.

Appendix F:

Ordinances

Forest Grove Development Code

(www.forestgrove-or.gov/city-hall/planning-division/community-development-planning-zoning-information.html)

- Forest Grove Development Code Article 5
 - Tree Protection
- Forest Grove Development Code Article 8
 - Landscaping, Screening and Buffering (Parking Lot Trees)

Forest Grove City Code

(www.forestgrove-or.gov/city-hall/city-manager/community-development-planning-city-code.html)

- Municipal Code Chapter 5
 - Trees and Plants
- Municipal Code Chapter 9
 - Boards and Commissions (Community Forestry Commission)

Appendix G:

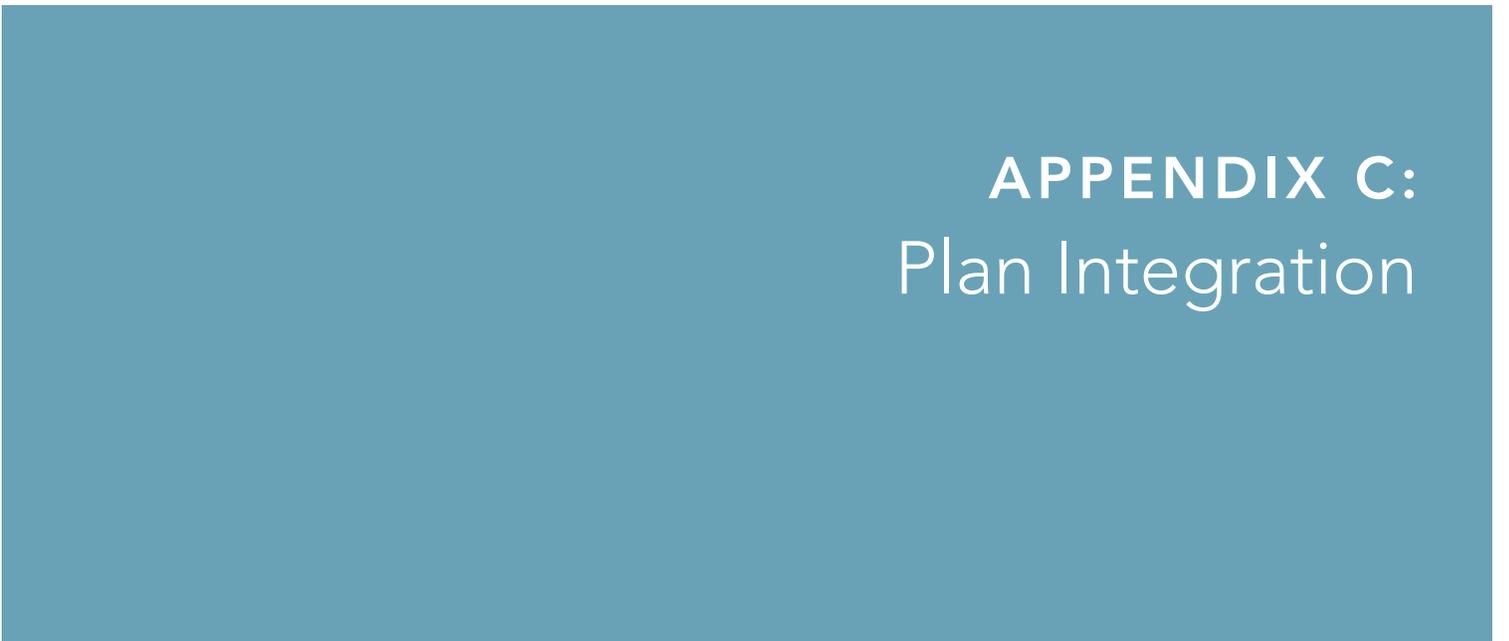
Additional related resources

Additional related resources available on the Community Forestry Commission portion of the City of Forest Grove’s website (forestgrove-or.gov/city-hall/citizen-boards-commissions/citizen-bac-community-forestry-commission.html).

- 2011 Forest Grove street tree inventory and assessment
- Suggested street tree list
- Register of significant trees
- Tree trimming information
- Tree pruning or removal permit (for street trees or historic/significant trees only)



APPENDIX C:
Plan Integration



APPENDIX C: PLAN INTEGRATION

Strategic directions and objectives of the Master Plan must comply with the adopted goals of other City and State planning efforts. This appendix includes a summary that shows how the Master Plan integrates with relevant goals of the City's Comprehensive Plan and Statewide Planning Goals.

I. COMPREHENSIVE PLAN GOALS

Forest Grove's Comprehensive Plan (2014) contains many plan elements that guide the planning of the city. Table C.1 lists the most relevant goals related to parks, recreation, open space and trails, and indicates Master Plan directions that help with implementation, as depicted by a "•". Across all elements, there are multiple Master Plan directions that support each of the Comprehensive Plan goals. As presented in Chapter 4, the Master Plan calls for the following strategic directions (abbreviated in Table C.1):

- A. **Parks and Facilities:** Enhance existing parks and facilities and develop new ones to provide engaging community recreation and social spaces that meet the needs of Forest Grove residents now and as the population grows.
- B. **Open Space Greenways and Trails:** Protect natural resources and provide trails to connect people to parks, open space and community destinations.
- C. **Recreation Programs and Services:** Activate parks and facilitate and coordinate recreation programs and events for Forest Grove residents.
- D. **Maintenance and Stewardship:** Maintain and replace assets in a sustainable manner. Preserve Forest Grove's historical and cultural heritage, including the tree canopy and natural resources.
- E. **Collaborative Management and Partnerships:** Work collaboratively with others to maximize the benefits of the park and recreation system. Involve volunteers, partners, businesses and other agencies to deliver recreation opportunities through shared resources, partnerships and joint use agreements.

TABLE C.1: INTEGRATION WITH RELEVANT COMPREHENSIVE PLAN GOALS

Relevant Comprehensive Plan Goals	Master Plan Strategic Directions				
	Parks and Facilities	Open Space Greenways and Trails	Recreation Programs and Services	Maintenance and Stewardship	Collaborative Management and Partnerships
<i>Citizen Involvement</i>					
1.1. Ensure the ongoing relevance of the City's Visions Statement for all citizens of Forest Grove.	•				•
2.1. Promote the participation of an engaged public and accessible, responsive government.	•				•
3.1. Promote the interests and needs of Forest Grove in local, state and national affairs.	•				•
5.1. Encourage and facilitate citizen involvement and inter-agency coordination in the development, implementation and updating of the Comprehensive Plan	•				•
<i>Community Sustainability</i>					
1. Support the function and identity of neighborhoods by encouraging communication, strengthening community bonds, local participation and interaction, and enhancing sense of place through design	•	•		•	•
2. Encourage involvement of underrepresented groups in civic affairs.	•				•
6. Foster excellence in the design of public and private development projects to minimize environmental impacts, maximize financial efficiency, optimize social equity and benefits, and improve public health.	•	•	•	•	•
7. Promote interconnected land uses that encourage diverse, accessible, and proximate land uses that promote active living and access to vital services including employment, education, and healthy food.	•	•	•		•
8. Create complete neighborhoods, through land use regulations, with housing, recreational opportunities, retail, services and employment nearby.	•	•	•	•	•
10. Promote the preservation and reuse of historic resources, including buildings, structures, sites, neighborhood districts and cultural landscapes to assist in the retention of local, regional and national history and heritage, reinforcement of community character, and conservation of material resources.	•			•	•
14. Promote opportunities for community gardens within neighborhoods.	•		•	•	•

FOREST GROVE PARKS, RECREATION AND OPEN SPACE MASTER PLAN (DRAFT)

Relevant Comprehensive Plan Goals	Master Plan Strategic Directions				
	Parks and Facilities	Open Space Greenways and Trails	Recreation Programs and Services	Maintenance and Stewardship	Collaborative Management and Partnerships
16. Increase the amount of urban forest tree canopy while planting species adapted to this area.	•	•		•	•
18. Increase the amount of park land and natural areas serving the community.	•	•		•	•
19. Support the restoration of natural areas such as Fern Hill Wetlands and Thatcher Woods.	•	•		•	•
23. Promote a balanced transportation system increasing opportunities for bicycling and walking throughout the community.	•	•	•	•	•
24. Anticipate the possibility of local in-migration due to the relocation of individuals and families impacted by a changing climate.	•	•	•	•	•
<i>Land Use</i>					
8. Land designated for single family attached and multi-family developments shall be distributed throughout the city taking into consideration availability of public services, topography and environmental constraints. Preferred locations for medium and higher density residential development include areas within walking distance of schools, parks, commercial areas, or existing/planned transit service.	•	•			
<i>Housing</i>					
1. Ensure an adequate supply of developable land to support needed housing types and a complete community.	•	•	•	•	•
6. Promote neighborhoods complete with residences, open space, schools, parks, and shopping opportunities within close proximity to each other. Avoid stand-alone residential developments lacking support activities.	•	•	•	•	•
<i>Economic Development</i>					
6. Enhance the local economy through Tourism	•			•	•
7. Promote the Forest Grove Town Center as the Focal Point of the Community	•		•		•
<i>Health Services</i>					
3. Promote good health and reduced healthcare costs through land development and transportation policies by	•	•	•	•	•

Relevant Comprehensive Plan Goals	Master Plan Strategic Directions				
	Parks and Facilities	Open Space Greenways and Trails	Recreation Programs and Services	Maintenance and Stewardship	Collaborative Management and Partnerships
encouraging active transportation (walking and bicycling) and recreational opportunities					
<i>Parks</i>					
1. Serve all ages and abilities	•	•	•	•	•
2. Provide safe and convenient access to parks for everyone	•	•	•	•	•
3. Create and expand partnerships for recreation facilities and programs			•	•	•
4. Promote a sense of community and preserve the character of Forest Grove	•	•	•	•	•
5. Contribute to a strong local economy by using park amenities to attract new residents, businesses and tourists	•	•	•	•	•
6. Provide diversity in facilities and programs	•	•	•	•	•
<i>Urbanization</i>					
3. Implement policies to create complete neighborhoods in areas undergoing urbanization.	•	•	•	•	•
<i>Transportation</i>					
1. Develop and maintain a balanced transportation system that provides travel choices and reduces the number of trips by single occupant vehicles.	•	•		•	•
3. Develop and maintain a transportation system that is safe.		•		•	•
4. Design and construct transportation facilities in a manner that enhances the livability of Forest Grove.		•		•	•

II. STATEWIDE PLANNING GOALS

As with all Oregon cities, the Statewide Planning Goals provide guidance and direction for planning in Forest Grove, including development of its Comprehensive Plan. There are 19 Statewide Goals, of which there are nine that relate to the Master Plan goals. Table C.2 lists the most relevant goals related to parks, recreation, open space and trails, and indicates Master Plan goals that help with implementation, as depicted by a “•”.

TABLE C.2: INTEGRATION WITH RELEVANT STATEWIDE PLANNING GOALS

Relevant Statewide Planning Goals	Master Plan Strategic Directions				
	Parks and Facilities	Open Space Greenways and Trails	Recreation Programs and Services	Maintenance and Stewardship	Collaborative Management and Partnerships
1. Citizen Involvement: To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.	•				•
2. Land Use Planning: To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.	•			•	•
3. Agricultural Lands: To preserve and maintain agricultural lands.	•			•	•
5. Natural Resources, Scenic and Historic Areas, and Open Spaces: To protect natural resources and conserve scenic and historic areas and open spaces.	•	•	•	•	•
6. Air, Water and Land Resources Quality: To maintain and improve the quality of the air, water and land resources of the state.	•	•		•	•
8. Recreational Needs: To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.	•	•	•	•	•
11. Public Facilities and Services: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.	•	•	•	•	•
12. Transportation: To provide and encourage a safe, convenient and economic transportation system.		•		•	•
14. Urbanization: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.	•	•	•	•	•



APPENDIX D:
Park Enhancement and Development
Opportunities

APPENDIX D: PARK ENHANCEMENT AND DEVELOPMENT OPPORTUNITIES

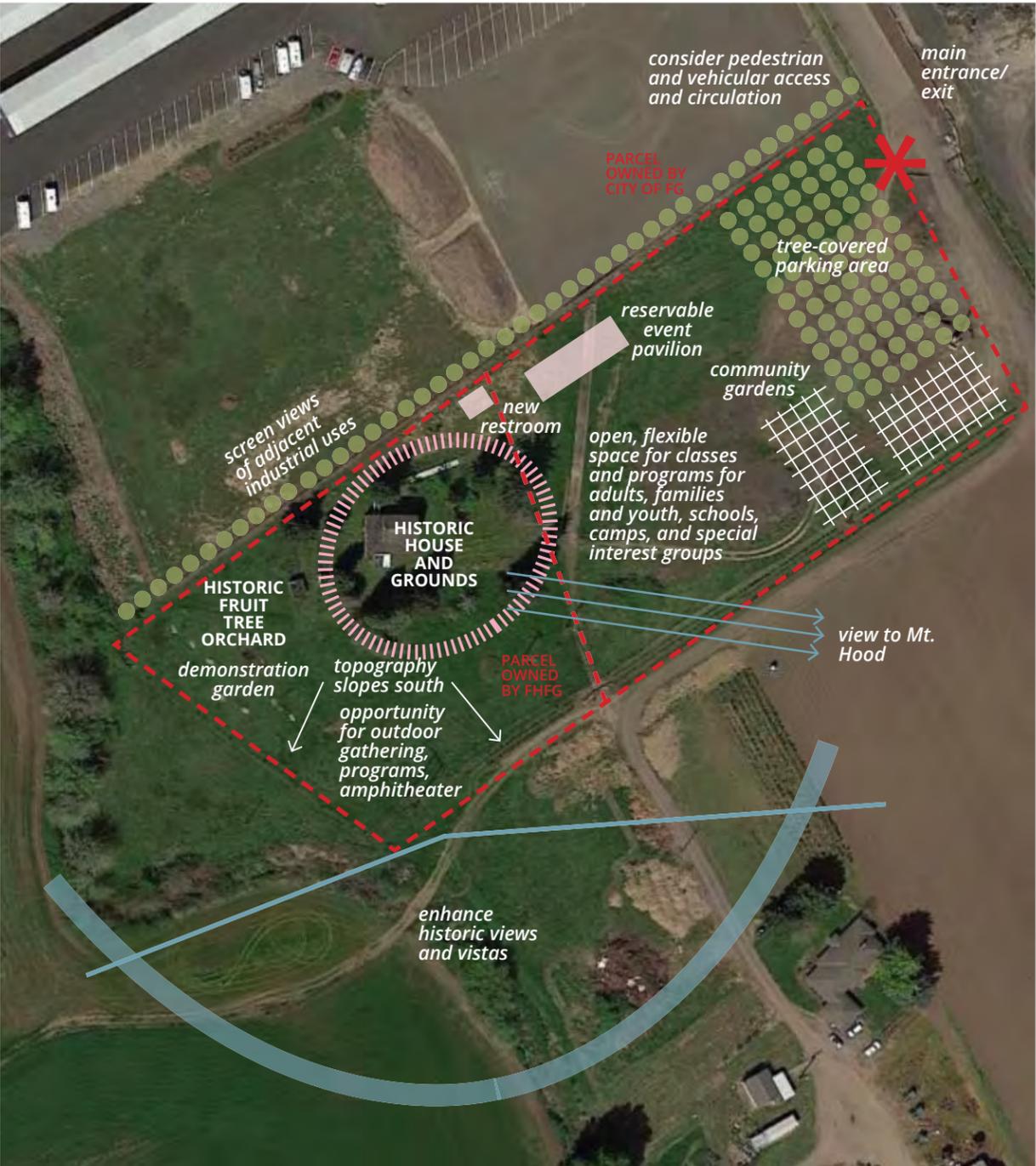
The City of Forest Grove evaluated the design of existing City parks and undeveloped park properties to identify ways to enhance outdoor recreation at each site. Design options were summarized in a series of site diagrams that took into account the existing site conditions, needs and outreach feedback, partnership and programming opportunities, as well as systemwide recommendations. The site diagrams, illustrated with photos of design and programming examples, present design options for adding outdoor recreation amenities and facilities. For developed parks, these diagrams are intended to be used as a menu of park improvements with projects that can be funded over time or when facilities are replaced at the end of their lifecycles. For undeveloped sites or sites requiring more extensive renovations, additional site master planning will be needed before construction, relying on these diagrams as guidelines for park development to ensure consistency with goals stated in this plan.

Note: Site diagrams were not created for special use parks with recreation buildings, such as the Forest Grove Aquatic Center and Senior Center, which lack space to add outdoor elements. See Chapter 4 for recommendations for these facilities.

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A.T. SMITH PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
 5.4 acres
 (3.2 owned by the City of Forest Grove)
 (2.2 owned by the Friends of Historic Forest Grove (FHFG))

SITE DESCRIPTION
 The A.T. Smith House and its surrounding landscape are located at the southern end of Forest Grove in the Carnation neighborhood. Bordered by industrial businesses to the north and agricultural land to the east, west, and south, this property contains a two-story, Greek Revival-style house that was built in 1854. The A.T. Smith House is the second oldest building in Forest Grove and in 1974 it was added to the National Register of Historic Places. The house and the 2.2 acres that surround it are owned by the Friends of Historic Grove, while the adjacent 3.2 acres of land is owned by the City of Forest Grove.

NEEDS AND OUTREACH FEEDBACK

- SITE-SPECIFIC IDEAS**
- Restroom facilities
 - Parking
 - Picnic areas
- COMMUNITY-WIDE IDEAS**
- Access improvements for parking, pedestrian and bicycles
 - Coordination with School District and University on park use for educational opportunities
 - Reservable community gathering spaces for cultural/social/special activities and events
 - Greater variety of programs and facilities to serve all ages
 - Increased recreation programming (summer camps, after-school, community events, concerts, and movies in the park)
 - Revenue generating opportunities through facility rentals and programming

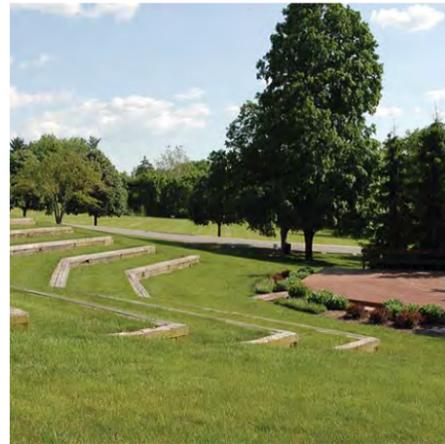
PROPOSED PARK DESIGN APPROACH

The A.T. Smith Historic Park has the potential to be an historic oasis that connects visitors to this site's past. With a variety of possible attractions such as an historic home, heritage orchards, community gardens, outdoor gathering spaces, a natural play area, an open-air shelter, and supporting outbuildings and furnishings, this park could provide local and visiting guests with a place to learn, play, grow, work, and celebrate.

- NEW FACILITIES + FEATURES**
- House Museum/Education Center
 - Community Gathering Space
 - Large Event Pavilion
 - Fruit Tree Orchard
 - Community Gardens
 - Heritage Demonstration Gardens
 - Amphitheater

- PROGRAMS**
- Museum and Park Tours
 - Special Events
 - Facility Rentals
 - Environmental Education
 - Historic Education and Interpretation
 - Historical Re-enactments
 - Pioneer Days
 - Native American History Program
 - Craft Programs and Demonstrations
 - Outdoor Skills Program

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- The Friends of Historic Forest Grove in partnership with the City of Forest Grove
- Pacific University
- Forest Grove School District
- Theater in the Grove
- Forest Grove Community Garden Org.
- Restore Oregon
- University of Oregon Historic Preservation Field School
- Dairy Creek Food Web
- State Historic Preservation Office
- Meyer Memorial Trust
- Keith Kinsman Foundation
- Local Wineries
- Volunteers

REVENUE GENERATING OPPORTUNITIES

- Facility Rentals
- Weddings and Other Outdoor Event Rentals
- Museum and Park Tours
- Camp Programs
- Education Programs
- Community Gardens
- Farm Market

BARD PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
2.8 acres

SITE DESCRIPTION
Bard Park is small neighborhood park located on the west side of Kingwood Street between 22nd Avenue and 22nd Place, a cul-de-sac that dead-ends at the park's northwest corner. Surrounded by a mix of single- and multi-family residences, this park's main entry is near the play area but it can be accessed from all four of its sides. There is one, short stretch of sidewalk adjacent to the play area on 22nd Avenue and on-street parking is allowed on all three streets surrounding the park.

Bard Park is characterized by a central open green lawn and clusters of existing trees. There are also two full size basketball courts, a basketball wall, a paved loop trail, a large play area, benches, barbecues, picnic tables, and a picnic shelter at the southern end.

NEEDS AND OUTREACH FEEDBACK

- SITE-SPECIFIC IDEAS**
- Play structures for younger children
 - Play elements that are simple and safe

- COMMUNITY-WIDE IDEAS**
- Water play
 - Reservable community gathering spaces for cultural/social/special activities and events
 - Non-reservable community gathering spaces for families and informal activities (game tables, group seating, etc)
 - Greater variety of programs and facilities to serve all ages
 - Increased recreation programming (summer camps, after-school, health and fitness, community events, concerts, and movies in the park)
 - Revenue generating opportunities through facility rentals and programming

PROPOSED PARK DESIGN APPROACH

Bard Park functions as a backyard to the multi-family housing that borders its west side and as a central gathering space for the single-family homes that surround its other sides. The park can be busy on weekends, the basketball courts and the basketball wall are very popular, and the play area gets a lot of use. The picnic shelter supports a Summer Meal Program sponsored by the School District.

The design approach builds on the park's success to make it even more comfortable, playful, and versatile than it already is. By adding a permanent restroom, natural play elements, natural planting areas, and small court games, as well as programming the space to accommodate a variety of everyday activities and special events, Bard Park could be an even more vibrant and diverse park for its local community.

NEW FACILITIES + FEATURES

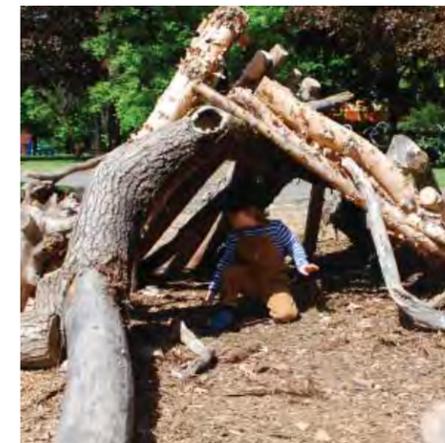
- Permanent Restroom
- Community Table (for gathering, meeting, resting, talking, playing, eating)
- Picnic Tables/Barbecues
- Park Games/Small Court Sports (bocce, ping pong, badminton, horseshoes, volleyball)
- Natural Play Features
- Teen Play Features (climbing wall, small court sports, picnic shelter, parkour equipment, "hang out" spaces)

PROGRAMS

- Summer Meal Program
- Summer Camps
- Health and Wellness Classes (park yoga, walking clubs, boot camp, stretching classes)
- Pop-Up Play (outdoor games, mobile playground van, loose parts to build with, hopscotch/sidewalk chalk games)
- Small Recurring Events (small concerts, dances, movies in the park, performance art)
- Everyday Events (outdoor reading room, game tables, horseshoes, bocce, ping pong)

✱ ENTRANCE/EXIT ■ STRUCTURE/FEATURE - - - - PLAY AREA OPPORTUNITY - - - - (E) PAVED PATH

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Forest Grove School District
- Local Summer Camp Organizations
- Health and Wellness Organizations
- Adopt-A-Park Program
- Local Neighborhood Groups
- Volunteers

B STREET TRAIL + TRAILHEAD

SITE ANALYSIS



✖ ENTRANCE/EXIT
 ●●●● (E) MULTI-USE TRAIL
 ●●●● (PR) MULTI-USE TRAIL
 ||||| NATURAL PLAY OPPORTUNITY
 + INTERPRETIVE SIGN
 — CREEK

EXISTING CONDITIONS

SIZE
2.5 acres

SITE DESCRIPTION
The B Street Trail—which runs for approximately 3/4 of a mile between 16th Avenue and Route 47—is a 10-foot wide, asphalt path that crosses Gales Creek via a bridge and abuts a Metro-owned natural area. The trail is part of the city's Emerald Necklace, a series of trails that will eventually connect the west side of Forest Grove.

The B Street Trailhead is located off of 16th Avenue between Main Street and A Street and is comprised of a gravel entry road, a bicycle parking area, a sign that indicates the start of the trail, a 25-car gravel parking lot with one paved accessible stall, and a circular concrete seatwall surrounding a gravel area that contains three picnic tables.

NEEDS AND OUTREACH FEEDBACK

SITE-SPECIFIC IDEAS

- Landscaping improvements
- Restroom facilities
- Safety improvements
- Access improvements for parking, pedestrians, and bicycles

COMMUNITY-WIDE IDEAS

- More multi-use trails that connect community destinations and nature

PROPOSED PARK DESIGN APPROACH

The B Street Trail is a well-traveled, well-loved pathway that provides an important recreational connection between the south end of downtown and the regional multi-use trail. While the trail is popular, there are some opportunities to enhance what currently exists on this site.

Interpretive signs that highlight the surrounding natural areas would be a nice addition to the Trailhead plaza. In addition to providing information, these panels would help visitors develop a better understanding of the features and stories of Forest Grove's natural environment. Interpretive signs would also augment the access point to Gales Creek, which is directly north of the bridge.

There is also an opportunity for a boardwalk and viewing platform that overlooks the water's edge, as well as some natural play features under the trees and along the banks of the creek. These amenities would encourage visitors to experience the wooded, creekside area in a way that complements the environment and fosters an appreciation for Forest Grove's natural habitat.

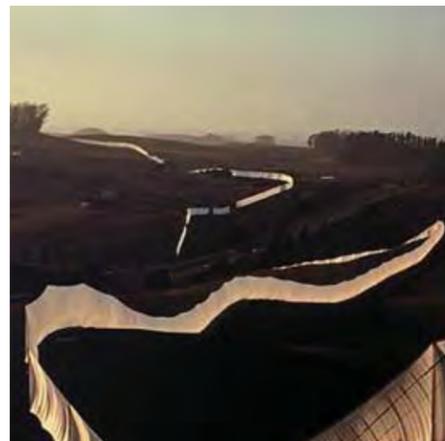
NEW FACILITIES + FEATURES

- Interpretive Signage at Trailhead Plaza
- Interpretive Signage at Gales Creek
- Boardwalk and Overlook along Gales Creek
- Natural Play Features at Gales Creek
- Connection to Multi-Use Trail
- Temporary Art Installations

PROGRAMS

- Environmental Education and Interpretation
- Outdoor Skills Program
- Summer Biking Adventure Camp
- Rotating Art Installation Program

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Metro
- Clean Water Services
- Forest Grove School District
- Local Summer Camp Organizations
- Environmental Education Groups
- Art Organizations
- Adopt-A-Park Program

FOREST GLEN PARK, TRAIL, + OPEN SPACE

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
51.3 acres

SITE DESCRIPTION
Forest Glen Park is a large park comprised of three main areas: an upper park, a lower park, and a large section of open space and trail.

The Upper Park is located on the residential corner of Circle Crest Way and Forest Gale Drive. It contains an open lawn area, a small tot lot, and a split rail fence that overlooks a drainage ravine. The Lower Park is located along Gales Creek Road and is a circular bowl surrounded by steep sloping sides. Local neighbors use the intermittent trail that links the upper park to the lower one, but the informal path is not suitable for all ages and abilities.

The park contains an open, grassy space with two basketball courts, a ball wall, a ball field backstop, a small wetland area in the center, a barbecue, and a paved path loop around the entire site that connects to the open space and adjacent neighborhoods, and provides expansive views to the surrounding agricultural fields. In the winter, this lower park acts as the primary sledding hill for the entire community. The Open Space portion is a large swath of forested land that runs along the southern and western edge of the City limits and connects the park to the adjacent residential areas and other future trails.

NEEDS AND OUTREACH FEEDBACK

- SITE-SPECIFIC IDEAS**
- Park provides ball field access in underserved area
 - Park lacks rectangular sports fields

- COMMUNITY-WIDE IDEAS**
- Improvements for parking, pedestrians, and bicycles
 - Non-reservable community gathering spaces
 - More multi-use trails
 - Enhanced play areas and play structures

PROPOSED PARK DESIGN APPROACH

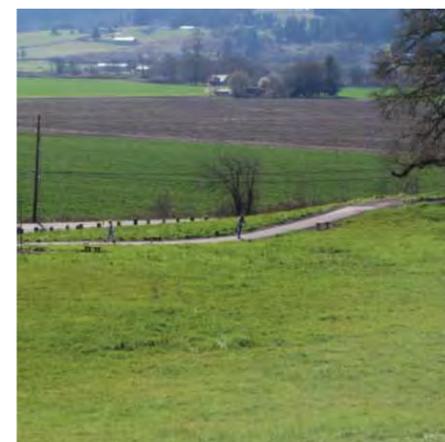
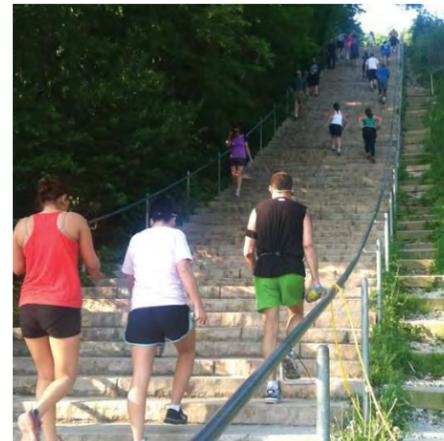
UPPER PARK
The location of the upper park provides the surrounding neighborhood with a tranquil spot to gather and play. By adding in a wider variety of play features—including natural play elements—and picnic tables and seating for relaxing, this park could be more dynamic and engaging.

LOWER PARK
Because of its unique topography and siting, there is a range of possible features that could work the lower bowl, including an amphitheater/stage for outdoor community events and an active site for rectangular-field sports and outdoor games. However, the small central wetland, the lack of good parking opportunities, and the desire to maintain the park's openness for winter sledding makes these designs less feasible. For these reasons, this approach includes maintaining the basketball courts, ball wall, and barbecue and adding picnic tables, seating/viewing options, a set of stairs for staircase workouts, a series of slides that capitalize on the site's terrain natural plantings, and some custom play features that embrace and take advantage of the site's topography.

- NEW FACILITIES + FEATURES**
- Natural Play Features
 - Seatwalls/Benches
 - Picnic Tables
 - Play Features
 - Staircase for Stair-Climbing Workouts
 - Slides along Steep Terrain
 - Natural Plantings

- PROGRAMS**
- Health and Wellness Classes
 - Pop-Up Play
 - Small Recurring Events
 - Outdoor Skills
 - Environmental Education and Interpretation

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Health and Wellness Organizations
- Biking/Hiking Organizations
- Environmental Education Groups
- Adopt-A-Park Program
- Local Neighborhood Groups
- Volunteers

HAZEL SILLS PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
0.5 acres

SITE DESCRIPTION
Hazel Sills Park is a very small neighborhood park located along the heavily-trafficked Willamina Avenue. It can also be accessed via a pathway on the north side that connects Bonnie Lane to Primrose Lane. It is surrounded by residences on three sides and is located within a 1/4 mile radius of Forest Grove High School.

The park is characterized by open green lawn space, a cluster of existing trees, and a small area with playground equipment.

NEEDS AND OUTREACH FEEDBACK

- COMMUNITY-WIDE IDEAS**
- Access improvements for pedestrians and bicycles
 - Water play
 - Non-reservable community gathering spaces for families and informal activities (game tables, group seating, etc)
 - Enhanced play areas and play structures, especially for younger children
 - Increased recreation programming (health and fitness, community events, concerts, and movies in the park)

PROPOSED PARK DESIGN APPROACH

The proposed design approach for Hazel Sills Park includes enhancing the park's curb appeal, screening it from its adjacent residential neighbors, expanding its play value, adding a sidewalk and split rail fence on the park's south side, and incorporating amenities such as seating options, picnic tables, open lawn space, a loop path, a free library, and open-ended play opportunities.

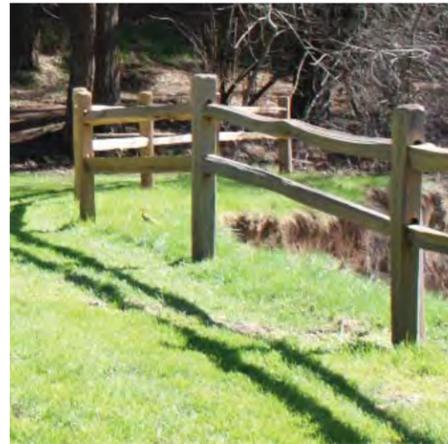
NEW FACILITIES + FEATURES

- Sidewalk along Willamina Avenue
- Fence/Entry Points along Willamina Avenue
- Seatwalls/Benches
- Picnic Tables
- Paved Path
- Natural Play Features
- Sand and Water Play
- Loose Parts (materials that can be moved, carried, combined, redesigned, lined up, taken apart and put back together in multiple ways)
- Free Library (glass-fronted boxes full of free books and a sign saying "take a book, leave a book")
- Natural Plantings/Screening

PROGRAMS

- Health and Wellness Classes (park yoga, walking clubs, boot camp, stretching classes)
- Pop-Up Play (outdoor games, loose parts to build with, hopscotch)
- Small Recurring Events (small concerts, dances, movies in the park, play or performance art)
- Everyday Events (outdoor reading room)

DESIGN + PROGRAMMING EXAMPLES

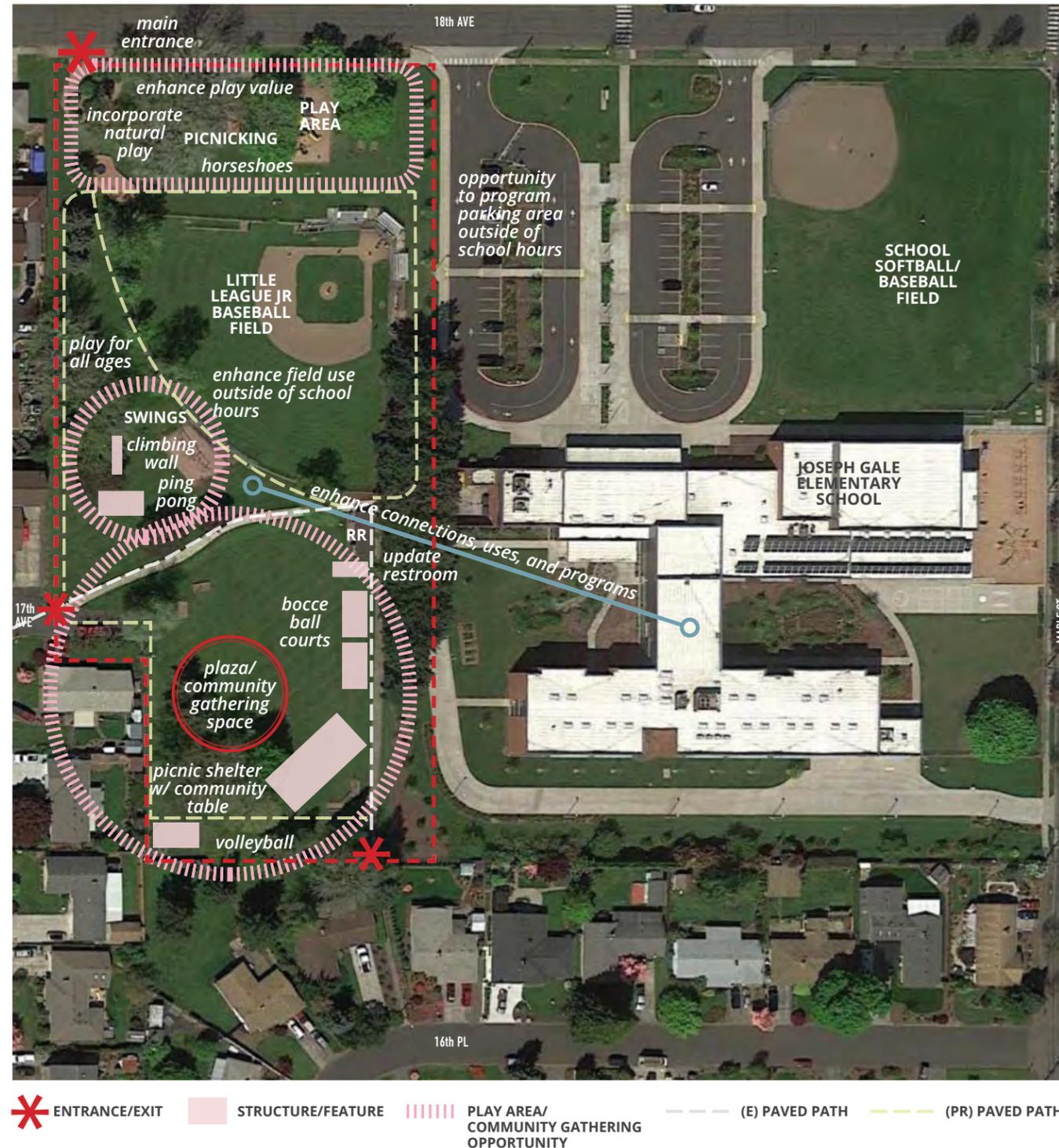


POTENTIAL PARTNERSHIPS

- Local Neighborhood Groups
- Volunteers

JOSEPH GALE PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
3.8 acres

SITE DESCRIPTION
Joseph Gale Park is small neighborhood park adjacent to the Joseph Gale Elementary School and located between Kingwood Street and Maple Street and between 18th Avenue and 16th Place. The park is surrounded by residences on two sides and can be accessed from the north edge, from the dead end street to the west, from a small path between two houses to the south, and from the school grounds.

The park is characterized by open green lawn areas and clusters of existing trees and contains a small area with playground equipment, a swing set, restrooms, picnic tables, and a barbecue. There is also a Junior Baseball Field and two T-Ball stops that are used very frequently between April and mid-June.

NEEDS AND OUTREACH FEEDBACK

SITE-SPECIFIC IDEAS

- The site provides access to recreation facilities in east Forest Grove where few parks exist

COMMUNITY-WIDE IDEAS

- Enhanced play area
- More small group/family activity areas for conversations and gathering (game tables, outdoor ping pong, grouped seating areas)
- Improved sports fields and support facilities
- Improved maintenance of sports fields
- Improved coordination/scheduling with School District for sports fields use
- Improved coordination with School District for park use related to education and recreation
- Increased/more diverse recreation programming (summer camps, after school programs, health and fitness programs, community events, concerts, and movies in the park)
- More revenue generating opportunities

PROPOSED PARK DESIGN APPROACH

Joseph Gale Park has the potential to be a vibrant, vital social space for both the school community and the surrounding residential neighborhood. A combination of ball fields; large open areas for gathering, games, and outdoor learning; and small, intimate areas for play and relaxation, would facilitate a wide variety of everyday activities, as well as special events.

- NEW FACILITIES + FEATURES**
- Plaza/Community Gathering Space
 - Picnic Shelter/Outdoor Classroom (for gathering, meeting, resting, talking, playing, eating, teaching, learning)
 - Picnic Tables
 - Park Games/Courts (horseshoes, bocce, volleyball, ping pong)
 - Natural Play Area (integrated into existing play area)
 - Climbing Wall
 - Paved Path

- PROGRAMS**
- Health and Wellness Classes (park yoga, walking clubs, boot camp, stretching classes)
 - Summer Camps
 - Pop-Up Play (outdoor games, mobile playground van, loose parts to build with, hopscotch)
 - Small Recurring Events (small concerts, dances, movies in the park, play or performance art)
 - Everyday Events (outdoor reading room, game tables, giant chess board, bocce, ping pong)

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

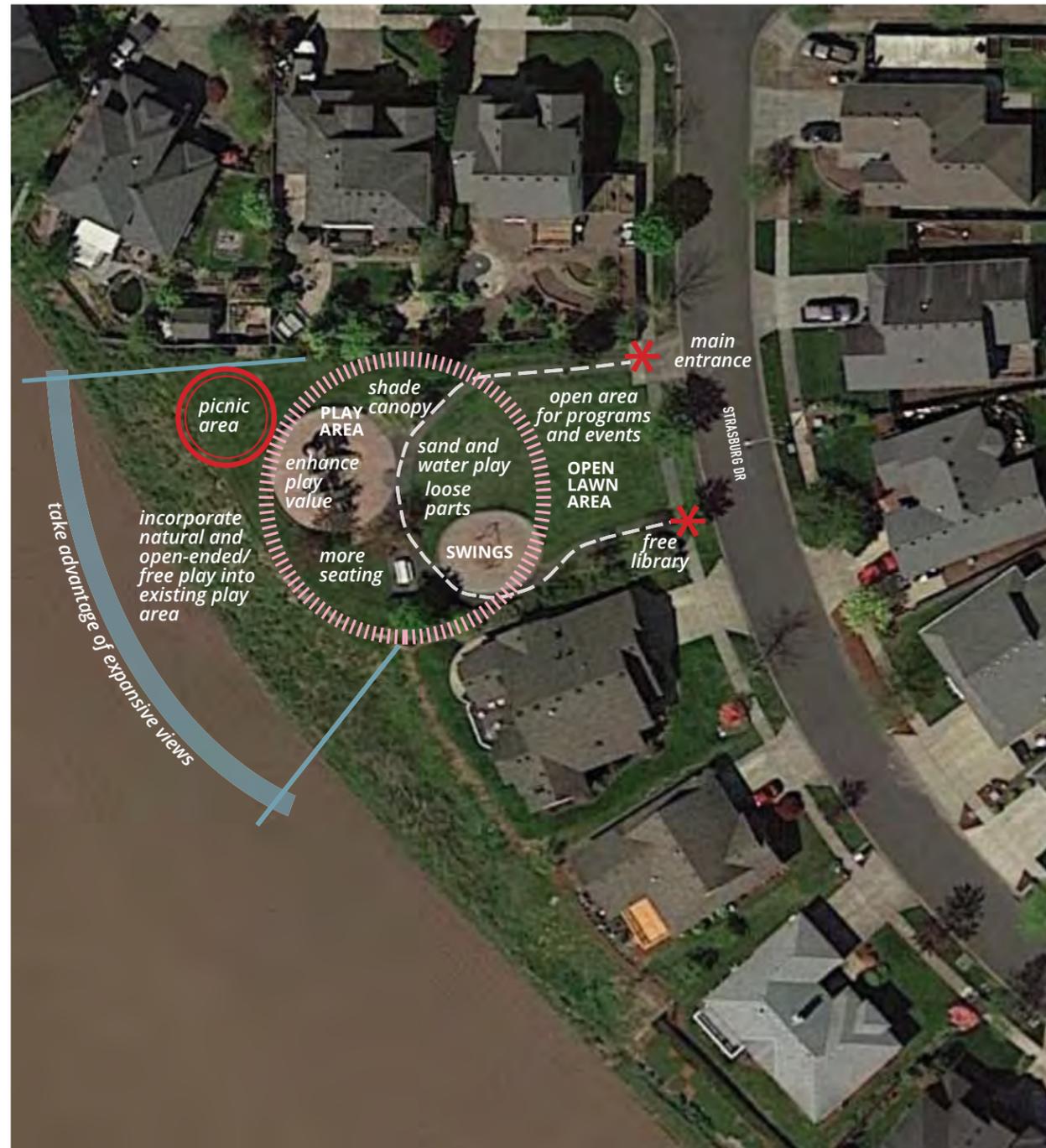
- There is an opportunity for the School District to team with the YMCA and the City to provide after school and recreation programming in the vacant second floor of the school building
- The School District could also partner with the local Little League organization to program the ball fields after school hours and on weekends
- Local Neighborhood Groups
- Volunteers

REVENUE GENERATING OPPORTUNITIES

- Picnic Shelter Rentals
- School Rentals for Educational Opportunities
- Recreation Program Fees
- Sports Field Use Fees
- Farmer's Market
- Food Carts

KNOX RIDGE PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
0.4 acres

SITE DESCRIPTION
Knox Ridge Park is a small neighborhood park on in west Forest Grove. The park is surrounded by single-family residences and has an expansive view to agricultural land to the west. The park's main access point is from the sidewalk at Strasburg Drive, where on-street parking is available for those arriving in vehicles.

The park is characterized by a lawn area, perimeter plantings, a paved path, and a tot lot and swing set. Benches and one picnic table are provided at the west end of the park with views to the Coast Range.

NEEDS AND OUTREACH FEEDBACK

- COMMUNITY-WIDE IDEAS**
- Water play
 - Non-reservable community gathering spaces for families and informal activities
 - Enhanced play areas and play structures, especially for younger children
 - Increased recreation programming (after-school, health and fitness, community events, movies in the park)

PROPOSED PARK DESIGN APPROACH

Knox Ridge Park provides the surrounding neighborhood with a place for young children to play and for people to sit and take in the pastoral views. Even though this pocket park is small, it can still offer residents a unique experience. The design approach for this site includes a diverse plant palette, natural play features, loose parts, a free library, and comfortable places to relax and watch the sunset.

- NEW FACILITIES + FEATURES**
- Seatwalls/Benches
 - Picnic Tables
 - Shade Canopy
 - Natural Play Area w/ sand and water play and loose parts (materials that can be moved, carried, combined, redesigned, lined up, taken apart and put back together in multiple ways)
 - Free Library (glass-fronted boxes full of free books and a sign saying "take a book, leave a book")
 - Natural Plantings

- PROGRAMS**
- Health and Wellness Classes (park yoga, walking clubs, boot camp, stretching classes)
 - Pop-Up Play (outdoor games, mobile playground van, loose parts to build with, hopscotch)
 - Small Recurring Events (small concerts, dances, movies in the park, play or performance art)
 - Everyday Events (outdoor reading room)

DESIGN + PROGRAMMING EXAMPLES

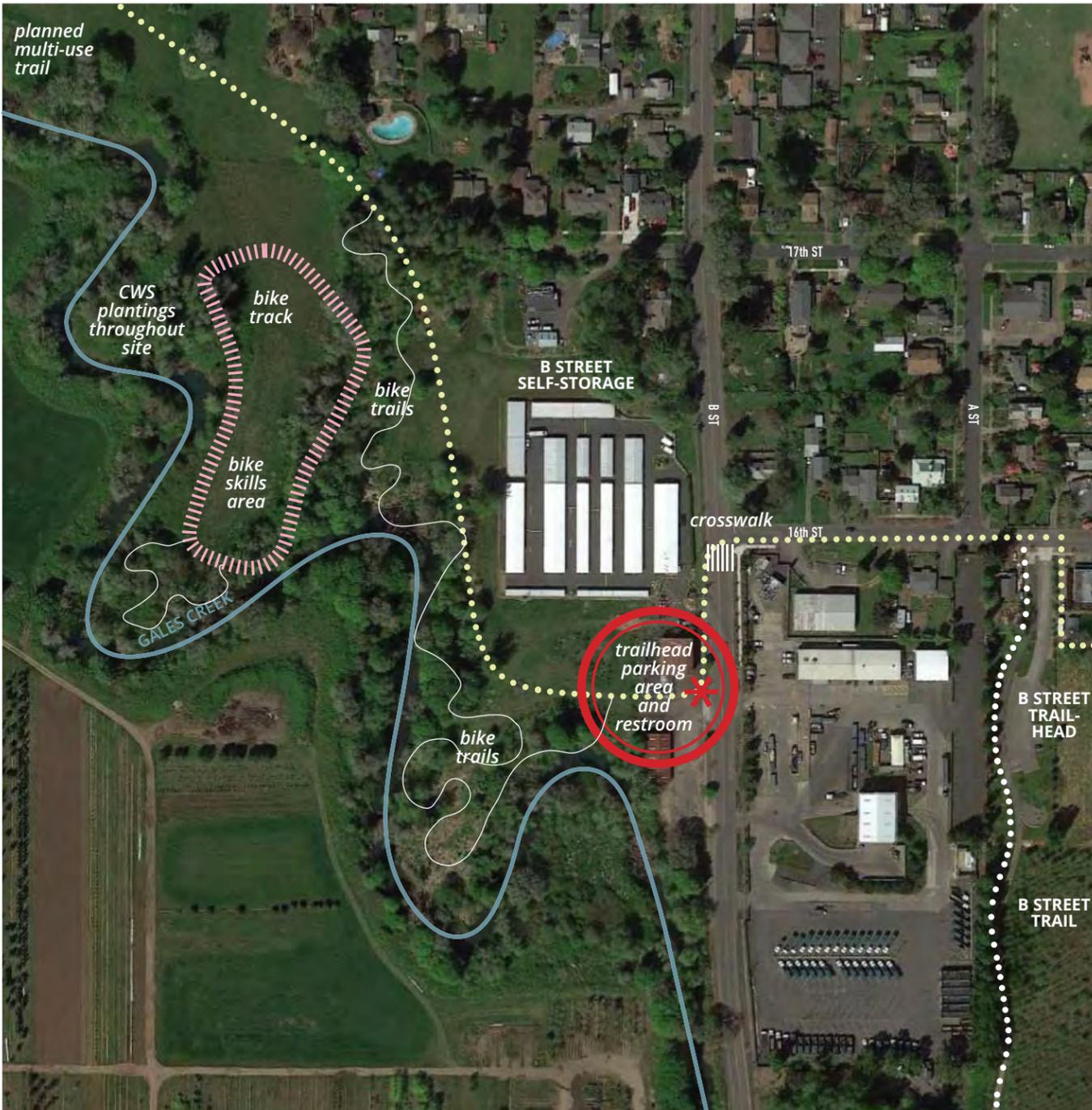


POTENTIAL PARTNERSHIPS

- Local Neighborhood Groups
- Adopt-A-Park Program
- Volunteers

KYLE PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
7.5 acres

SITE DESCRIPTION
The Kyle Recreation Area is an undeveloped park site located along Gales Creek, just west of B Street and the B Street Self-Storage facility. In addition to the adjacent storage buildings, there are also two Forest Grove Light & Power buildings that are used by the City at the site's street frontage. The site is located only 800 feet away from the B Street Trailhead, which is just east along 16th Street.

The site, which is currently accessed via the gravel parking lots at the Light & Power buildings, is characterized by open lawn areas, and riparian vegetation abutting the creek, and deciduous tree canopies that are scattered across the property.

NEEDS AND OUTREACH FEEDBACK

- COMMUNITY-WIDE IDEAS**
- Improvements for parking, pedestrians, and bicycles
 - More multi-use trails that connect community destinations and nature
 - Greater variety of programs and facilities to serve all ages
 - Increased recreation programming (summer camps, after-school, health and fitness, community events)
 - Revenue generating opportunities through facility rentals and programming

PROPOSED PARK DESIGN APPROACH

The vision for this site is to develop it as an open space greenway that provides a range of bicycling opportunities for people of all ages and abilities. The recommended regional loop trail will connect this area to the B Street Trail and other walkable/bikable trails, making it a desirable stop along the way. Equipped with bike trails, a bike skills area, and a bike track, this park could be built using volunteer labor, donated materials, local construction companies, and the city's construction oversight.

Because of its location along the creek, this park could also have a strong natural resource component and could provide Clean Water Services with another large planting area for native and riparian vegetation and habitat.

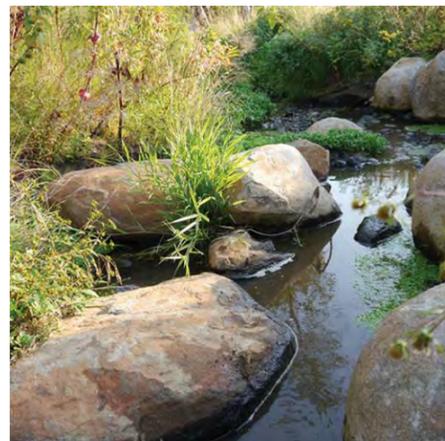
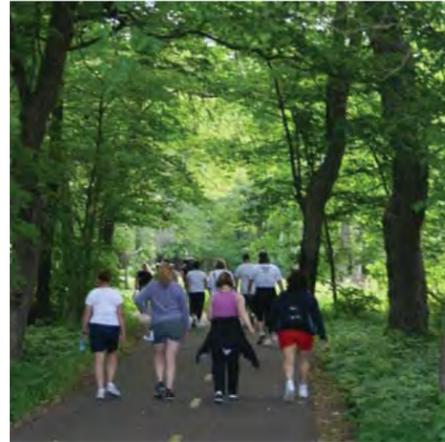
NEW FACILITIES + FEATURES

- Trailhead
- Parking Area
- Bike Trails
- Bike Skills Park
- Bike Track (relocated from Lincoln Park)
- Native Planting and Habitat Areas

PROGRAMS

- Environmental Education and Interpretation
- Outdoor Skills Program
- Bike Skills Camps
- Summer Biking Adventure Camp

DESIGN + PROGRAMMING EXAMPLES

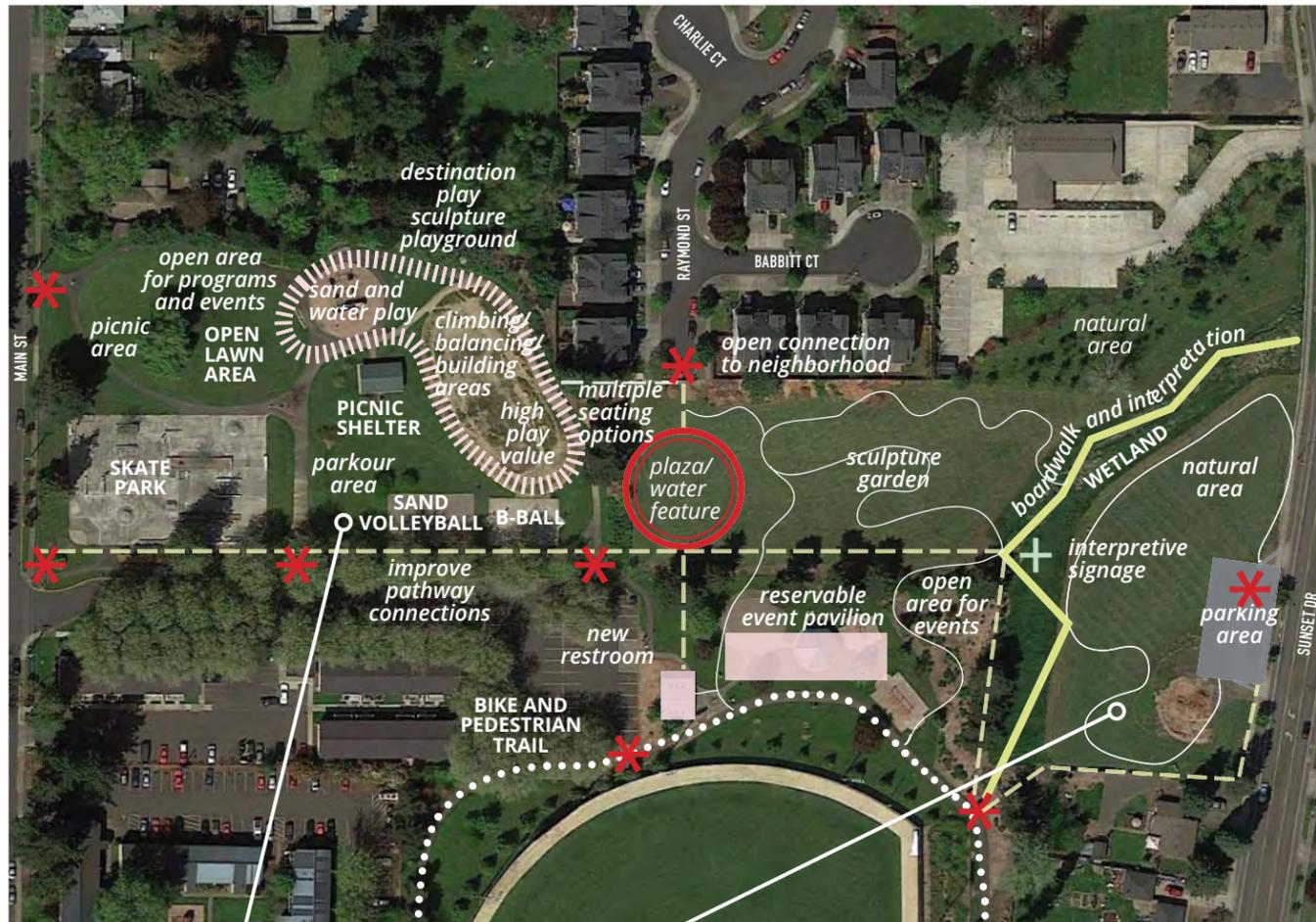


POTENTIAL PARTNERSHIPS

- Biking/Hiking Organizations
- Clean Water Services
- Forest Grove School District
- Local Summer Camp Organizations
- Environmental Education Groups
- Volunteers

LINCOLN PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
 25.8 acres (entire park)
 8.75 acres (northern portion)

SITE DESCRIPTION
 Lincoln Park is a large community park located in the center of Forest Grove, just north of the Aquatics Center and Pacific University. The park can be accessed from Main Street, Sunset Drive, Pacific University, and Raymond Street to the north.

The northwest part of the park contains a skate park, a BMX park, a small playground, a picnic shelter, an open lawn area with a large weeping willow tree, a basketball court, a sand volleyball court, and a paved loop trail that connects the various elements to each other and the rest of the park. The south central portion of this area contains a restroom, a small shelter, two swing sets, and a walking/biking path. The north central east portions are undeveloped and contain open, sweeping fields of tall grass, and a 3.2 acre wetland area.

NEEDS AND OUTREACH FEEDBACK

SITE-SPECIFIC IDEAS

- The site provides access to recreation facilities in central and east Forest Grove
- Improved lighting, safety, and access

COMMUNITY-WIDE IDEAS

- Improvements for parking, pedestrians, and bicycles
- Additional sports fields
- Water play
- Reservable community gathering spaces for cultural/social/special activities and events
- Non-reservable community gathering spaces for families and informal activities
- Enhanced play areas and play structures, especially for younger children
- Greater variety of programs and facilities to serve all ages
- Increased recreation programming
- Revenue generating opportunities

PROPOSED PARK DESIGN APPROACH

The northern end of Lincoln Park has the opportunity to function as the outdoor living room for all of Forest Grove. With a wide variety of engaging outdoor amenities, this park could become the public gathering space for everyday activities and special events.

This approach recommends moving the BMX Park to the Kyle Recreation Area and adding a destination sculptural play area in its place. It also recommends adding a new parkour practice area geared towards teens and adults, a hardscape plaza/gathering space that doubles as a playful water feature on warm days, an outdoor sculpture park that showcases new and exciting works in a public space, and an open connection to the adjacent neighborhood to the north. The natural area is enhanced with a boardwalk over the wetland, interpretive panels, and soft surface paths through the meadow area. This approach also recommends adding a small parking lot, upgrading the existing bathroom, and replacing the central small shelter with a rentable open-air pavilion for large events and weddings.

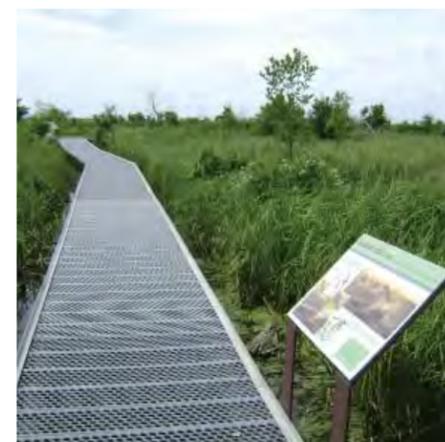
NEW FACILITIES + FEATURES

- Plaza/Community Gathering Space/Water Feature
- Reservable Event Pavilion w/ Community Table
- Public Art Sculpture Park
- Destination Sculpture Playground
- Water Play
- Parkour Area/Park Games/Courts
- Wetland Boardwalk and Interpretive Signage
- Seatwalls/Benches/Picnic Tables
- Paved Walkways/Soft Surface Trails
- Small Parking Area

PROGRAMS

- Arts and Culture Events and Programs
- Environmental Education
- Health and Wellness Classes
- Pop-Up Play
- Small Recurring/Everyday Events
- Summer Camps/Art Camps/Sports Camps
- Social Groups and Gathering Events
- Pacific University Athletics
- Recreational Sports

DESIGN + PROGRAMMING EXAMPLES

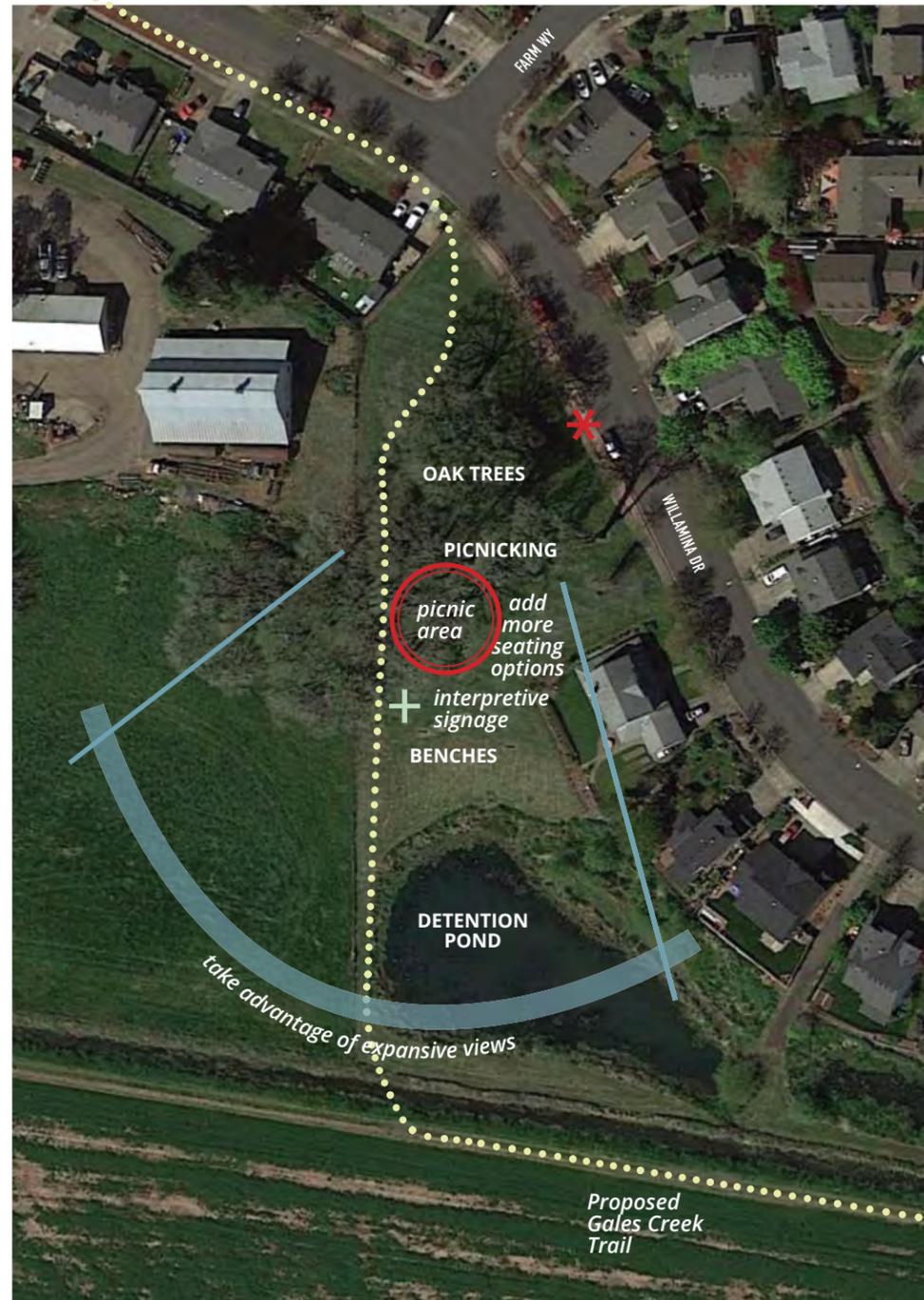


POTENTIAL PARTNERSHIPS

- Pacific University
- Sports Leagues
- Chamber of Commerce
- Local Businesses
- Local Summer Camp Organizations
- Volunteers

REUTER FARM PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
2.1 acres

SITE DESCRIPTION
Reuter Farms Park is located toward the west edge of the city limits by the intersection of Willamina Drive and Farm Way. It is surrounded by residential development to the north and east and agricultural land to the south and the west.

The park is characterized by a sloping hill and a stand of oak trees that provides lots of shade and gives the park a unique character. There is also an adjacent barn that makes the site feel rural and pastoral. There is one picnic table and three benches that overlook the detention pond and farming properties on the south side of the park's hill.

NEEDS AND OUTREACH FEEDBACK

SITE-SPECIFIC IDEAS

- This park could be developed to address unmet needs in nearby underserved areas

COMMUNITY-WIDE IDEAS

- Non-reservable community gathering spaces for families
- More multi-use trails that connect community destinations and nature

PROPOSED PARK DESIGN APPROACH

Part of Reuter Farm Park's charm is in the simplicity of its amenities: a hill, a group of oak trees, and a place to sit and take in the view. In order to maintain this uncomplicated character, the recommended design approach is to preserve the health of the existing oak trees by developing an oak tree replacement plan for when certain trees need to be removed and adding more picnic tables and benches for the neighborhood and trail users.

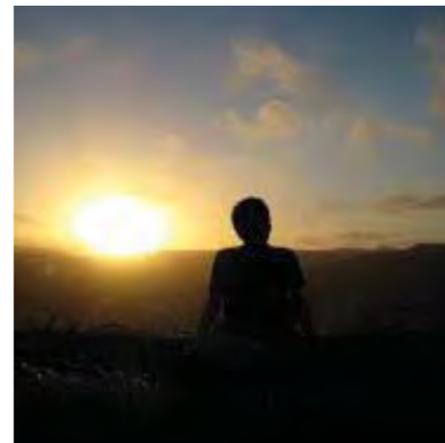
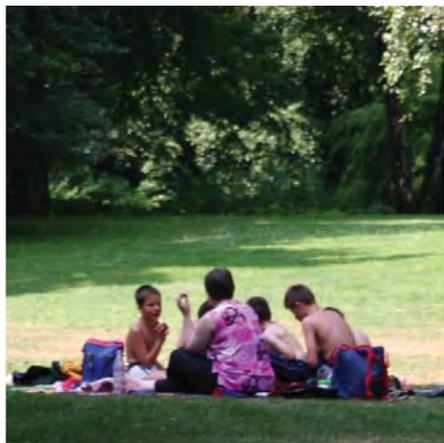
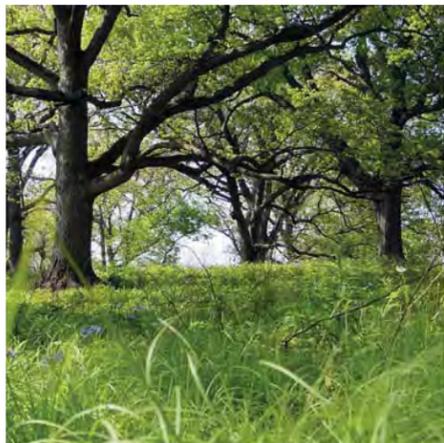
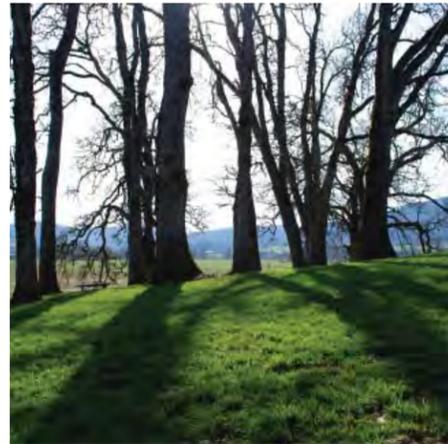
NEW FACILITIES + FEATURES

- Picnic Tables
- Benches
- Interpretive Signage
- Connection to Multi-Use Trail

PROGRAMS

- Neighborhood Gatherings
- Small Recurring Events
- Cultural Landscape Interpretation

DESIGN + PROGRAMMING EXAMPLES

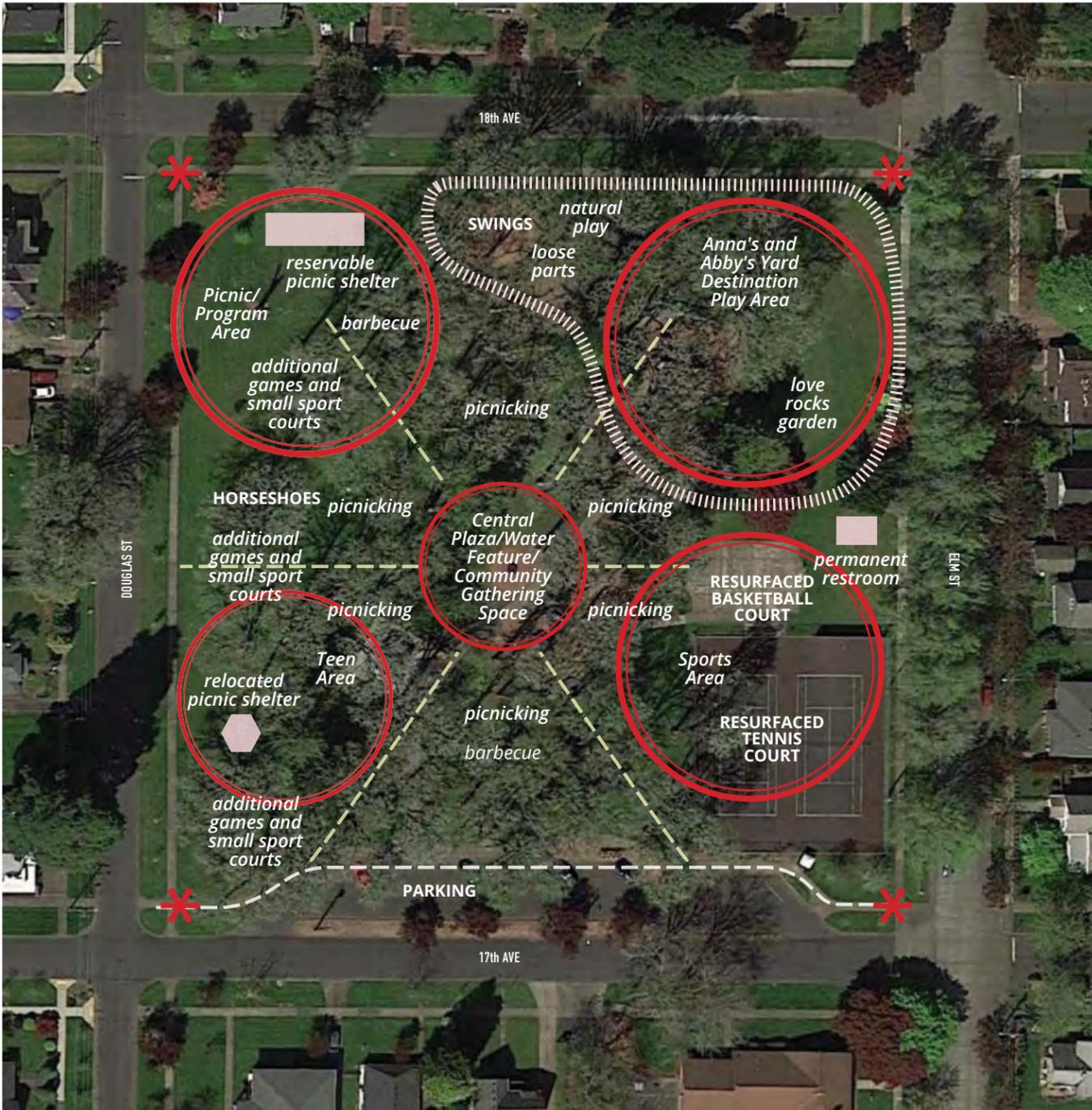


POTENTIAL PARTNERSHIPS

- Tree Preservation Organizations
- Local Neighborhood Groups
- Adopt-A-Park Program
- Volunteers

ROGERS PARK

SITE ANALYSIS



✱ ENTRANCE/EXIT
 STRUCTURE/FEATURE
 - - - (E) PAVED PATH - - - (PR) PAVED PATH
 ||||| PLAY AREA OPPORTUNITY
 ○ PARK ZONES

EXISTING CONDITIONS

SIZE
3.7 acres

SITE DESCRIPTION
Rogers Park is neighborhood park located in Downtown Forest Grove between 17th and 18th Avenues and by Elm and Douglas Streets. The park is surrounded by single-family residences and several churches, and sidewalks are provided along all four frontage streets. The park's main access point is along 17th Avenue, where a small parking lot with angle-in parking is provided.

This park is characterized by a mature tree canopy and has two tennis courts, a basketball court, a portable restroom, lawn areas, two small play structures, horseshoe pits, paved pathways, a small shelter, picnic tables, and barbecues. Many people consider Rogers Park their favorite park in the system, and on hot, sunny days it is filled with people playing sports and games, picnicking, listening to music, and enjoying the cooler temperatures under the park's Oregon White Oak trees.

NEEDS AND OUTREACH FEEDBACK

SITE-SPECIFIC IDEAS

- Improved restroom facilities
- Social gathering spaces for adults
- Resurfaced tennis/basketball courts

COMMUNITY-WIDE IDEAS

- Water play
- Reservable community gathering spaces for cultural/social/special activities and events
- Non-reservable community gathering spaces for families and informal activities (game tables, group seating, etc)
- Enhanced play areas and play structures, especially for younger children
- Greater variety of programs and facilities to serve all ages
- Increased recreation programming (summer camps, after-school, health and fitness, community events, concerts, and movies in the park)
- Revenue generating opportunities through facility rentals and programming

PROPOSED PARK DESIGN APPROACH

An exciting new addition is already planned for the northeast quadrant of Rogers Park. Anna and Abby's Yard will be a memorial play area built to honor two sisters—Anna Dieter and Abby Robinson—who loved to run, skip, laugh, climb, swing, jump, explore, and dream in the parks and yards of Forest Grove. The play area will include a custom-designed play structure, hills and mounds, large boulders, flowers, and places for children and adults to get lost in their imagination.

In addition to Anna and Abby's Yard, there are several opportunities that could make this park even more dynamic and engaging and help it meet a wider range of community needs. By adding a central hardscape plaza with seatwalls and spray jets for intermittent water play, a permanent restroom, a reservable picnic shelter, waterwise plantings, natural play features, additional games and small sport courts, and seating options, this park could become a destination for the entire community.

NEW FACILITIES + FEATURES

- Anna and Abby's Yard Play Area
- Natural Play Features
- Central Plaza w/ Water Spray Ground
- Permanent Restroom
- Reservable Picnic Shelter
- Additional Picnic Tables and Seating Options
- Additional Games and Small Sport Courts
- Waterwise Plantings

PROGRAMS

- Health and Wellness Classes (park yoga, walking clubs, boot camp)
- Summer Camps
- Pop-Up Play (outdoor games, mobile playground van, loose parts, musical instruments)
- Small Recurring Events (small concerts, dances, play or performance art)
- Everyday Events

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Anna and Abby's Yard Foundation
- Local Businesses
- Health and Wellness Organizations
- Local Summer Camp Organizations
- Local Neighborhood Groups
- Adopt-A-Park Program
- Volunteers

SAUCY PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
0.5 acres

SITE DESCRIPTION

Saucy Park is a very small, undeveloped site at the intersection of 14th Avenue and Birch Street in the historic district of Painter's Woods. Situated between a residential lot and the Metro-owned natural area, this park is a sloped piece of property that connects the neighborhood to both existing and proposed bike and pedestrian trails, including the planned Emerald Necklace.

The park is characterized by open lawn and extensive, west-facing views, as well as the borrowed shade from the adjacent residence's tree canopy.

NEEDS AND OUTREACH FEEDBACK

COMMUNITY-WIDE IDEAS

- Improvements for parking, pedestrians, and bicycles
- More multi-use trails that connect community destinations and nature

PROPOSED PARK DESIGN APPROACH

Saucy Park will provide an important connection along the bike and pedestrian trails that will run throughout the city. It could also be the place where neighbors gather to enjoy a picnic, take in the view, and watch the sunset. It could also be the place where kids come to climb on logs, run through a meadow, and learn about the natural resources below. By adding in picnic tables, seating options, interpretive features, a natural play area, natural plantings, and rotating art installations that bring awareness to the natural surroundings, Saucy Park could become a well-used and well-loved site.

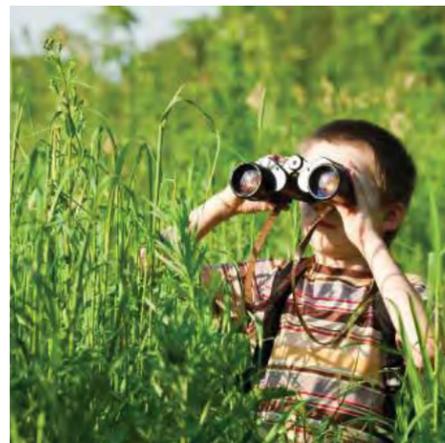
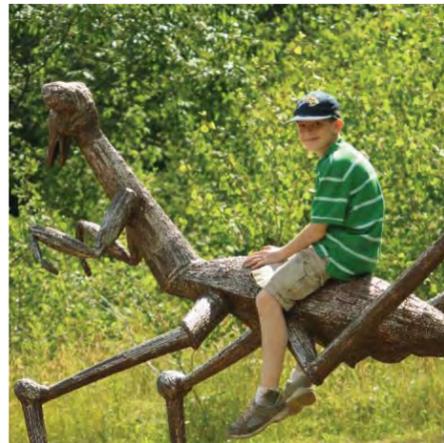
NEW FACILITIES + FEATURES

- Picnic Tables
- Seating Options
- Natural Play Features
- Natural Plantings
- Interpretive Signage and Features
- Temporary Art Installations

PROGRAMS

- Environmental Education
- Rotating Art Installation Program
- Neighborhood Summer Camp
- Health and Wellness Classes
- Small Recurring Events
- Stargazing/Full Moon Walks

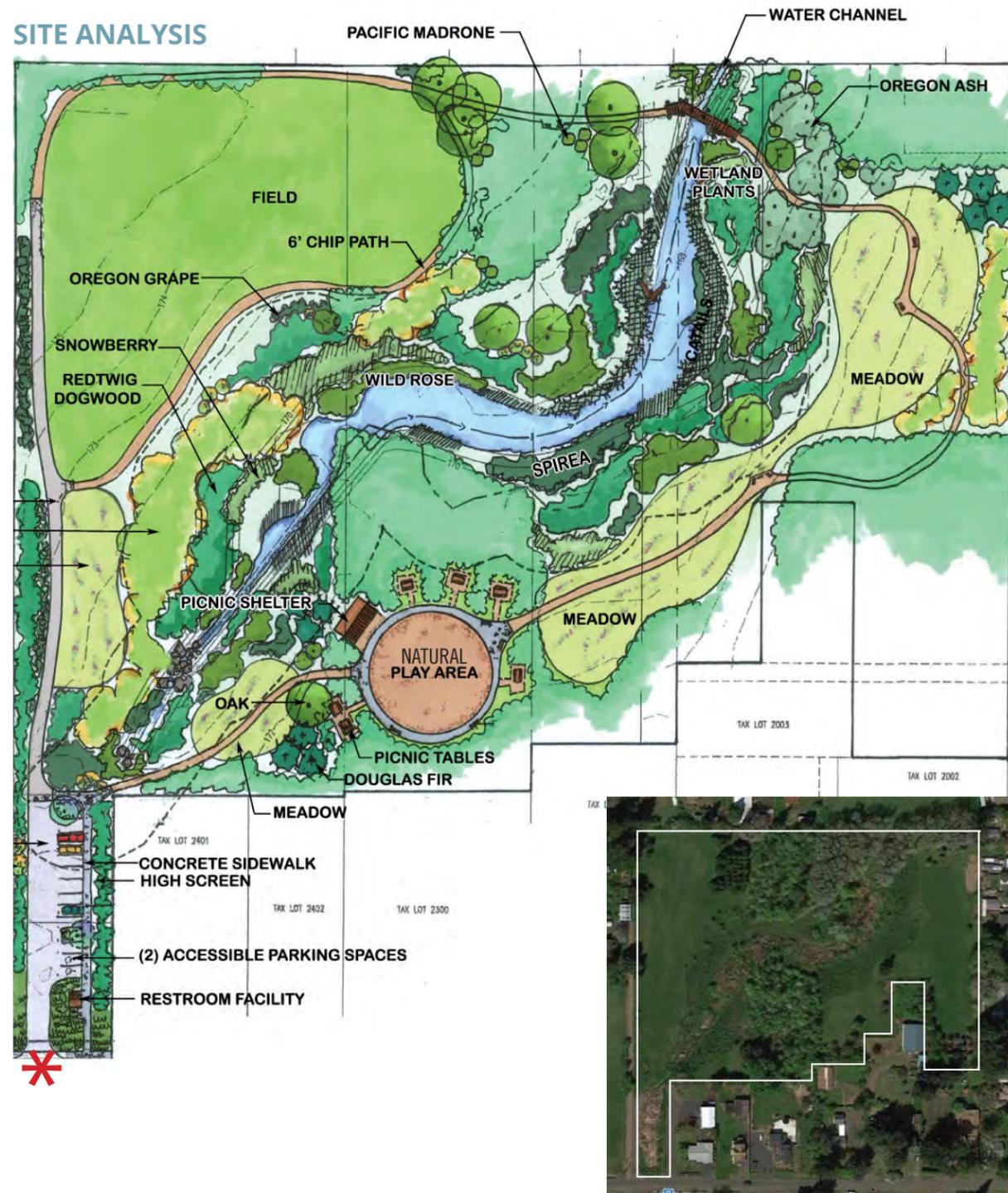
DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Environmental Education Organizations
- Art Organizations
- Forest Grove School District
- Volunteers

STITES NATURE PARK



SOURCE: AKS ENGINEERING & FORESTRY

EXISTING CONDITIONS

SIZE
10.9 acres

SITE DESCRIPTION
Stites Nature Park is currently a large, undeveloped piece of land set behind the residential properties that border 26th Avenue, Firwood Lane, and Willamina Avenue. The site is characterized by an intermittent water channel, open lawn areas, and stands of deciduous trees. At this time, the only way to access the site from public property is at its southwest corner along 26th Avenue.

NEEDS AND OUTREACH FEEDBACK

- SITE-SPECIFIC IDEAS**
- This park could be developed to address unmet needs in nearby underserved areas
 - Group covered shelter
 - Space for overnight for outdoor science education camp
 - Interpretive flora/fauna signage

- COMMUNITY-WIDE IDEAS**
- Improvements for parking, pedestrians, and bicycles
 - Better coordination with School District on park use for educational opportunities
 - Reservable community gathering spaces for cultural/social/special activities and events
 - More multi-use trails that connect community destinations and nature
 - Enhanced play areas and play structures, especially for younger children
 - Greater variety of programs and facilities to serve all ages
 - Revenue generating opportunities through facility rentals and programming

PROPOSED PARK DESIGN APPROACH

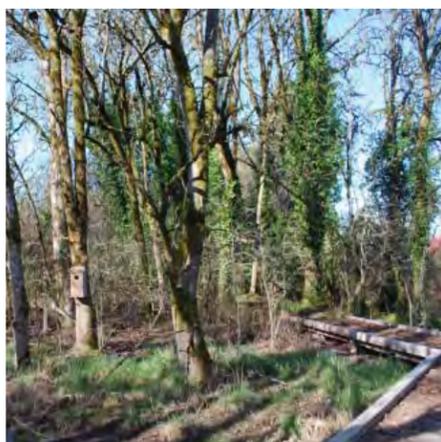
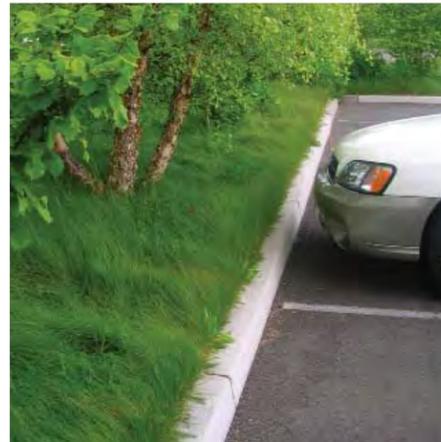
The City has developed a master plan for the Stites site, which takes advantage of the sites natural feature and bolsters it with some essential park amenities.

The new plan (shown to the left) includes a 12-stall parking area at the park's main entrance with a permanent restroom and an informational kiosk. The larger park is divided into two main sections, one on the east side of the water channel and one on the west side. The east side is more developed and consists of walking paths, a reservable picnic shelter, picnic areas, a natural play area, open swaths of meadow, plants from an ash forest wetland plant community, viewpoints and overlooks, and interpretive signage. The west side of the park contains walking paths, fields of open grass, plants from an oak woodland plant community, riparian habitat, rock outcroppings, and views to the water. The two sides of the park are connected by a raised boardwalk and bridge that cross the water and provide places to sit and learn about the natural resources on the site.

- NEW FACILITIES + FEATURES**
- Parking Area
 - Informational Kiosk
 - Restroom
 - Reservable Picnic Shelter
 - Natural Play Area
 - Walking Paths
 - Native Plantings
 - Open Field
 - Interpretive Features

- PROGRAMS**
- Environmental Education
 - Outdoor Skills
 - Plant Identification
 - Summer Camps

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Forest Grove School District
- Environmental Education Organizations
- Local Summer Camp Organizations
- Local Neighborhood Organizations

TALISMAN PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
2.3 acres

SITE DESCRIPTION
Talisman Park is small neighborhood park located where Willamina Avenue dead-ends after crossing Magnolia Way. The park is surrounded by single-family residences and its main access point is along Willamina Avenue, where on street parking is allowed. A paved trail along Gales Creek Road also provides pedestrian access to the park.

The park is characterized by a central open green lawn, a play structure, and existing perimeter trees. The park has a small picnic shelter, barbecues, picnic tables, a loop walking path, and a stand of trees that are marked and labeled in the style of an arboretum. On many days, the park is full of parents bringing their children to climb on the play equipment and bike around the loop path.

NEEDS AND OUTREACH FEEDBACK

SITE-SPECIFIC IDEAS

- Opportunities to increase usage

COMMUNITY-WIDE IDEAS

- Improvements for parking, pedestrians, and bicycles
- Water play
- Non-reservable community gathering spaces for families and informal activities (game tables, group seating, etc)
- Enhanced play areas and play structures, especially for younger children
- Greater variety of programs and facilities to serve all ages
- Increased recreation programming

PROPOSED PARK DESIGN APPROACH

With a few additions, Talisman Park could offer even more than it already does to the surrounding neighborhood. By enhancing the play area with more open-ended, free play features, the quality of the play value in this park would increase. With updated tree identification information, people would become more familiar with the tree species in the surrounding neighborhood. And with a picnic shelter and large community table for people to rest, talk, play games, and eat, Talisman Park could serve a wider audience and provide more amenities for community gathering and events.

NEW FACILITIES + FEATURES

- Picnic Shelter
- Community Table
- Picnic Tables
- Seating Options
- Natural Play Area
- Sand and Water Play
- Loose Parts (materials that can be moved, combined, redesigned, taken apart and put back together in multiple ways)
- Free Library
- Updated Tree Identification Signage

PROGRAMS

- Plant Identification
- Health and Wellness Classes
- Pop-Up Play
- Small Recurring Events
- Everyday Events

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Local Neighborhood Organizations
- Adopt-A-Park Program
- Volunteers

THATCHER PARK

SITE ANALYSIS



EXISTING CONDITIONS

SIZE
25.5 acres

SITE DESCRIPTION
Thatcher Park is a community park located in west Forest Grove at the corner NW David Hill Road and NW Thatcher Road. Its main access point is a driveway at NW David Hill Road, and the driveway terminates along a central parking spine with approximately five accessible spaces and 65 regular spaces.

The park is characterized by an off-leash dog area, baseball/softball fields, a soccer field, a playground, and a small woodland with walking trails. There is also a picnic shelter, picnic tables, barbecues, and restroom facilities.

NEEDS AND OUTREACH FEEDBACK

SITE-SPECIFIC IDEAS

- The site provides access to community-scale recreation facilities in north and west forest grove
- The site should provide parking, pedestrian, and bike access as residential development occurs
- Splash pad
- Trees in dog park
- Shelter/covered picnic facilities
- Trail connections to Forest Gale Heights
- Viewpoint on David Hill
- Improved field maintenance and drainage
- Music/Concerts
- More parking
- Improved restroom facilities

COMMUNITY-WIDE IDEAS

- Better coordination with School District for sports field scheduling
- Better coordination with School District on park use for educational opportunities
- Reservable community gathering spaces for cultural/social/special activities and events
- More multi-use trails that connect community destinations and nature
- Increased recreation programming

PROPOSED PARK DESIGN APPROACH

The City has developed a master plan for Phase II of Thatcher Park's design, and this design approach recommends a similar direction for the park's additional features, which includes: an entry plaza/water feature, a small parking area with a one-way exit road, a new destination play area, natural play opportunities, a reservable picnic shelter, small sport courts (bocce, tennis, or basketball), hillside plantings for shade and interest, and soft surface trails that extend throughout the forest at the south end of the site. These additional amenities are meant to increase the recreation opportunities at the site and facilitate both everyday and special events.

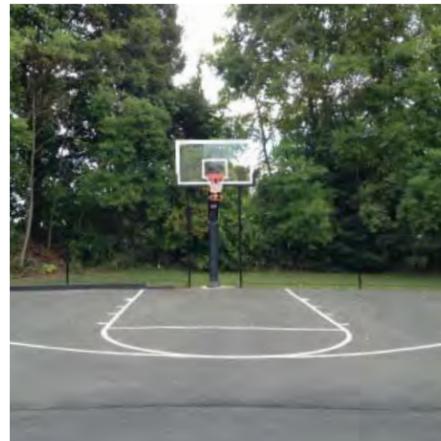
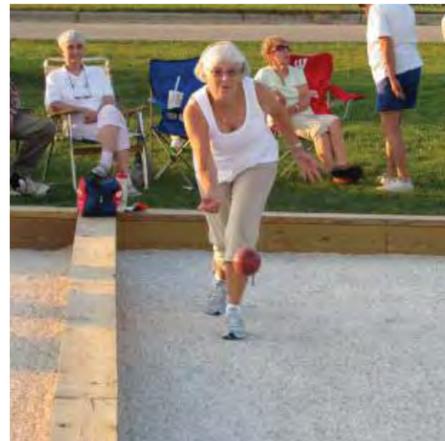
NEW FACILITIES + FEATURES

- Additional Parking
- Reservable Picnic Shelter
- Seatwalls/Benches
- Picnic Tables
- Small Court Sports (bocce, basketball, volleyball, ping pong, pickleball)
- Community Gardens
- New Play Area (sand and water play)
- Natural Play Features
- Loose Parts (materials that can be moved, carried, combined, redesigned, lined up, taken apart and put back together in multiple ways)
- Soft Surface Woodland Trails
- Interpretive Signage
- Self-Guided Nature Trail Tour
- Story Circle Gathering Area

PROGRAMS

- Sports Programs
- Social Groups and Gathering Events
- Health and Wellness Classes
- Community Gardening
- Environmental Education
- Outdoor Skills Plant Identification
- Summer Camps
- Pop-Up Play
- Small Recurring Events
- Everyday Events

DESIGN + PROGRAMMING EXAMPLES



POTENTIAL PARTNERSHIPS

- Pacific University
- Community Garden Organizations
- Sports Leagues
- Boy Scouts
- Local Businesses
- Local Summer Camp Organizations
- Health and Wellness Organizations
- Adopt-A-Park Program
- Volunteers

REVENUE GENERATING OPPORTUNITIES

- Picnic Shelter Rental
- Recreation Program Fees (tournament and private operator fees)
- Sports Field Use Fees



APPENDIX E: Capital and Operations Cost Model

APPENDIX E: CAPITAL AND OPERATIONS COST MODEL

Appendix E presents estimated capital costs for all of the park development, enhancements and rehabilitation noted in Chapter 5. These projects are far more than can be completed in a 10-year planning horizon. They include all projects associated with City of Forest Grove public parks, even where park improvements or development could potentially be funded by other partners or interest groups. The totals shown here do not reflect specific costs for the City to bear over a specific timeframe, but instead identify potential cost allowances associated with opportunities to refresh and remodel public parks, open space, greenways and trails as recommended in this Master Plan.

This appendix includes two tables:

- Table E.1: Capital Projects and Cost Estimates for Existing and Proposed Parks
- Table E.2: Per Unit Cost Estimate by Park Type

I. TABLE E.1

Table E.1 presents planning-level cost estimates by park site for projects such as land acquisition, park development and site enhancements. It also notes the reinvestment costs and maintenance costs. Existing parks are organized by four classifications: community parks, neighborhood parks, special use parks and open space, greenways and trails. Proposed parks and trails are organized in three categories: proposed parks, improvements to partner sites and proposed trail corridors. The goal of this table is to identify a general level of funding needed to update and enhance the park system per recommendations noted in Chapters 4 and 5.

All costs are planning level costs estimated in 2016 dollars based on the per-acre assessment in Table E.2. The costs do not account for inflation. Over time, these costs will need to be adjusted for inflation as well as changes in land values, the market value of labor and materials, and expectations regarding the quality and level of park development desired. More specific costs should be defined prior to construction or improvements, when the scale, scope and phasing of projects are more defined.

Category Definitions

The first three columns in Table E.1 include reference information about each park site.

FOREST GROVE PARKS, RECREATION AND OPEN SPACE MASTER PLAN (DRAFT)

- **Acreage:** This column reflects park acreage as noted in the park and facility inventory for existing park sites and as proposed for planned parks and other sites.
- **Percentage of park developed:** This column reflects an approximation of the percentage of each site that is currently developed. Undeveloped areas include open space as well as vacant park areas held for future facility development.
- **Park type:** This column classifies park sites into types of parks as provided by the City of Forest Grove. Each existing and proposed site is classified as either a community park, a neighborhood park, a special use park, a partner site, trail corridor or as an open space, greenway and trail.

RECOMMENDATIONS

This category indicates the types of recommendations appropriate for individual existing and proposed parks.

- **Acquire land:** Acquisition may occur through purchase, donation, easement or other means. In residential areas, these would be community and neighborhood parks, while in residential, commercial and other areas they might include trail corridors and open space, greenways and trails.
- **Develop park or trail:** This refers to park and facility construction and landscaping at several currently undeveloped sites, including sites not yet acquired.
- **Provide minor enhancements:** This refers to sites where the number of recommended improvements and the size of the improved area is relatively small.
- **Provide major enhancements:** This refers to sites where the number of enhancements and the size of the impacted area is relatively high.
- **Add facility through partnership:** This refers to facility development funded and managed by the City at sites owned by partner organizations such as nonprofits or other public and private entities. It also includes projects that are anticipated to involve equity partners, such as the development of a new community recreation center.

CAPITAL COSTS

This category considers the costs of acquisition, development, enhancement and improvement of parks. The per-acre costs from Table E.2 are multiplied by the acreage of each park to determine site-specific costs (except for partnership improvements, as noted below).

- **Acquisition:** This column reflects the cost of acquiring land for new parks.
- **Development:** This column reflects the cost of site master planning, construction and landscaping at currently undeveloped sites.
- **Minor or major enhancements:** Opportunities to enhance sites were categorized as “major” or “minor” based on the numbers of enhancements needed and the size of the impacted area. Minor enhancements are anticipated to affect approximately one-quarter of the site; major enhancements affect approximately half of the site. Costs for these projects are shown accordingly.
- **Partnership improvement or major new facility:** This column reflects anticipated City costs for new facility development through partnership. This includes projects at sites owned

by other public or private entities, as well as the costs associated with community recreation center development, which are anticipated to be shared with an equity partner. Rather than a per-acre cost, these costs are the planning level estimate for the entire project.

- **Total capital cost:** This column represents the sum of the capital costs for each individual site.

% TO BE MAINTAINED AFTER PROJECT

This column shows the percentage of the site that will be developed or landscaped and therefore must be maintained by the City of Forest Grove or project partners after improvements are completed.

REINVESTMENT COSTS

Park reinvestment costs reflect an annual allocation for the capital replacement of outdated or worn facilities based on their age and use. These costs are based on a 20-year replacement schedule to update one-quarter of the park, including landscaping and amenities. The costs are annualized to provide an estimated allowance to set aside annually to ensure that funds are available for these types of improvements when needed. The per-acre costs are provided in Table E.2.

MAINTENANCE COSTS

This category reflects the level of maintenance needed as well as the cost of maintenance after developments are completed. For the Aquatic Center, Maintenance Costs include the estimated annual net expenses for both maintaining and operating the facility (total costs minus revenues generated).

- **Maintenance tier:** This column identifies whether maintenance for individual parks should be classified as enhanced or basic. The current level of maintenance is reflected by the basic tier and is applied to parks that are lightly used and not recommended for additional development. Enhanced maintenance should be applied to high-use parks and those sites where a number of amenities and facilities are proposed to be added. Basic maintenance costs are based on an average cost per acre to maintain all City parks and trails, based on figures in the City's Proposed Budget, FY 2016-17.
- **Post development annual maintenance cost:** This column reflects the annual cost of maintaining each park after developments are completed.

II. TABLE E.2

Table E.2 identifies average per unit cost estimate for improving or developing parks, which follow the same classifications from Table E.1: community park, neighborhood park, special use park, partner site, trail corridor or open space, greenway and trail. The estimated cost shown for each type is the per-acre cost based on the proposed City budget for fiscal year 2016-17, industry standards and local real estate values. All costs are based on 2016 dollars, not accounting for inflation. These costs are carried into the Capital Costs, Reinvestment Costs and Maintenance Costs columns of Table E.1 and multiplied by the acreage of each park to determine site-specific costs.

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TABLE E.1: Capital Projects and Cost Estimates for Existing and Proposed Parks (DRAFT)

	Acres	% of Park Currently Developed	Park Type	RECOMMENDATIONS					CAPITAL COSTS						% to be Maintained After Project	REINVESTMENT COSTS		MAINTENANCE COSTS	
				Acquire Land	Develop Park or Trail	Provide Minor Enhancements	Provide Major Enhancements	Add Facility through Partnership	Acquisition	Development	Minor Enhancements	Major Enhancements	Partnership Improvement or Major New Facility	Total Capital Cost		Annual Future Reinvestment	Maintenance Tier (Basic or Enhanced)	Annual Post Development Maintenance Cost*	
EXISTING PARKS																			
Community Parks																			
LINCOLN PARK	22.8	100%	CP			•			\$ -	\$ -	\$ 2,280,000	\$ -	N/A	\$ 2,280,000	100%	\$ 114,000	Enhanced	\$ 273,600	
LINCOLN PARK (Addition)	3.0	0%	CP	•					\$ -	\$ 1,200,000	\$ -	\$ -	N/A	\$ 1,200,000	100%	\$ 15,000	Enhanced	\$ 36,000	
THATCHER PARK	16.0	100%	CP			•			\$ -	\$ -	\$ 1,600,000	\$ -	N/A	\$ 1,600,000	100%	\$ 80,000	Enhanced	\$ 192,000	
THATCHER PARK (Phase 2)	8.5	0%	CP	•					\$ -	\$ 3,400,000	\$ -	\$ -	N/A	\$ 3,400,000	100%	\$ 42,500	Enhanced	\$ 102,000	
THATCHER PARK (Dog Park)	1.0	100%	CP	•					\$ 200,000	\$ -	\$ -	\$ -	N/A	\$ 200,000	100%	\$ 5,000	Enhanced	\$ 12,000	
<i>Community Parks Subtotal</i>	<i>51.3</i>								<i>\$ 200,000</i>	<i>\$ 4,600,000</i>	<i>\$ 3,880,000</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 8,680,000</i>		<i>\$ 256,500</i>		<i>\$ 615,600</i>	
Neighborhood Parks																			
BARD PARK	2.8	100%	NP			•			\$ -	\$ -	\$ 213,000	\$ -	N/A	\$ 213,000	100%	\$ 10,650	Basic	\$ 28,400	
HAZEL SILLS PARK	0.5	100%	NP			•			\$ -	\$ -	\$ 38,250	\$ -	N/A	\$ 38,250	100%	\$ 1,913	Basic	\$ 5,100	
JOSEPH GALE PARK	3.8	100%	NP				•		\$ -	\$ -	\$ -	\$ 564,000	N/A	\$ 564,000	100%	\$ 14,100	Enhanced	\$ 45,120	
KNOX RIDGE PARK	0.4	100%	NP			•			\$ -	\$ -	\$ 30,000	\$ -	N/A	\$ 30,000	100%	\$ 1,500	Basic	\$ 4,000	
ROGERS PARK	3.7	100%	NP				•		\$ -	\$ -	\$ -	\$ 550,500	N/A	\$ 550,500	100%	\$ 13,763	Enhanced	\$ 44,040	
TAILSMAN PARK	2.3	100%	NP			•			\$ -	\$ -	\$ 172,500	\$ -	N/A	\$ 172,500	100%	\$ 8,625	Basic	\$ 23,000	
FOREST GLEN PARK 1 (Upper)	0.9	100%	NP			•			\$ -	\$ -	\$ 67,500	\$ -	N/A	\$ 67,500	100%	\$ 3,375	Basic	\$ 9,000	
FOREST GLEN PARK 2 (Lower)	5.3	50%	NP			•			\$ -	\$ -	\$ 198,750	\$ -	N/A	\$ 198,750	75%	\$ 14,906	Basic	\$ 39,750	
<i>Neighborhood Parks Subtotal</i>	<i>19.7</i>								<i>\$ -</i>	<i>\$ -</i>	<i>\$ 720,000</i>	<i>\$ 1,114,500</i>	<i>\$ -</i>	<i>\$ 1,834,500</i>		<i>\$ 68,831</i>		<i>\$ 198,410</i>	
Special Use Parks																			
FOREST GROVE AQUATIC CENTER*	3.0	100%	SU				•		\$ -	\$ -	\$ -	\$ 750,000	N/A	\$ 750,000	100%	\$ 18,750	Enhanced	\$ 320,000	
FOREST GROVE SENIOR CENTER	1.3	100%	SU				•		\$ -	\$ -	\$ 162,500	\$ -	N/A	\$ 162,500	100%	\$ 8,125	Enhanced	\$ 15,600	
<i>Special Use Parks Subtotal</i>	<i>4.3</i>								<i>\$ -</i>	<i>\$ -</i>	<i>\$ 162,500</i>	<i>\$ 750,000</i>	<i>\$ -</i>	<i>\$ 912,500</i>		<i>\$ 26,875</i>		<i>\$ 335,600</i>	
Open Space, Greenways and Trails																			
B STREET TRAIL (Trailhead)	0.9	100%	OSGT			•			\$ -	\$ -	\$ 45,000	\$ -	N/A	\$ 45,000	100%	\$ 2,250	Basic	\$ 9,000	
B STREET TRAIL (Trail Corridor)	1.4	100%	TC						\$ -	\$ -	\$ -	\$ 3,500	N/A	\$ -	100%	\$ 3,500	Basic	\$ 14,000	
FERNHILL WETLANDS TRAILHEAD	0.9	100%	OSGT			•			\$ -	\$ -	\$ 45,000	\$ -	N/A	\$ 45,000	100%	\$ 2,250	Basic	\$ 9,000	
FERN HILL ELEMENTARY SCHOOL TRAIL	1	100%	TC						\$ -	\$ -	\$ -	\$ -	N/A	\$ -	100%	\$ 2,500	Basic	\$ 10,000	
FOREST GLEN OPEN SPACE AND TRAIL	45.1	15%	OSGT			•			\$ -	\$ -	\$ 338,250	\$ -	N/A	\$ 338,250	25%	\$ 28,188	Basic	\$ 112,750	
HIGHWAY 47 TRAIL	9.1	100%	TC			•			\$ -	\$ -	\$ 455,000	\$ -	N/A	\$ 455,000	100%	\$ 22,750	Basic	\$ 91,000	
OLD TOWN LOOP TRAIL	1.3	100%	TC						\$ -	\$ -	\$ -	\$ -	N/A	\$ -	100%	\$ 3,250	Basic	\$ 13,000	
<i>Open Space, Greenways and Trails Subtotal</i>	<i>59.7</i>								<i>\$ -</i>	<i>\$ -</i>	<i>\$ 883,250</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 883,250</i>		<i>\$ 64,688</i>		<i>\$ 258,750</i>	
<i>Existing Parks Subtotal</i>	<i>135.0</i>								<i>\$ 200,000</i>	<i>\$ 4,600,000</i>	<i>\$ 5,645,750</i>	<i>\$ 1,864,500</i>	<i>\$ -</i>	<i>\$ 12,310,250</i>		<i>\$ 416,894</i>		<i>\$ 1,408,360</i>	

FOREST GROVE PARKS, RECREATION AND OPEN SPACE MASTER PLAN (DRAFT)

	Acres	% of Park Currently Developed	Park Type	RECOMMENDATIONS					CAPITAL COSTS					% to be Maintained After Project	REINVESTMENT COSTS		MAINTENANCE COSTS	
				Acquire Land	Develop Park or Trail	Provide Minor Enhancements	Provide Major Enhancements	Add Facility through Partnership	Acquisition	Development	Minor Enhancements	Major Enhancements	Partnership Improvement or Major New Facility		Total Capital Cost	Annual Future Reinvestment	Maintenance Tier (Basic or Enhanced)	Annual Post Development Maintenance Cost*
PROPOSED PARKS AND TRAILS																		
Proposed Parks																		
A.T. SMITH PARK (City)	3.2	0%	SU		•				\$ -	\$ 1,600,000	\$ -	\$ -	N/A	\$ 1,600,000	100%	\$ 20,000	Enhanced	\$ 38,400
KYLE PARK	7.5	0%	OSGT		•				\$ -	\$ 750,000	\$ -	\$ -	N/A	\$ 750,000	50%	\$ 9,375	Basic	\$ 37,500
RUETER FARM PARK	2.1	0%	OSGT		•				\$ -	\$ 428,000	\$ -	\$ -	N/A	\$ 428,000	100%	\$ 5,350	Basic	\$ 21,400
SAUCY PARK	0.5	0%	OSGT		•				\$ -	\$ 100,000	\$ -	\$ -	N/A	\$ 100,000	100%	\$ 1,250	Basic	\$ 5,000
STITES NATURE PARK	10.9	0%	NP		•				\$ -	\$ 2,616,000	\$ -	\$ -	N/A	\$ 2,616,000	80%	\$ 32,700	Enhanced	\$ 104,640
NEW DOWNTOWN PLAZA	0.5	0%	SU	•	•				\$ 100,000	\$ 250,000	\$ -	\$ -	N/A	\$ 350,000	100%	\$ 3,125	Enhanced	\$ 6,000
NEW NEIGHBORHOOD PARK # 1 (David Hill North)	6.0	0%	NP	•	•				\$ 1,200,000	\$ 1,800,000	\$ -	\$ -	N/A	\$ 3,000,000	100%	\$ 22,500	Enhanced	\$ 72,000
NEW NEIGHBORHOOD PARK # 2 (Oak Street)	2.5	0%	NP	•	•				\$ 500,000	\$ 750,000	\$ -	\$ -	N/A	\$ 1,250,000	100%	\$ 9,375	Enhanced	\$ 30,000
NEW COMMUNITY PARK (Community Recreation Center)**	10.0	0%	CP	•	•		•		\$ 2,000,000	\$ 4,000,000	\$ -	\$ -	\$ 32,000,000	\$ 38,000,000	100%	\$ 475,000	Enhanced	\$ 120,000
<i>Proposed Parkland Subtotal</i>	<i>43.2</i>								<i>\$ 3,800,000</i>	<i>\$ 12,294,000</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 32,000,000</i>	<i>\$ 48,094,000</i>		<i>\$ 578,675</i>		<i>\$ 434,940</i>
Improvements to Partner Sites																		
A.T. SMITH AMPHITHEATER (FHFG)	2.2	0%	PS				•		\$ -	\$ -	\$ -	\$ -	\$ 350,000	\$ 350,000	100%	\$ 4,375	Enhanced	\$ 26,400
METRO WETLANDS VIEWPOINT	1.0	0%	PS				•		\$ -	\$ -	\$ -	\$ -	\$ 75,000	\$ 75,000	100%	\$ 937.50	Basic	\$ 10,000
NEIL ARMSTRONG MS SPORTS FIELDS	7.5	N/A	PS				•		\$ -	\$ -	\$ -	\$ -	\$ 1,250,000	\$ 1,250,000	100%	\$ 15,625	Enhanced	\$ 90,000
TOM MCCALL UPPER ELEMENTARY SOCCER FIELD	2.1	N/A	PS				•		\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000	100%	\$ 2,500	Enhanced	\$ 25,680
<i>Undeveloped Partner Sites Subtotal</i>	<i>56.1</i>								<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 1,875,000</i>	<i>\$ 1,875,000</i>		<i>\$ 23,438</i>		<i>\$ 152,080</i>
Proposed Trail Corridors (City/Partner)																		
GALES CREEK TRAIL ***	7.5	0%	OSGT	•	•				\$ 750,000	\$ 1,500,000	\$ -	\$ -	N/A	\$ 2,250,000	100%	\$ 18,750	Basic	\$ 75,000
DAVID HILL TRAIL ***	5.1	0%	OSGT	•	•				\$ 510,000	\$ 1,020,000	\$ -	\$ -	N/A	\$ 1,530,000	100%	\$ 12,750	Basic	\$ 51,000
<i>Trails Subtotal</i>	<i>12.6</i>								<i>\$ 1,260,000</i>	<i>\$ 2,520,000</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 3,780,000</i>		<i>\$ 31,500</i>		<i>\$ 126,000</i>
<i>Proposed Parks and Trails Subtotal</i>	<i>111.9</i>								<i>\$ 5,060,000</i>	<i>\$ 14,814,000</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 33,875,000</i>	<i>\$ 53,749,000</i>		<i>\$ 633,613</i>		<i>\$ 713,020</i>
Totals for All Parks	246.9								\$ 5,260,000	\$ 19,414,000	\$ 5,645,750	\$ 1,864,500	\$ 33,875,000	\$ 66,059,250		\$ 1,050,506		\$ 2,121,380

Revised 8/02/16
 *For the Aquatic Center, Maintenance Costs include the estimated annual net expenses for both maintaining and operating the facility (total costs minus revenues generated).
 **For the new community recreation center, partnership costs may be shared by the City and equity partners. Janitorial costs for the indoor space are not include in maintenance costs.
 ***Trail acreage is calculated based on an average assumption of a 20-foot corridor.
 CP- Community Park; NP- Neighborhood Park; SU- Special Use; OSGT- Open Space, Greenway and Trail, PS- Partner Site

TABLE E.2: Per Unit Cost Estimate by Park Type

	Capital Costs per Acre				Other Costs per Acre		
	Acquire Land	Develop Park or Trail	Provide Minor Enhancements	Provide Major Enhancements	Maintenance (Basic)	Maintenance (Enhanced)	Reinvestment (Annual)
PARK TYPE							
COMMUNITY PARK	\$200,000	\$400,000	\$100,000	\$200,000	\$10,000	\$12,000	\$5,000
NEIGHBORHOOD PARK	\$200,000	\$300,000	\$75,000	\$150,000	\$10,000	\$12,000	\$3,750
SPECIAL USE SITE	\$200,000	\$500,000	\$125,000	\$250,000	\$10,000	\$12,000	\$6,250
OPEN SPACE, GREENWAY & TRAIL	\$100,000	\$200,000	\$50,000	\$100,000	\$10,000	\$12,000	\$2,500
TRAIL CORRIDOR	\$100,000	\$200,000	\$50,000	\$100,000	\$10,000	\$12,000	\$2,500
PARTNER SITE	--	Site-specific	--	--	\$10,000	\$12,000	Site-specific
Total							

Notes:

All costs are based on 2016 dollars, not accounting for inflation.

For partner sites, site-specific costs for development and reinvestment are identified in Table D.1.

Minor enhancements are anticipated to affect approximately 1/4 of the site; major enhancements affect approximately 1/2 of the site.

Basic maintenance costs are based on an average cost per acre to maintain all city parks and trails, based on figures in the City's Proposed Budget, FY 2016-17. The budget for the Aquatic Facility is calculated separate based on both maintenance and operations costs.



APPENDIX F:
Potential Funding and Partnership
Opportunities

APPENDIX F: POTENTIAL FUNDING AND PARTNERSHIP OPPORTUNITIES

I. EXISTING FUNDING OVERVIEW

Forest Grove’s existing funding structure consists of two primary categories: non-capital costs, including system operations and management; and capital costs to acquire land and develop sites and facilities.

NON-CAPITAL COSTS

Similar to most cities, the majority of Forest Grove’s existing source of funding comes from the General Fund in the form of property taxes. Since the 2011-12 budget cycle, property tax revenues for the City have increased from \$6,773,073 to \$7,654,833 in Fiscal Year 2014-15. Similarly, inner-departmental budgets are also increasing. According to the 2014-15 Budget, the Parks and Recreation Department revenue has increased 24 percent since Fiscal Year 2011-12, dropping slightly in 2012-13. Still, the City’s General Fund is the primary source of funding for park, recreation and aquatics operations (non-capital costs). The Aquatics Department revenue has also increased over the past four years. Though public aquatics facilities are commonly subsidized, the cost of aquatics operations will be an important consideration in determining potential options in subsequent phases of the planning process. Table F.1 provides a summary of parks, recreation and aquatics budgets over the past four years.

TABLE F.1: PARKS & RECREATION AND AQUATICS BUDGET SUMMARY (2013/14-2016/17)

	2013-14	2014-15*	2015-16	2016-17*
Parks & Recreation				
Revenue				
Services	\$132,175	\$164,737	\$171,397	\$142,428
Miscellaneous	\$500	\$1,200	\$0	\$500
TOTAL Revenue	\$132,675	\$165,937	\$171,397	\$142,928
Expenditures				
Personnel Services	\$484,136	\$548,128	\$588,165	\$583,932
Materials and Services	\$173,334	\$172,010	\$180,399	\$171,567
TOTAL Expenditures	\$657,470	\$720,138	\$768,564	\$758,499

Aquatics				
Total Revenue**	\$303,000	\$322,000	\$348,721	\$342,000
Expenditures				
Personnel Services	\$434,664	\$469,038	\$462,365	\$473,930
Materials and Services	\$187,106	\$190,282	\$643,325	\$644,756
TOTAL Expenditures	\$618,770	\$659,320	\$643,325	\$644,756

Source: City of Forest Grove 2016-2017 budget. *Proposed Budget.

CAPITAL COSTS

The Parks Acquisition and Development Fund is based on revenue sources for growth related parks and capital expansion projects. In addition to the General Fund, this fund is based on major trail funds and System Development Charges. Other sources include Major Maintenance Funds and various grant sources. Table F.1 summarizes the Parks Acquisition and Development Fund for capital projects. According to the table, the City has budgeted \$2,827,242 for parks acquisition and development for the 2016-17 fiscal year, the largest amount in the past several years. The majority of resources comes from Park SDC fees.

- System Development Charges (SDCs):** Forest Grove collects SDC fees to make growth-related improvements to its water and park systems. Initially adopted in 2002 and based on the Park, Recreation and Open Space Master Plan (2002), the City updated the parks SDC rate from \$2,000 per residential unit to \$3,000 per unit in 2006. At this time, the City also added a separate rate for Planned Unit Development’s to \$1,000 per unit. Though the 2002 methodology recommended fees for both residential and non-residential development, the City does not currently require park SDCs from non-residential development.
- Trail Funds:** The City has two funding sources for trails and pathways: The Trail Fund and Bike/Pedestrian Pathways Fund. The City established the Trail Fund in Fiscal Year 2007-08 to account for payments from Waste Management to the City, dedicated to the development and maintenance of the trail system. Though currently inactive, the established rate of return for solid waste disposal services is 11%. The Bike/Pedestrian Pathways Fund stems from 1% of the State Gas Tax, dedicated to build or improve facilities for pedestrians and bicyclists. The fee is currently active and is dedicated to the B Street Trail.

TABLE F.2: PARKS ACQUISITION AND DEVELOPMENT FUND SUMMARY (2013-2017)

Parks Acquisition and Development Fund	2013-14	2014-15	2015-16	2016-17*
Revenue				
Intergovernmental	\$0	\$395,500	\$250,000	\$250,000
Park SDC Fees	\$252,000	\$360,000	\$270,000	\$1,060,000
Miscellaneous	\$4,318	\$8,000	\$9,000	\$6,000
Fund Balance	\$863,562	\$1,316,528	\$1,370,116	\$1,511,242

<i>TOTAL Resources</i>	\$1,119,880	\$2,080,028	\$1,899,116	\$2,827,242
Expenditures				
Materials and Services	\$85,000	\$200,000	\$250,000	\$110,000
Capital Outlay	\$1,034,880	\$1,880,028	\$1,649,116	\$2,717,242
<i>TOTAL Expenditures</i>	\$1,119,880	\$2,080,028	\$1,899,116	\$2,827,242

Source: City of Forest Grove 2016-2017 budget. *Proposed Budget.

According to the budget, funds are expended on projects that are based on growth of the city, as identified through the Parks and Recreation Master Plan. The city-wide Capital Improvement Program (CIP) lists four primary sources of funding for capital projects (Table F.3). The Park Acquisition and Development Fund will account for the largest source of funding for capital projects over the next five years, totaling \$1,151,000. The City's Five-Year CIP identifies nearly \$1.6 million in capital projects over the next five years. The Parks Acquisition and Development Fund has a total of nearly \$2.8 million available (Table F.2), leaving about \$1.2 million for other capital projects.

TABLE F.3: PARKS & RECREATION AND AQUATICS CIP FUNDING SOURCES (2016-2021)

Funding Source	2016-17	2017-18	2018-19	2019-20	2020-21	TOTAL
General Fund	\$25,000		\$235,000			\$260,000
Major Maintenance Fund		\$135,000				\$135,000
Park Acquisition and Development Fund	\$626,000	\$80,000	\$325,000	\$120,000		\$1,151,000
State Grants		\$75,000				\$75,000
CIP TOTAL	\$651,000	\$290,000	\$560,000	\$120,000	\$0	\$1,621,000

Source: City of Forest Grove Proposed Budget 2016-17

II. POTENTIAL ALTERNATIVE RESOURCES

There are a number of possible funding sources for programs, parks and facilities acquisition, development, and maintenance. Most sources are limited in scope and can only be used to fund specific types of projects, but will not fund operations. Because of these limitations, the City of Forest Grove will have to carefully consider all funding options to determine the best strategy for implementing system improvements. This appendix lists potential funding sources for operations and capital projects, including a brief summary of each source.

PARTNERS: SITE ACQUISITION AND DEVELOPMENT

Forest Grove has a variety of partners (both existing and potential) to help expand park system assets. Partnerships can occur in a number of different forms, including designing, financing,

building, owning/transferring and/or operating. Existing public agency land owners in Forest Grove (including Metro) have the potential to acquire and/or develop new or existing sites in coordination with city needs. Park conservancies or foundations are the most common type of organization to raise private funding for public parks. However, the City can also serve as the negotiator using a memorandum of agreement as the official contract between a partner group to ensure conditions are met. Partners for site acquisition and development should be only part of the city's resource portfolio and like any source, the City should rely on partnerships for a portion of its needs.

A key factor of these agreements is to engage the public in all stages of decision making. As public resources, the perception of a private entity having a degree of control over valuable resources can lead to larger challenges. It's critical that the performance of these agreements or arrangements conform with the public interest and the goals of this Parks Plan.

Potential partners for site acquisition and development include:

- Metro
- Clean Water Services
- Pacific University
- Friends of Historic Forest Grove (A.T. Smith Park)
- Private businesses (Viasystems, Stimson Lumber, Doherty Ford, etc.)

PARTNERS: PROGRAMMING

The city also relies on public and private groups to extend programming. Partners provide a range of possibilities for program options, from sports to education-based classes. A common theme that emerged from the planning process was the importance and increasingly relevant role that health care providers play in recreation. These organizations usually follow a mission to improve the health of the local communities by sponsoring healthy living classes and programs, such as cooking classes and physical and emotional fitness courses. Programming partners help reduce overlap of competing program types and private organizations can also contribute financial resources to extend limited public funding. Other organizations, such as schools and health care providers also offer programmable space to extend city resources. For example, the City can partners with the School District and YMCA to provide after school and recreation programming in the vacant second floor of the school building on weekends.

Potential partners for programming include:

Sports and Fitness

- Health and Wellness Organizations (Virginia Garcia Health Center, Tuality Healthcare)
- Sports Leagues
- Outdoor Recreation Organizations (Northwest Trail Alliance, Adventures without Limits)
- Forest Grove School District
- YMCA

Aquatics

- Pacific University
- Forest Grove High School

Arts, History and Cultural Services

- Theater in the Grove (A.T Smith)
- Art Organizations
- University of Oregon Historic Preservation Field School
- State Historic Preservation Office
- Restore Oregon

General

- Local Wineries
- Local Summer Camp Organizations
- Local Neighborhood Groups
- Adelante Mujeres

Environmental or Outdoor Education

- Pacific University (A.T. Smith Park)
- Clean Water Services (B Street Trail and Trailhead, Kyle Park)
- Forest Grove School District
- Forest Grove Community Garden Organization
- Environmental Education Groups

GENERAL OBLIGATION BOND FOR PARKS

The 2002 Parks Plan discussed the strategy of including a General Obligation Bond as part of a larger financing strategy. Recently, nearby parks and recreation agencies (including Portland Parks, Tualatin Hills Parks & Recreation District and Metro) have had successful bond campaigns that focus on repairing, replacing and maintaining parks, recreation facilities and natural areas. Public outreach for the Parks Plan Update has indicated a strong support for parks and recreation in Forest Grove. With approximately \$65.6 million in recommended capital projects (including \$1.6 million in existing park improvements) identified in Chapter 6, a future parks bond would provide needed resources to complete capital projects and park upgrades throughout the system. Survey findings point to a strong interest in protecting existing investments, including the willingness to pay more for these improvements. Across all successful bond measures, a strong outreach and promotional campaign is the centerpiece to ensuring a favorable election. When deciding for a potential bond measure, the City could consider identifying a “friends-of” group or foundation to help sponsor and promote a bond campaign, bringing the case for a parks bond to the mainstream.

GRANTS OR SPONSORSHIPS

Federal, state and other government agencies and foundations sometimes make funds available to serve specific purposes related to parks and recreation. In addition to requirements for a local match, grants often have other conditions and limitations such as providing for project planning but not construction. Grant funding is highly competitive and is also limited to different grant cycles (typically yearly). Forest Grove’s CIP has \$75,000 in grant funding planned for the 2017/18 fiscal year.

Potential grants or sponsorship opportunities include:

- Oregon Parks and Recreation Department (Recreational Trail Program, Land & Water Conservation Fund)
- Metro (Nature in Neighborhoods Grants, Community Enhancement Grants)

- Meyer Memorial Trust
- Keith Kinsman Foundation
- Chamber of Commerce (Lincoln Park):
- Oregon Community Foundation (OCF)

TRUSTS, ESTATES AND EXCHANGES

Private land trusts such as the Trust for Public Land and the Nature Conservancy employ various methods, including conservation easements, to work with willing owners to conserve important resource land. Land trusts assist public agencies in various ways. For example, land trusts may acquire and hold land for eventual acquisition by the public agency. Lifetime estates are an agreement between a landowner and the city that gives the owner the right to live on the site after it is sold to the city. Another option is an exchange of property between a private landowner and the city. For example, the city could exchange a less useful site it owns for a potential park site that is currently under private ownership.

VOLUNTEERS

Many cities are recognizing that volunteers can be a valuable source of labor to help with maintenance, programming, special events, and capital improvements. Volunteers can increase the quality and quantity of public services at a minimal cost, and provide an opportunity for citizens to contribute to the betterment of their community. Studies suggest that for every \$1 invested in volunteers, a city can realize as much as \$10 in benefits. With tight fiscal conditions, more local governments are expanding volunteer programs. Volunteer programs include individuals or groups who agree to take on specific tasks or perform certain services, such as maintenance, restoration, programming, and special event support. Volunteers may provide direct and indirect support to the park system. For example, a volunteer park clean-up crew directly saves on paid maintenance tasks. Volunteer safety patrols (community groups) may indirectly reduce facility damage and vandalism, protecting City assets.



APPENDIX G: Prioritization Scorecard

APPENDIX G: PRIORITIZATION SCORECARD

Community priorities and Master Plan goals were used to define prioritization criteria that the City of Forest Grove can apply when making decisions about which projects and programs to implement first. These criteria are presented in a scorecard that can be used to rate different projects and programs. This scorecard should be applied in two steps:

- Step 1: Criteria applicable to the project are reviewed and tallied to create an average score across reviewers.
- Step 2: The ranked list is considered in light of the best information available on funding, political will and staff capacity. This practical screen will likely result in the reshuffling of projects based on the realities of the planned budget year, but will still retain the basis in the master plan goals noted in Chapter 4 and implement key recommendations and projects described in Chapters 5.

Details on potential and actual funding can be applied to a prioritized project list and can be reapplied as the funding situation changes in the future. This will help allocate available funding on high-priority projects.

I. STEP 1: APPLICATION OF CRITERIA

Table G.1 presents a one-page worksheet that can be used to rate different projects in terms of their priority for implementation. The projects that score highly and satisfy multiple criteria may be prioritized for the Step 2 screening.

For each project being considered (which may be a sub-set of the recommendations) the criteria below should be considered and either checked or left blank by each reviewer.

TABLE G.1: PRIORITIZATION CRITERIA FOR EVALUATING PROJECTS AND PROGRAMS

	Prioritization Criteria	Check if applicable
A	Replaces or revitalizes aging, worn, outdated or unsafe amenities and facilities: Project removes, replaces or enhances facilities or landscaping in poor condition to ensure high quality parks and facilities compliant with current safety and ADA standards.	
B	Increases programming options: Improves a facility or park area to support a program, class, camp, organized sport or event.	
C	Provides a new or unique recreation opportunity: Project adds a new type of recreation facility to address changing recreation trends and support a greater variety of recreation opportunities in Forest Grove.	
D	Serves all ages and abilities or underserved user groups: Project provides recreation opportunities for different age groups and people of all abilities and skill levels and/or supports activities targeting teens, young adults, and adults.	
E	Improves park access or connectivity: Project serves an identified unserved area (e.g. east Forest Grove), makes it easier to walk or bike to parks and community destinations, or provides convenient and safe access to parks and park facilities through trail development, improved park entries or enhanced parking.	
F	Preserves community heritage and/or natural resources: Project creates engaging parks and facilities that reflect local heritage and history, and/or protects the urban forest, stream corridors, natural resources and open space.	
G	Promotes a sense of community and social cohesiveness: Project creates social gathering places or responds to the City's demographic character, cultural diversity and community cohesion.	
H	Contributes to a strong local economy: Project increases opportunities to generate revenue or supports community events and encourages tourism that indirectly supports local businesses.	
I	Increases sustainability, cost-effective operations and maintenance efficiencies: The project reduces operations and maintenance costs or helps achieve City sustainability goals.	
J	Increases or maintains partnerships: Project leverages resources through partnerships to achieve plan goals.	

II. STEP 2: PRACTICALITIES DISCUSSION

With each project scored the list of projects under consideration can be given a rough sort, with the projects meeting the highest number of criteria moving to the top. This list now represents a preliminary prioritization based on the expressed needs of the community and the results of the analysis in the Master Plan. It is important to know which of these projects hits the most of these criteria. However, there are reasons that the highest priority project may not be the most appropriate to move forward first. During this second step, a discussion of the top ranked projects should focus on the practical implications of each project. These practicalities include:

- The availability of dedicated funding or partner support and investment in the project;
- The amount of ongoing operations and maintenance funding and staff time required;
- The potential to reduce costs or be more efficient by bundling projects;
- The interest among community leaders and decision makers in the project or program; and
- Staff capacity to implement the project.

Using these topics in the discussion, not as hard and fast screens but instead as important considerations, will help to set an achievable path forward.

FLEXIBILITY OF SCORECARD

The criteria here are given equal weight and in some cases combine multiple ideas to simplify the scoring process. Over time, the City may need to modify the scorecard to accentuate topics or criteria that have achieved a higher importance. Splitting the criteria down into multiple items would often accomplish this greater focus in one area.