

VIII. Capital Facilities Element

Introduction

Purpose and Intent

The Capital Facilities Element discusses all current infrastructure owned by the City and establishes and documents a plan for the City to provide the infrastructure and facilities needed to serve its residents in the future. The Capital Facilities Element consolidates capital improvement projects from this and other comprehensive plan elements into a complete capital improvement program for the next six years. The purpose of the Capital Facilities Element is to determine the availability of existing capital facilities, forecast future needs for such facilities based upon land use and population growth statistics, and to plan for how such facilities will be financed. The Capital Facilities Element functions as an integral part of the City's Comprehensive Plan, and is essential in maintaining adequate level of service standards for all facilities.

The Capital Facilities Element focuses on those facilities that are owned and operated by the City, which include water, sewer and stormwater management systems; community facilities such as city hall, police services, the Duvall Community Center and the Dougherty Farmstead; public works facilities such as the sewer treatment plant, permit office, public works yard, roads, parking areas and city parks. In addition to city-owned facilities, a capital improvement plan for the Riverview School District has been adopted by reference into this document. Separate management plans have been prepared for stormwater, water and sewer facilities, and those plans form the basis for their respective capital facilities analysis. Relevant discussion is summarized in this plan, which incorporates and adopts the utility management plans by reference as part of the Duvall Comprehensive Plan. In each of the capital improvement plans, "local funds" include capital facilities charges, impact fees, Real Estate Excise Tax funds (REETs) and the general fund; "state funds" are from state agencies; and "other funds" are monies and/or grants from various agencies.

Under the Growth Management Act (GMA), a Capital Facilities Element is required to assess the needs of a community and determine how to provide appropriate facilities for current and future residents (RCW 36.70A.070). The element must contain an inventory of existing facilities, an assessment of future facility needs, the proposed locations of new or expanded facilities, a plan to finance such facilities within projected funding capacities, and a requirement to reassess the land use element if probable funding falls short of meeting existing needs. King County has established Countywide Planning Policies (CWPPs) that shall be addressed by all of the cities in King County. The policies in the Capital Facilities section must reflect the CWPPs that are concerned with capital facilities.

Capital Facilities

Water Facilities

The information used in this analysis has been summarized from the *City of Duvall Comprehensive Water System Plan* prepared by Murray, Smith and Associates, Inc. (MSA) approved in May 2012. The water plan is a twenty year planning document and includes a description of the existing water system and service area, forecast of future demands, policies and design criteria for water system operation and improvements, water system analyses, the operations and maintenance program, a schedule of improvements, and a financial plan to accomplish the improvements. The water plan also includes several ancillary elements, including a water conservation plan, cross-connection control plan, and water quality monitoring plan, wellhead protection plan and emergency response plan. In the State of Washington, water systems and facilities are regulated by the Department of Health under Washington Administrative Code 246-290. The 2012 plan also meets the requirements of the King County Department of Development and Environmental Services (DDES) and is consistent with the East King County Coordinated Water System Plan requirements.

The *City of Duvall Comprehensive Water System Plan* (2012) shall be considered a part of this Capital Facilities Element and as such is adopted as part of the Duvall Comprehensive Plan upon adoption of this Element.

System History

The Seattle Public Utilities' (SPU) Tolt River Pipeline No.1 supplies water for the Duvall water system. The line is located approximately one-half mile south of the city limits, and is connected to Duvall's system through two interties (connections). The first intertie was constructed in 1962 near 274th Avenue NE, and is a ten-inch diameter asbestos cement transmission main. The second intertie, which was constructed as part of a developer extension in 1983, is near Big Rock Road and is a twelve-inch diameter ductile iron transmission main. Each intertie is in combination with a pressure reducing station, appurtenant valves, and metering equipment.

Service Area

The service area of the system is defined by the boundaries shown on Figure CF – 1. Prior to the passage of the GMA, the East King County Water Service Plan identified a 4300-acre water service planning area for Duvall. The 2012 plan shows the boundaries of the service area as well as the larger planning area. The City's water utility already serves several areas that were outside of the UGA service area prior to the establishment of the UGA. King County Water District 119 serves an area adjacent to the City's water service area southeast of the city. A 1986 agreement established the boundary between the two service areas.

Existing Conditions

Duvall currently has no rights to surface waters. It holds groundwater rights to the Taylor's Landing well which is currently capped and sealed. No alternative sources have been used or developed. There are numerous homes using private wells within the City's service area.

The distribution system is composed of a variety of pipe sizes and material types. Areas of recent development are constructed using eight to twelve-inch diameter ductile iron pipe. A few remaining older portions of the system are made up of asbestos cement pipe.

Storage is provided in the system by a 0.5 million-gallon (MG) and a 2.2 MG reservoir. The 0.5 MG tank was constructed in 1988 to replace two 55,000-gallon tanks that were then taken out of service. The 2.2 MG tank was built in 1997 to serve the water system's present and future growth needs. Cedarcrest High School has a 0.3 MG private on-site storage system to meet required fire flow demand.

The water system consists of six connected pressure zones. The 2012 Comprehensive Water System Plan contains detailed information regarding the zone pressures and pressure reducing valve locations.

Seattle Public Utilities provides monitoring and treatment required to ensure water quality complies with federal and state standards.

Future Conditions

The 2012 water plan analyzes future system demand based on the expected growth in population and service connections and the average daily water usage. The average daily demand in 2010 was 361 gallons per service with a per capita daily demand of 78 gallons. The plan also identifies a program of conservation methods as a primary method of increasing supply through reducing per capita and per connection usage rates. System improvements needed to meet future demand have also been identified. Duvall has a contract with the Seattle Public Utilities to supply water until 2062.

Figure CF – 1: Water Facilities, presents the location of water facilities.

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Figure CF - 1: Water Facilities

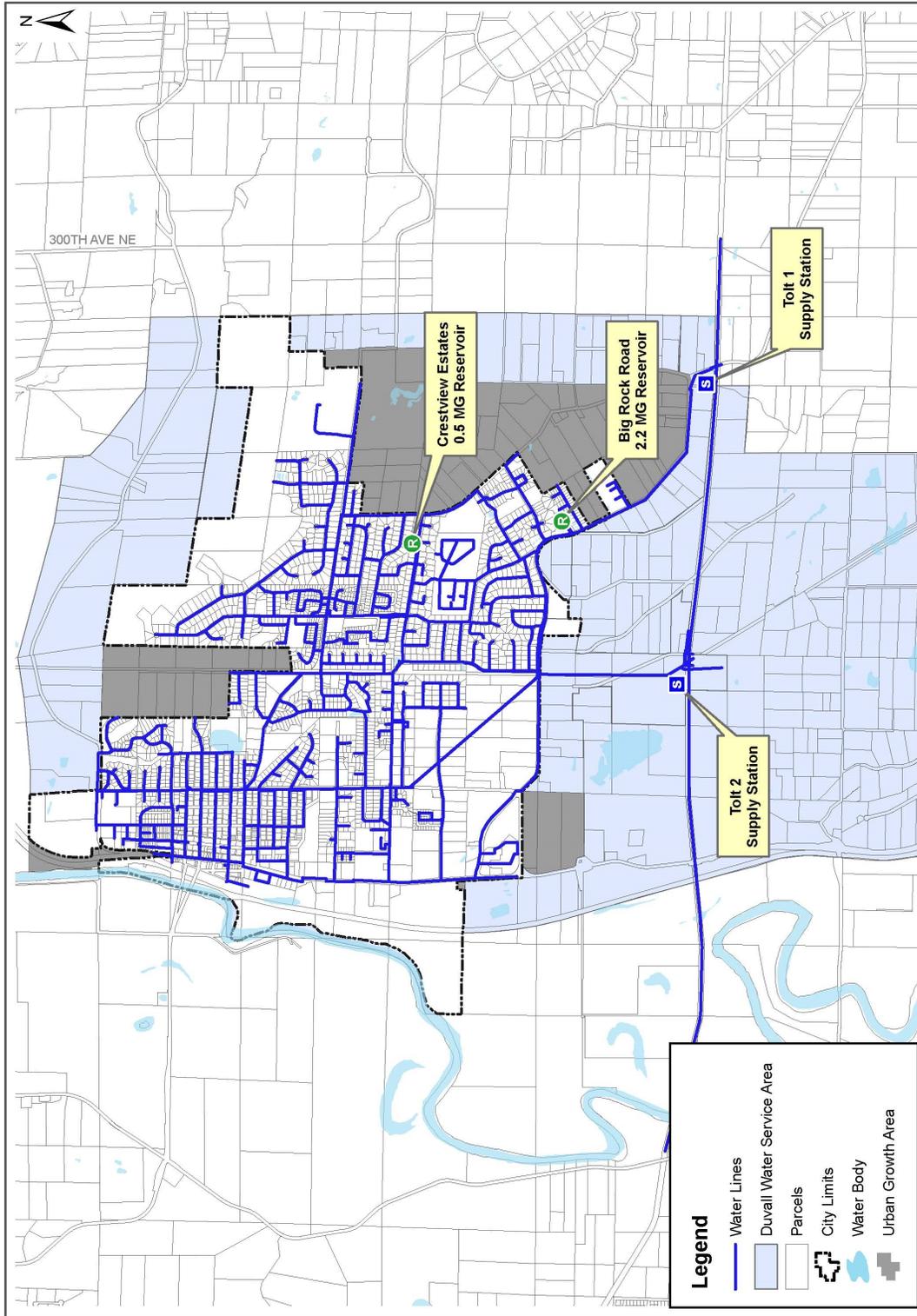


FIGURE
CF - 1



Water Facilities

City of Duvall 2009 Comprehensive Plan

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Water Capital Improvement Plan

Table CF - 1 shows the water system capital improvement program for the six years from 2014 to 2019. These improvement projects can be divided into four general categories. They are water main improvements, pressure reducing station and relief improvements, facility improvements and miscellaneous improvements.

The City will reduce the number of pressure reducing stations to improve flows and water quality within the system and replace old or undersized mains. The largest project is to reconstruct the 10-inch AC main from the SPU intertie to NE Big Rock Road (Project #R4).

**Table CF - 1:
2014 to 2019 Water Capital Improvement Plan**

#	Project	2014	2015	2016	2017	2018	2019	Total Funds ¹
R3	8" Water Main in NE Kennedy Dr from Dougherty Place NE to 4th PL NE				\$173,000			\$173,000
R4	12" Tolt 2 Supply Line from Tolt Supply Station to NE Big Rock Rd			\$278,000		\$788,000	\$788,000	\$1,854,000
R6	8" Water Main in 1st Ave NE from NE Stephens St to NE Ring St		\$219,000					\$219,000
L1	8" looping to improve zone circulation and decommission the 555/450 Zone PRV at 143rd/272nd						\$301,000	\$301,000
L2	12" looping from NE 143rd PI to Big Rock Road and abandon the 450/330 Zone PRV located on NE 143rd PI (City portion only)						\$500,000	\$500,000
L5	8" looping in 1st Ave NE from NE Virginia Street to NE Stephens Street				\$324,000			\$324,000
PRV1	Remove 485/555 PRV's in NE Big Rock Rd & 275th Ave NE and reconfigure existing 450/555 PRV to a pressure relief station.	\$135,000						\$135,000
CW1	Conservation Program and Leak Detection	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$54,000
CW2	Water Reclamation Activity	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000
CW3	Cross-connection Control Program	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000
CW4	Comprehensive Water System Plan Update (Every 6 years)					\$150,000		\$150,000
F1	Taylor's Landing Well Monitoring and Study	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000
F2	Crestview Estates Reservoir Seismic Evaluation/Improvements & Recoat	25,000		\$50,000	\$150,000			\$200,000
F3	Big Rock Road Reservoir Re-coating	25,000		\$82,000				\$82,000
F4	Big Rock Road Reservoir Inlet/Outlet Improvements & Seismic Evaluation/Improvements	25,000		\$50,000	\$100,000			\$150,000
F5	615 Zone Pump Station Improvements					\$100,000		\$100,000
F6	Tolt 1 Supply Station Improvements	\$50,000						\$50,000
F7	Tolt 2 Supply Station Improvements	\$50,000						\$50,000
F8	Telemetry, Operation and Control Improvements	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$120,000
	Total Annual Cost²	\$279,000	\$263,000	\$504,000	\$791,000	\$1,082,000	\$1,633,000	\$4,552,000

Source: City of Duvall Public Works Department

- 1 Funds include Local Funds primarily from water capital improvement charges, grant funds, and developer installed improvements
- 2 Costs in 2011 Dollars

Sewer Facilities

The information used in this analysis has been summarized from *City of Duvall Wastewater Facility Plan*, compiled by Parametrix (2001) and the *Sewer Rate & General Facilities Charge Analysis*, compiled by FCSG (2003). In the State of Washington, sewer treatment facilities are regulated by the Department of Ecology under Washington Administrative Code 173-240. The 2001 wastewater facility plan meets the requirements of WAC 173-240-050 for a General Sewer Plan.

The 2001 *City of Duvall Wastewater Facility Plan* and the 2003 *Sewer Rate & General Facilities Charge Analysis* shall be considered a part of this Capital Facilities Element and as such are adopted as part of the Duvall Comprehensive Plan upon adoption of this Element.

System History

Sewer service was not provided in the city until fairly recently. In the mid-1960's, drainfield failures and potential health hazards prompted the Washington State Department of Health and Water Pollution Control Commission to order an engineering study of sewer options for the City. After a supplemental report prepared in 1971, the City formed a Local Improvement District in the mid -1970's to finance the construction of a sewer collection and treatment system. The City brought the system on-line in 1976. Initial construction in 1976 consisted of a dual oxidation ditch, activated sludge system with chlorine disinfection, and effluent discharge through an outfall into the Snoqualmie River.

Growth in the city required the construction of improvements to the system, including system extensions and additional pumping stations. By the late 1980's, the sewer treatment system was no longer adequate and a new sewer treatment plant was completed in 1991 using the UV-oxidation ditch process. This treatment facility was suitable throughout the 1990s, until rapid growth caused the facility to be inadequate yet again. In 1999, a building moratorium went into effect for any new development within the city limits. A new facility was built and put into operation in late summer of 2005 that included the use of a new membrane bioreactor (MBR).

Service Area

The service area of the City's sewer system is defined as any property within the city limit boundaries. All properties currently outside the city limits are on septic systems. When properties within the UGA choose to annex into the city, all properties that develop or redevelop will be required to connect to the City's sewer system.

Existing Conditions

As of 2013, Duvall's sewer collection system serves approximately 2,350 customers and consists of approximately 32 miles of gravity and force mains and eight city-owned submersible pump stations. In addition, Riverview School District owns and operates a pump station at Cedarcrest High School that discharges to the City's collection system. The majority of the system consists of eight-inch diameter gravity mains. Most of the original construction was either concrete or asbestos cement pipe, while newer construction is mainly PVC pipe. The *2001 Wastewater Facility Plan* includes a detailed description of the treatment plant and the sewage treatment process. Sewer characteristics are also described in the 2001 plan.

The *2001 Wastewater Facility Plan* evaluated the collection system using the HYDRA computer model. The model identified several locations where system deficiencies exist and improvements are required to meet the needs of future development. The report also recommended continuation of the City's program to reduce infiltration and inflow (I/I) into the system. Infiltration and inflow is typically caused by deterioration in the collection system such as failed gaskets, broken pipes, and leaking manholes.

The 2001 Plan identified future system improvements including on-site generators, flow meters, and several new gravity mains. An evaluation of the sewer facility, constructed in 1991, showed that it was designed to serve a population of 6,000 residents.

In the spring of 2003, the State legislature understood the critical need to upgrade Duvall's sewer treatment plant and appropriated \$4-million in its 2003 budget to assist the City in constructing this approximately \$11-million project. The new sewer treatment plant, which came on line in late summer 2005, includes innovative "membrane bioreactor" (MBR) technology, which is able to produce Class A reclaimed water, suitable for irrigation, industrial process water and salmon recovery projects. Principal components of the project consisted of:

- Excavation, fill, grading, and removal of excess material from the site;
- Construction of MBR, aeration, anoxic tanks, road work and headworks;
- Construction of MBR building, and blower, pump and electrical rooms;
- Construction of MBR equipment, other mechanical equipment, piping, and electrical equipment services;
- Construction of solids building, with belt press, biofilter and electrical rooms;
- Paving and hydroseeding, and;
- Demolition of oxidation ditches, clarifier equipment and headworks.

Future Conditions

The new treatment plant was constructed to meet the population estimates set out in the 2004 Comprehensive Plan. The treatment plant blowers were upgraded in 2008 to provide additional capacity and efficiency for the existing three treatment trains. Based on the October 26, 2006 Parametrix evaluation titled "Capacity of the Duvall MBR WWTP", the full build out treatment plant with upgraded blowers and an additional fourth train would have a capacity equivalent to a population of 13,100. This capacity is enough to accommodate residents and associated commercial development, within the city limits as well as much of the designated Urban Growth Areas as they are annexed to the city.

In conjunction with proposed capital improvements, the updated sewer system plan was prepared to reflect planned changes in sewer facilities. The sewer plan uses revised land use and population information that is included in this Comprehensive Plan update.

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Figure CF - 2: Sewer Facilities

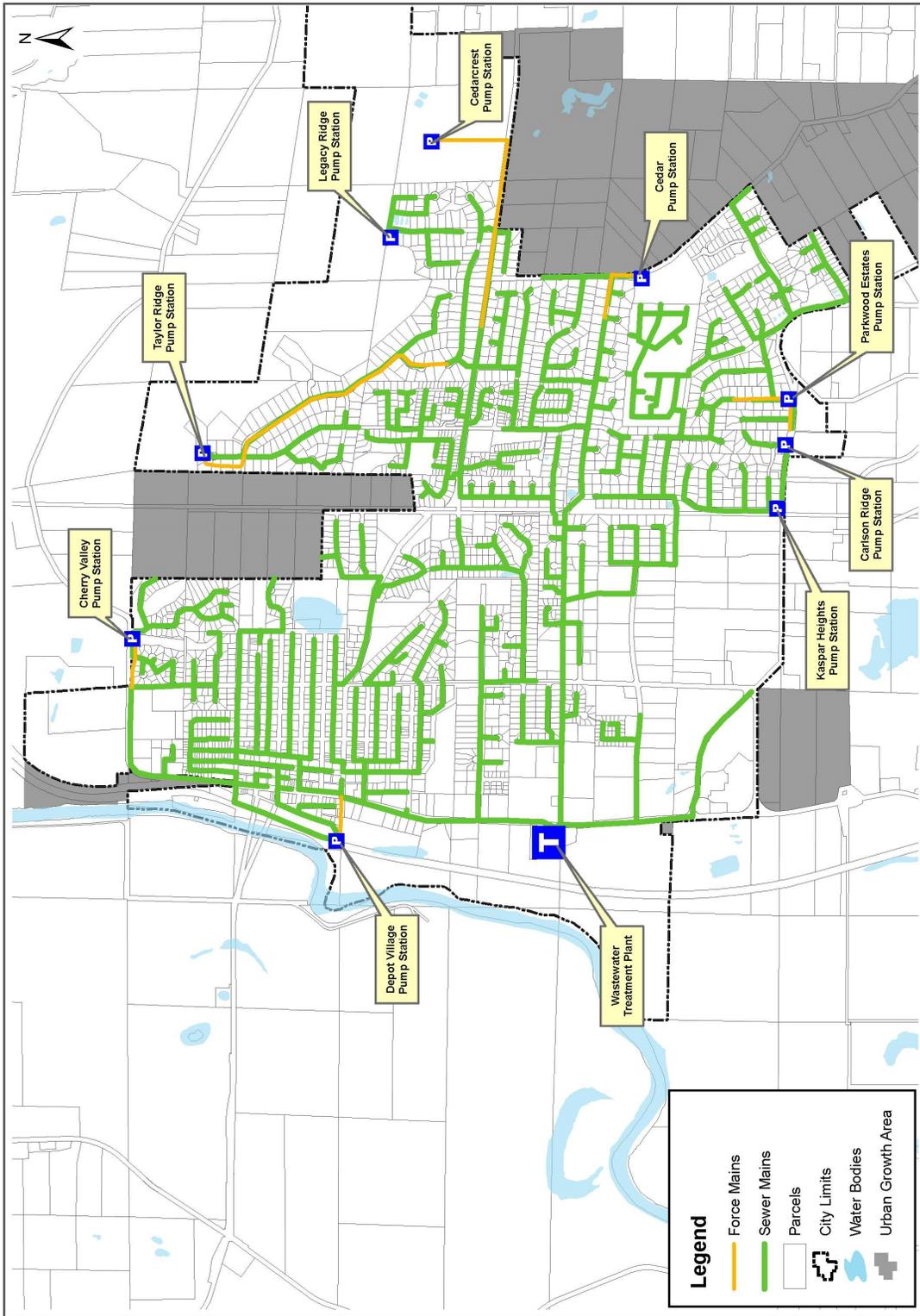


FIGURE
CF - 2



Sewer Facilities
City of Duvall 2009 Comprehensive Plan

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Sewer Capital Improvement Plan

As required by the GMA, the City has prepared a capital improvement program that identifies projects needed to expand, maintain and upgrade the system in the next six years. The current sewer CIP, as revised by public works staff, is shown in Table CF - 2: Sewer Capital Improvement Plan.

**Table CF - 2:
2014 to 2019 Sewer Capital Improvement Plan**

Project	2014	2015	2016	2017	2018	2019	Total Funds ¹
City wide, Infiltration and Inflow Projects	\$56,000	\$56,000	\$56,000	\$56,000	\$56,000	\$56,000	\$336,000
City wide, pump station upgrades and improvements	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$480,000
City wide, sewer main repair and replacement		\$165,000	\$165,000	\$165,000	\$165,000	\$165,000	\$825,000
WWTP, Frontage improvements along Main Street NE	\$400,000						\$400,000
Sewer Facility Plan		\$65,000	\$65,000				\$130,000
TOTAL²	\$536,000	\$366,000	\$366,000	\$301,000	\$301,000	\$301,000	\$2,171,000

Source: City of Duvall Public Works Department

- 1 Funds include Local Funds primarily from sewer general facilities charges, grant funds, and developer installed improvements
- 2 Costs in 2010 Dollars

Stormwater Facilities

The information used in the stormwater facilities analysis has been summarized from the 1997 City of Duvall Stormwater Management Plan, compiled by Gardner Consultants (1997) and the 2004 Comprehensive Plan Update. The Plan shall be considered a part of this Capital Facilities Element and as such is adopted as part of the Duvall Comprehensive Plan upon adoption of this element.

System History

The City occupies a portion of a plateau east of the Snoqualmie River and south of the Cherry Creek drainage. Although the city abuts the floodplain of the Snoqualmie River, its location on the elevated riverbank prevents most floodwaters from reaching developed property in the city. However, properties located along the Snoqualmie Valley Trail west of Main Street and two properties north of Cherry Valley Road are susceptible to major flood events.

The City includes both older development within the historic downtown area and newer residential and commercial development and redevelopment throughout the city. Much of the existing drainage system throughout the older downtown area was designed prior to the development of a comprehensive stormwater management plan and is drained by a network of ditches and drainage culverts. Newer residential and commercial development and redevelopment throughout the city is constructed in accordance with adopted stormwater regulations. In general, stormwater detention and water quality facilities are connected to a pipe stormwater conveyance system.

The City became a National Pollution Discharge and Elimination System (NPDES) Phase II City in 2007. The NPDES Phase II Permit addresses water quality within small jurisdictions and is administered by the Washington State Department of Ecology in conjunction with the United States Environmental Protection Agency. The City complies with the monitoring, education, maintenance, and other required elements of the NPDES Phase II permit. Details of the NPDES permit and permit compliance are summarized in the city's NPDES Annual Report which can be found at the City's website or City Hall.

Existing Conditions

The City's drainage area is divided into nine different drainage basins. Two basins drain northerly and easterly into tributaries of Cherry Creek and three basins flow westerly through lowlands to the Snoqualmie River. The remaining basins drain into natural drainage courses or culverts maintained by King County. Figure CF – 3: Storm Drainage Basins, shows drainage basin boundaries.

The City maintains approximately 30 stormwater detention ponds, bioswales and ditches, and approximately 40 detention tanks, pipes, or filters. Drainage regulations mandate water quality and detention for most new development, and the majority of the detention ponds were constructed as part of the residential development process. Figure CF – 4: Stormwater Drainage Facilities, shows the location of stormwater drainage facilities.

The City's water quality program has as a goal to identify and quantify water quality problems and then to institute a program to correct and prevent them. The City currently uses operation and maintenance measures such as street sweeping, catch basin and pipeline cleaning, detention pond and tank cleaning, and an emergency response program. The City has also established regulations such as design standards and construction standards to avert potential impacts from new development. Education, maintenance, mapping, and inspection activities are constantly being updated as part of the NPDES Phase II requirements.

Future Conditions

Capital improvements for the City drainage system include correcting remaining drainage problems identified in the 1997 City of Duvall Stormwater Management Plan and new drainage problems identified since that time. The 1997 plan identified a possible regional stormwater facility within the undeveloped floodplain west of the Snoqualmie Valley Trail. This possible regional stormwater facility has been removed from the improvement plan because of environmental constraints and the trend of on-site stormwater facilities within portions of the city that the regional facility was to serve. Future stormwater facilities will be constructed in accordance with City requirements. Education, maintenance, mapping, and inspection activities will continue as required by City requirements and as part of the NPDES Phase II requirements.

Stormwater Capital Improvement Plan

As required by the GMA, the City has prepared a capital improvement plan (CIP) that identifies projects needed to expand, maintain and upgrade the stormwater system. The last major update of the stormwater CIP was in the 1997 Stormwater Management Plan. The current CIP includes remaining projects from the 1997 Stormwater Management Plan and new projects that have been identified by the City as a result of the NPDES requirements. The revised CIP is shown below in Table CF - 3: Stormwater Capital

Improvement Plan.

**Table CF - 3:
2014 to 2019 Stormwater Capital Improvement Plan**

Project	2014	2015	2016	2017	2018	2019	Total Funds ¹
Chain Link Fence for cascade at Bruett outfall, Basin B		\$12,000					\$12,000
Basin E Storm Drainage (Big Rock Road Conveyance from 275th Ave NE to 3rd Avenue NE)(developer or grant)			\$445,000	\$445,000			\$890,000
Basin E overflow line (conveyance from Glen Cairn) (to be installed by developer in S UGA)						\$320,000	\$320,000
Basin F Storm Drainage System (NE 143rd Place and NE 145th Street from 3rd to Main Street NE, possible outfall improvements west on 145th to floodplain)					\$300,000		\$300,000
Catch basin/Conveyance on east side of 1st Ave NE north of Richardson, Basin G						\$11,000	\$11,000
Basin G, 1st Ave NE and Richardson						\$15,000	\$15,000
Carrie Rae Pond upstream conveyance at 3rd Place NE north of NE Miller Street, Basin G		\$30,000					\$30,000
Coe Clemons Creek from 3rd Ave NE to Main Street NE, Basin G	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000
General Old Town Improvements, Basin G and H,	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000
Basin G, Replace hanging NE Kennedy Drive Culvert immediately east of 3rd Ave. NE					\$20,000		\$20,000
Basin F, Improve conveyance (ditch and pipe) at southwest corner of Comey's Street and 2nd Place NE to correct flooding					\$15,000		\$15,000
Duvall Hills Pond Retrofits (2 ponds)				\$60,000			\$60,000
Parkwood Estates Pond Retrofit		\$60,000	\$90,000				\$150,000
Stormwater Facility Baseline Mapping City Wide	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000
Stormwater Comp Plan	\$20,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$45,000
TOTAL²	\$35,000	\$122,000	\$555,000	\$525,000	\$355,000	\$366,000	\$1,958,000

Source: City of Duvall Public Works Department

- 1 Local funds are primarily from grants, stormwater fees, and storm drain area charges.
- 2 Costs in 2010 Dollars

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Figure CF - 3: Storm Drainage Basins

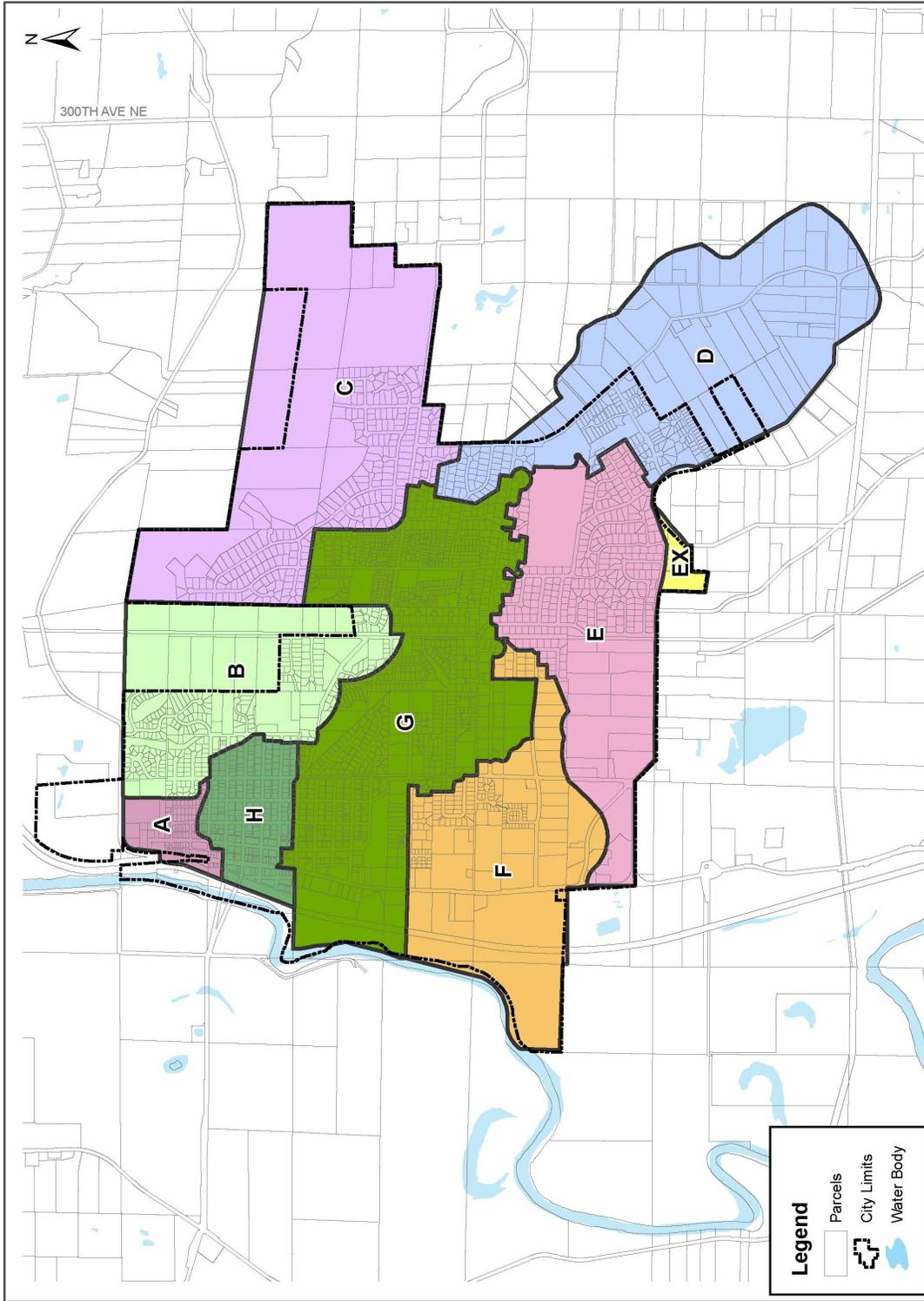


FIGURE
CF - 3

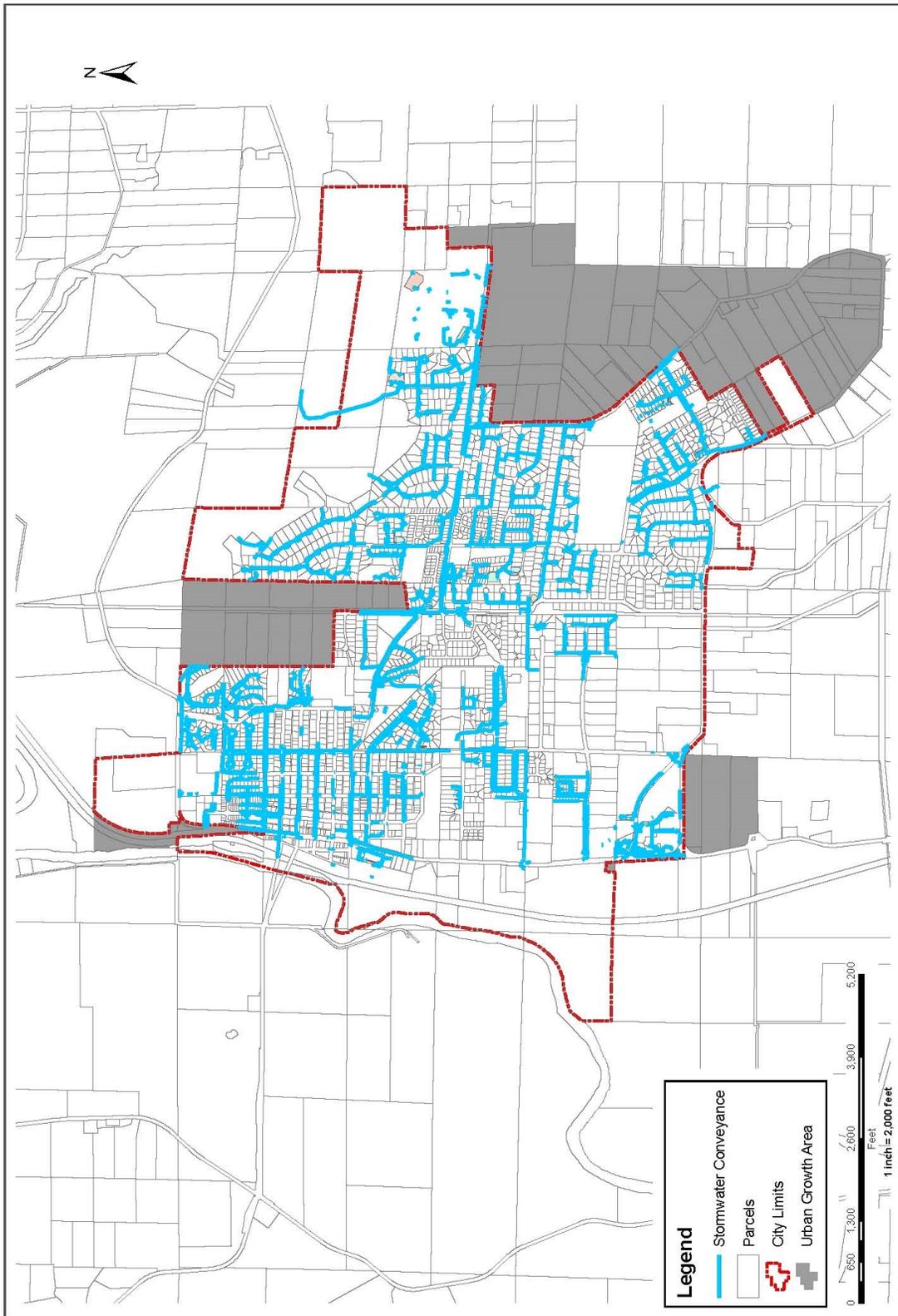


Storm Drainage Basins
City of Duvall 2009 Comprehensive Plan

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Figure CF - 4: Stormwater Drainage Facilities



**FIGURE
CF - 4**



Stormwater Drainage Facilities

City of Duvall 2009 Comprehensive Plan

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Transportation Facilities

The city of Duvall is served by a wide variety of transportation facilities, ranging from county equestrian and mountain biking trails to a network of arterial and secondary roads and a state highway. The City is primarily responsible for the development and maintenance of facilities within its city limits, such as streets and associated traffic control hardware, sidewalks and bicycle lanes. Public transportation facilities are operated by King County METRO and maintained by METRO or the city of Duvall. They include a city-owned park & ride lot at Woodinville-Duvall Road/Main Street (Community Car Park) and transit loading facilities along Brown Avenue and on Main Street. Limited bus service is also provided by Snoqualmie Valley Transportation (SVT) service. The Transportation Element of the Comprehensive Plan provides a more complete reference to existing and planned transportation facilities and funding strategies. Future possible revisions to the Transportation Element include updates in accordance with Vision 2040 requirements and revisions to Level of Service Calculation methodologies.

Transportation Capital Improvement Plan

As required by the GMA, the City has prepared a capital improvement program that identifies projects needed to expand, maintain and upgrade the transportation system in the next six years. The current transportation CIP is shown in Table CF - 4: Transportation Capital Improvement Plan.

**Table CF - 4:
2014 to 2019 Transportation Capital Improvement Plan**

Map ID # ⁵	Project	2014	2015	2016	2017	2018	2019	Total Funds ¹
R-2	Main Street NE from NE Ring Street to Big Rock Road	\$350,000*	\$350,000*	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$14,700,000
R-9	NE Cherry Valley Road Sidewalk (1 st Ave NE to 3 rd Ave NE)	\$500,000						\$500,000
O-1	Citywide Sidewalk Improvement Program	\$100,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$200,000
O-3	Maintenance and Operations	\$256,000	\$256,000	\$256,000	\$256,000	\$256,000	\$256,000	\$1,536,000
R-13	3rd Avenue NE from NE Stephens Street to NE 143rd Place*		\$335,000	\$250,000	\$250,000			\$835,000
M-1	1 st Avenue from Anderson to Cherry Valley Road***	\$1,973,000						\$1,973,000
M-2	3rd Avenue NE from NE 143rd Place to NE Big Rock Road**			\$17,550	\$99,450			\$117,000
M-3	1 st Avenue from 145 th to 143 rd *** (partial)			\$1,257,000				\$1,257,000
M-9	2 nd Avenue from 143 rd to Big Rock Road*** (Partial)					\$1,046,000		\$1,046,000
N-1	275 th Avenue NE from NE 141 st Ct to NE 150 th Street***			\$160,000	\$475,000			\$635,000

Map ID # ⁵	Project	2014	2015	2016	2017	2018	2019	Total Funds ¹
R-11	NE Big Rock Road from Main Street NE to 3rd Avenue NE***						\$1,250,000	\$1,250,000
R-17	NE Big Rock Road from 3rd Avenue NE to NE Roney Road***					\$94,000	\$94,000	\$188,000
R-12	NE 145th Street from Main Street NE to 3rd Avenue NE*						\$143,250	\$143,250
M-5	NE 145th Street from 275th Ave NE to 3rd Avenue NE*					\$151,650		\$151,650
I-2	Main Street NE, NE143rd Intersection**	\$100,000	\$100,000					\$0
R-18	Batten Road NE from NE Roney Road to NE 146th Street*						\$147,750	\$147,750
TOTAL²		\$3,179,000	\$961,000	\$5,460,550	\$4,600,450	\$5,067,650	\$5,411,000	\$24,679,650

Source: City of Duvall Public Works Department

- 1 Local, developer and grant funds. Local funds are provided by motor vehicle fuel taxes, property taxes, miscellaneous revenues, grants, and developer improvements. Refer to Table T-10 on page VI-45 of the Transportation Element.
 - 2 Costs are in 2010 dollars
 - 3 I – intersection improvements; R-minor widening/reconstruction; M –new roadways/major widening/reconstruction. See Figure T-6 in the Transportation Element for a map of projects
- * Includes PS&E only.
** City of Duvall portion only with remainder completed in conjunction with private development.
*** Completed in conjunction with/or only by private development

Parks and Recreation Facilities

Public parks and recreational facilities serving Duvall are owned and operated by either the city of Duvall or King County. The City's facilities include Big Rock Ball Fields, Taylor Park, Depot Park, McCormick Park, Taylor's Landing, Lake Rasmussen Park, Judd Park, and several neighborhood parks. The City also owns the historic Dougherty Farmstead, located on the northern boundary of the city, and several large open space areas. There are also three sites which serve the Duvall area that are owned by King County Parks. These include the Snoqualmie Valley Trail, the Tolt Pipeline Trail, and Duvall Community Park. For more detailed parks and recreation information including but not limited to; an inventory of existing park facilities, a forecast for the future needs of park facilities, the proposed location of new park facilities, and level of service standards, refer to the Parks and Recreation Element of the Comprehensive Plan and the Parks, Trails, and Open Space Plan. The Parks, Trails, and Open Space Plan is hereby adopted by reference.

Parks and Recreation Capital Improvement Plan

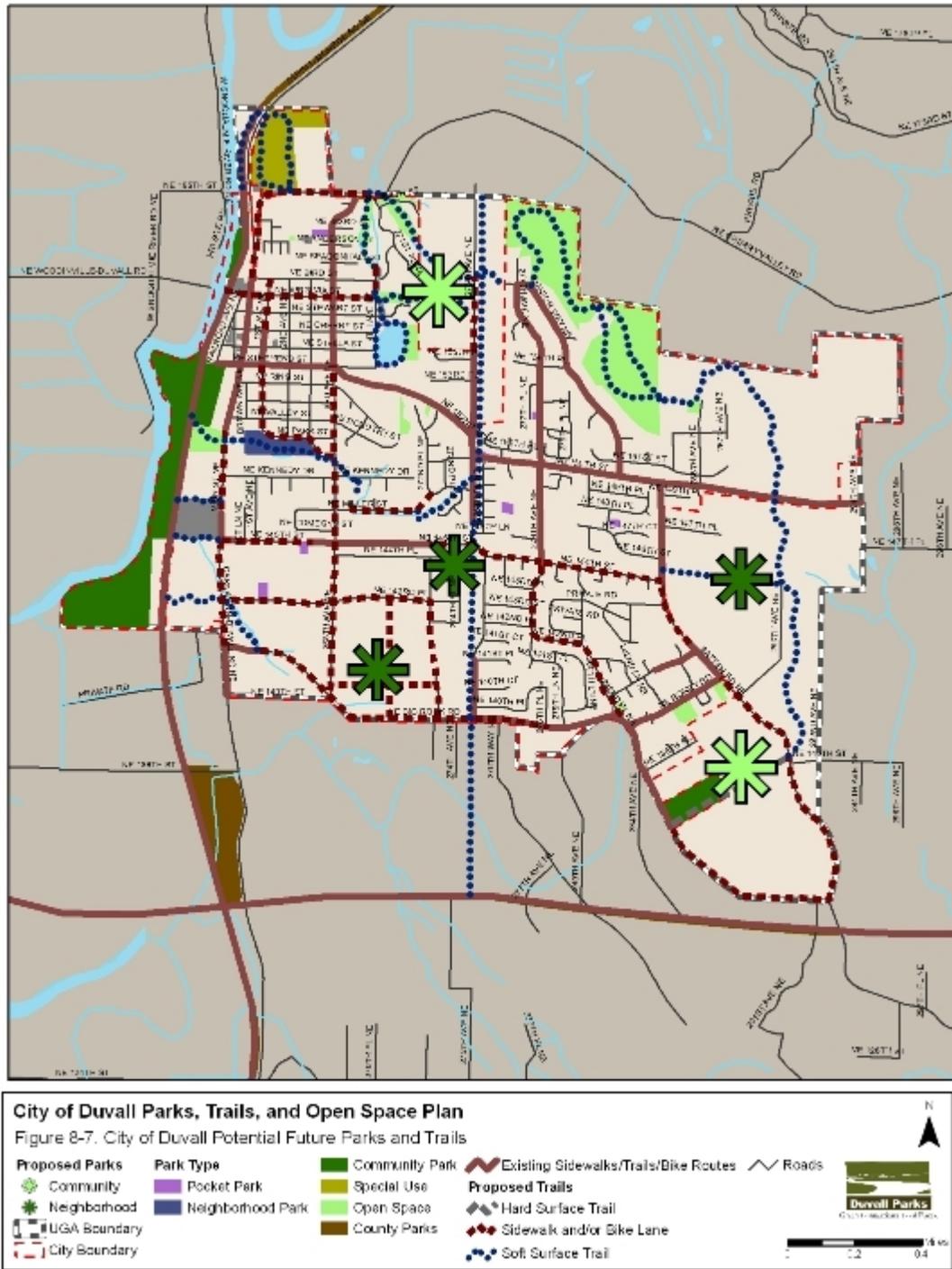
As required by the GMA, the City has prepared a capital improvement program that identifies projects needed to expand, maintain and upgrade the parks and recreation system in the next six years to meet the City's adopted levels of service. The Parks and Recreation Capital Improvement program is based on the 2008 Parks, Trails, and Open Space Plan, which identifies facilities and improvements needed to raise and maintain Duvall's park and recreation level of service to nationwide standards set by the National Recreation and Park Association. The current Parks and Recreation Capital Improvement Program is shown in Table CF -5. Figure CF - 5 sets out Potential Future Parks and Trails. Figure CF - 6 sets out a Phasing Plan for those future facilities.

**Table CF - 5:
Parks and Recreation Capital Improvement Program, 2009-2014**

Project Description							Total
	2010	2011	2012	2013	2014	2015	
Phase I							
Neighborhood Park 1, south of NE 145 th Street, construction (3 acres)		\$532,232	\$487,464				\$1,019,696
Neighborhood Park 2, south of NE 145 th Street, acquisition and construction (3 acres)				\$288,496	\$1,500,880	\$280,320	\$2,069,696
Construction of Soft Surface Trails	\$27,000			\$23,000	\$180,000		\$230,000
Construction of Sidewalk and Bike Lane additions							\$0
IMPROVEMENTS							
Improvements at Big Rock Ball Fields including utilities, stormwater, nighttime lighting, restrooms. Install a playground area.			\$250,000	\$250,000			\$500,000
Restore restroom facilities, improve lighting and traffic safety measures at Taylor Park	\$100,000					\$250,000	\$350,000
Improve basketball court at Taylor Park				\$20,000			\$20,000
Add picnic shelters/shade covers over 1/2 the picnic tables at McCormick Park, Big Rock Ball fields, Taylor Park (7 tables total)				\$15,000			\$15,000
Improve internal walking trails within McCormick Park, and Taylor Park				\$15,000			\$15,000
New play structure and general improvements to Hix Park						\$75,000	\$75,000
New park signage and way-finding markers; Interpretation and education signs and kiosks	\$50,000			\$50,000			\$100,000
YEARLY TOTAL	\$177,000	\$532,232	\$737,464	\$661,496	\$1,680,880	\$605,320	\$4,394,392
PHASE I TOTAL							\$4,394,392

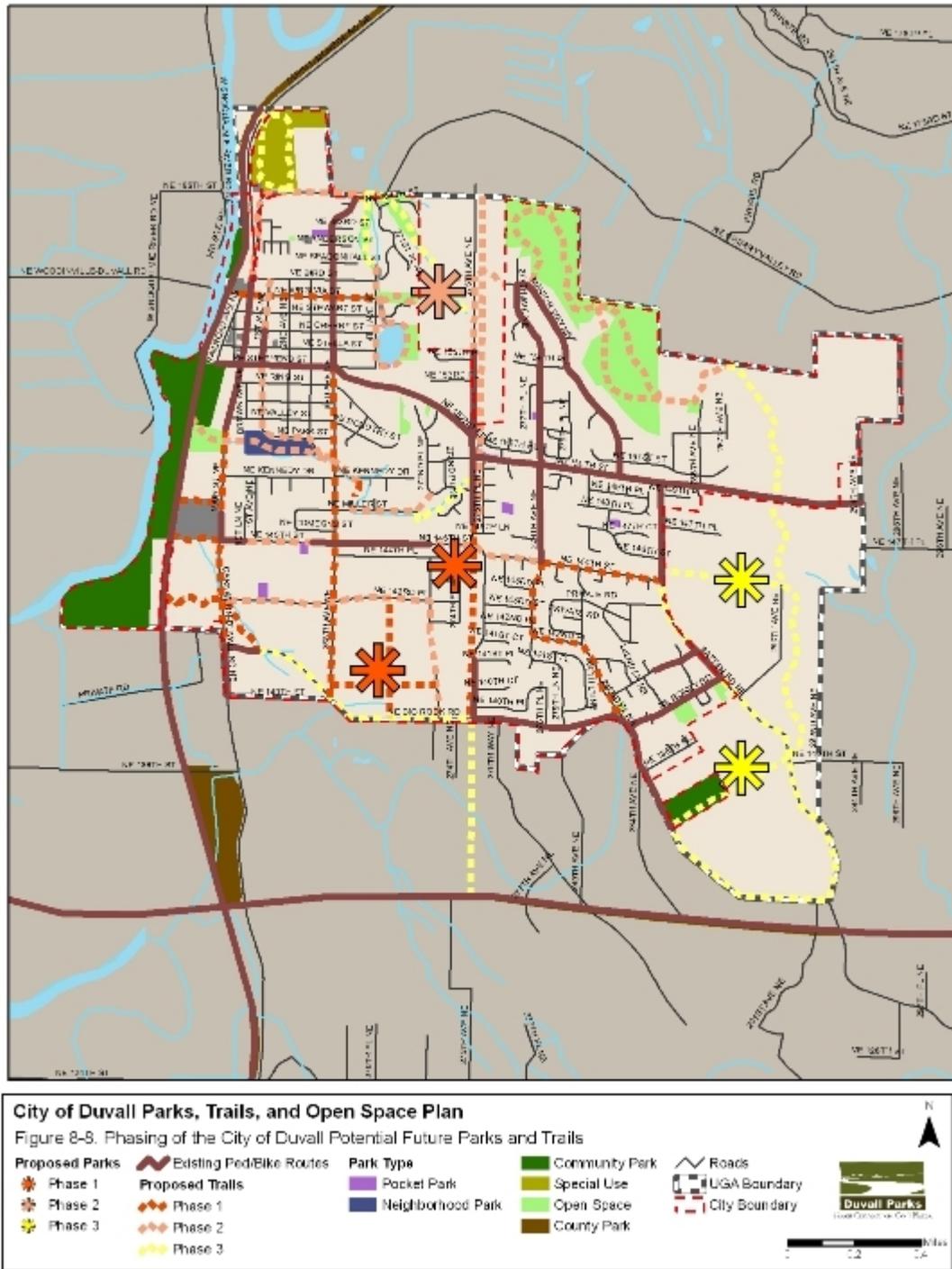
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Figure CF – 5 Potential Future Parks and Trails



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Figure CF – 6 Phasing of Potential Future Parks and Trails



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Paying for Parks

City of Duvall revenue is obtained from a combination of taxes, license and permit fees, state and federal grants, user service charges, fines and forfeits, miscellaneous interest earnings and sales, and pass-through federal revenue sharing monies. Major funding sources for park and recreation facilities can include property taxes, general obligation bonds, real estate excise taxes, grants, and pass-through monies. The City also collects a park impact fee of a specified dollar amount from developers for each residential unit constructed.

Potential Revenue Sources for Parks

Potential funding sources for new park and recreation development in Duvall include the following:

Park Impact Fees – Park impact fees are typically collected when a new residential development is constructed (to provide for recreational opportunities for new residents of the development). The City of Duvall currently charges an impact fee for each new residential unit built in the city. Impact fees may be spent only on system improvements needed to serve new growth and development.

User/Concession Fees – User fees (e.g., daily, league, seasonal, annual, and/or resident fees, among others) are typically charged for use of park and recreation facilities. Concession fees are collected from private businesses (concessionaires) who operate recreation-support services (e.g., food/beverage stands, equipment rentals, etc.) at park and recreation facilities. User and/or concession fees may be used to purchase land, develop, operate, and maintain facilities.

Special Use Agreements — Special use agreements are encouraged such as property agreements that could be used instead of property purchases to secure public use rights for land or property at no cost or for a nominal fee. This is particularly beneficial where public use is of benefit to the private landowner. Some forms of special use agreements can provide favorable tax benefits if the use agreement can be shown to have an assigned value.

Public-Private Partnerships – Public-private partnerships are typically defined as cooperative ventures between the public and private sectors (e.g., corporations, non-profit organizations, citizen groups, etc.). For park and recreation departments, public-private partnerships may include corporate sponsorships, staffing, and/or facility management, among others.

Public/Private Service Contracts — Private market skills and capital may be employed in a variety of ways including the use of public/private service contracts where a private party can be contracted to operate and maintain a facility for a fixed fee cost. Service contracts can be very efficient where the activities are small, scattered in location, seasonal, expert or experimental. Service contracts are also relatively easy to initiate or terminate if the area demand fails to provide sufficient use or revenue to justify continued operation. Service contracts may be flexible and can include agreements with the school district or local user groups who can or would be interested in sustaining the activity on a subsidized or sweat-equity basis in exchange for use of the facility.

Public/Private Concessions – Cities may lease a portion of a site or facility to a private party in exchange for a fixed fee or a percentage of gross receipts. The private operator assumes operation and maintenance responsibilities and costs in exchange for a profit. A city's portion of the profits may be used to help pay facility development costs at the same rate as for similar facility developments. Concessions can save the City considerable monies where the activities are specialized, seasonal, experimental or unproven. Concessions can be easily initiated, provide direct user benefit/cost reimbursements and relieve the city of a capital risk should market or user interest fail to materialize to at least break-even levels.

Public/Private Joint Development Ventures – Cities may enter into an agreement with a private or public developer to jointly own or lease land for an extended period of time to allow the development, operation and maintenance of a major recreational facility or activity in exchange for a fixed lease cost or a percentage of gross receipts. A developer would assume development and operations and maintenance responsibilities and related costs and all of the market risk in exchange for a market opportunity providing a profitable return, which may or may not otherwise be available. A city would realize the desired development of a facility, which may or may not be realized otherwise, in exchange for a low minimum capital return and little or no capital risk.

Joint development agreements represent an ultimate benefit/cost resolution which may also provide public revenue which a city could use for other development opportunities.

Land Leases – There are instances where an activity is so specialized in appeal, or has a service area so broad in scope, that it cannot be equitably financed using general public funds. Specialized user groups may be provided options for developing and/or maintaining specific recreation facilities in ways that provide an equitable distribution of public and private costs. User groups or clubs may assume the responsibility for the development and/or operation and maintenance of a facility. User groups or clubs may provide volunteer help. Land lease agreements may also be used to accommodate organized athletics such as soccer, baseball, football, softball and rugby; or unique, specialized facilities like horse stables or equestrian centers.

Taxation – Special Improvement Districts (SID) – Funds for these districts may be generated through property tax assessments and/or financed through bonds. These funds may be used for specific projects or improvements to parkland. This type of district is often created as part of a subdivision process.

General Obligation Bonds – General obligation bonds may be used to generate funds for use in acquiring land, improving/enhancing existing facilities, and developing new park facilities. Bonds often enable a city to utilize local funds to match state and federal grant funding and are one of the most common funding sources for new and/or improved park and recreation facilities.

Sales Tax – Funds from increased sales and local option taxes can be used to fund park and recreation improvements and for land acquisition.

Real Estate Excise Tax (REET) – The State of Washington is authorized to levy a real estate excise tax on all sales of real estate, measured by the full selling price, including the amount of any liens, mortgages and other debts given to secure the purchase at a rate of 1.28 percent (RCW 82.45.060). A locally-imposed tax may also be authorized. All cities

may levy a quarter percent tax (described as "the first quarter percent of the real estate excise tax" or "REET 1") (RCW 82.46.010). Cities that plan under the GMA also have the authority to levy a second quarter percent tax (known as "REET 2") (RCW 82.46.035(2)). REET funds can be used for capital projects specified in a capital facilities element including planning, construction, reconstruction, repair, rehabilitation, or improvement of parks. Only REET 1 funds can be used for acquisition of land for parks.

Grants – There are a substantial number of park and recreation-specific grant opportunities available to local communities. However, funding for these grants changes on an annual basis, based on state and federal budgets. Most grants require a local funding match. In Washington, many grants are administered by the Washington State Recreation and Conservation Office (WSRCO).

Donations - Donations to municipalities may provide tax deductions equivalent to 501(c)3 corporations. Life estates and reverse mortgages are examples of other donation strategies that may help fund park and recreation facilities.

Funding Strategies for Parks

In considering various park and recreation revenue sources as described above, funding sources should generally be matched to specific needs in order to avoid duplication and to take advantage of each fund's specific possibilities. For example, specific funding strategies may include:

Park and Recreation Program Services - Individual user fees and charges should generally be used to help finance recreation programs or services to the maximum extent practicable to provide cost/benefit equities and efficiencies. General funds may be used to help cover situations where fees cannot be readily collected, as in most special events; or where fees do not cover all operating costs of a program or service.

Facility Operation, Maintenance and Minor Construction - General funds should generally be used to help fund the operations and maintenance costs for park facilities and recreation activities that cannot be financed by user fees and charges, or be financed with other funding methods. General funds are flexible and can be adjusted to meet annual programming variations or priorities.

Facility Development - Capital improvements, including property acquisition, can be funded through the general fund, real estate excise taxes, park impact fees, or other funding sources as discussed above.

The City has prepared a plan to finance the parks and open space capital facilities discussed in Table CF-5 above over the next six years, within the projected funding capacity for the funding sources described above. That plan is set forth in Table CF-6 below.

**Table CF - 6:
Parks and Recreation Capital Improvement Budget and Financing Plan, 2009-2014**

Impact Fees	\$2,761,480.00
REET 1 and 2	\$1,193,472.80
Grants	\$ 439,439.20
Other Revenue Sources (general fund, levy, and bond)	
Estimated Revenue for Parks	\$4,394,392

Assumptions: Table CF-6 assumes an additional 2,090 residents and a per capita impact fee cost of \$1,472.00.

Government Facilities

General government facilities owned by the city of Duvall include city hall, the public works buildings, the police building, the library building and the Duvall Community Center. Fire protection in Duvall is provided by King County Fire District 45 and is neither owned nor operated by the City. However, fire services will be addressed as part of the capital facilities summary.

Figure CF – 7: General Government Facilities presents the location of each facility in Duvall.

Figure CF - 7: General Government Facilities

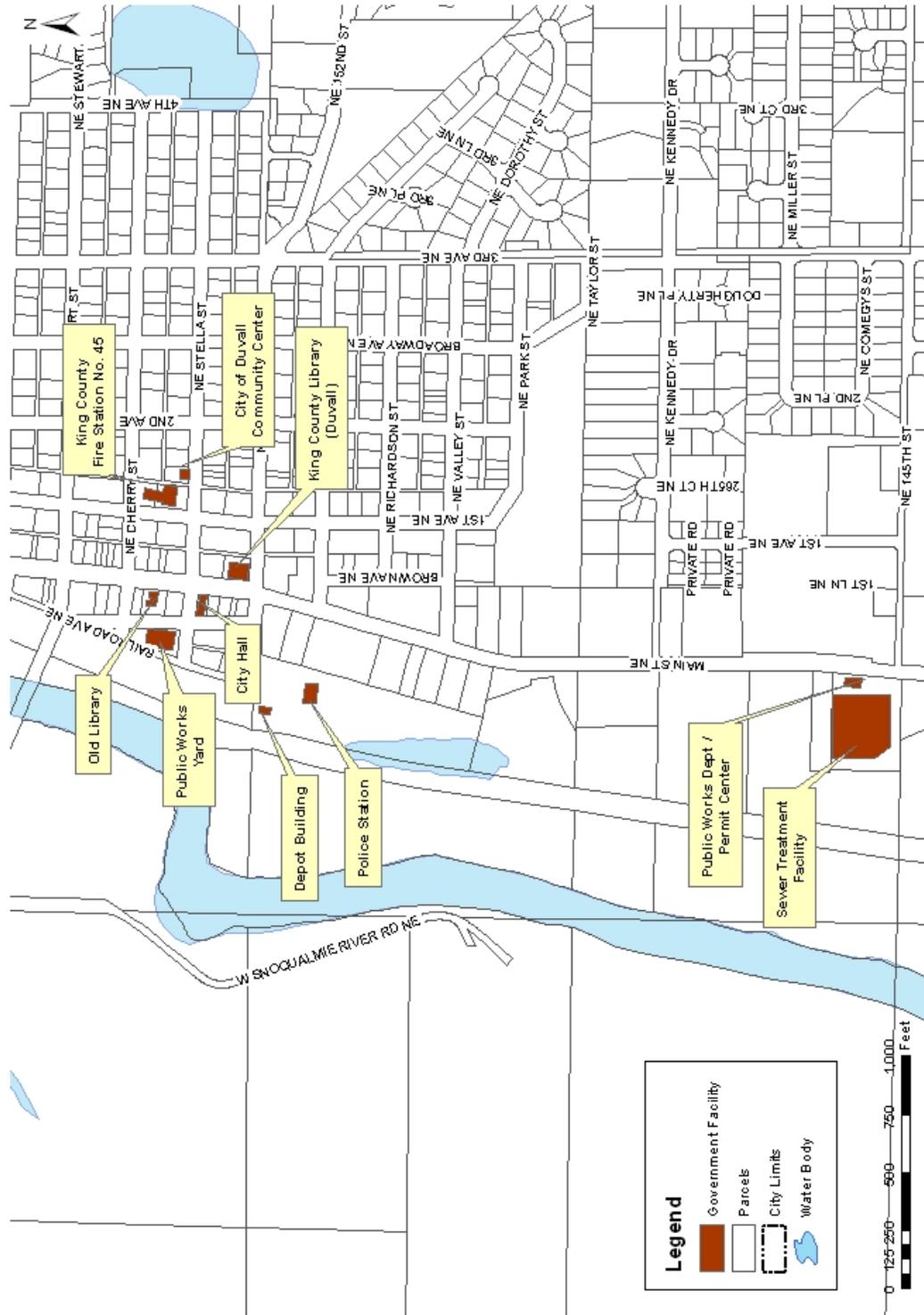


FIGURE
CF - 7



General Government Facilities

City of Duvall 2009 Comprehensive Plan

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City Hall – Existing

The existing 3,004 square foot, 2-story city hall building is located on the southwest corner of Main Street and Stella Street and can accommodate approximately 10 employees. The building was expanded to include a lower floor in 1994 and is the location for city administration, finance, planning, and utility billing departments. Parking is currently provided along the side of the building on Stella Street and within the right-of-way along Main Street. Parking is also provided behind the building along Riverside Avenue.

City Hall – Future

Current City services are located in three separate locations. A future City Hall, when constructed, could consolidate all administrative functions and customer services in a single facility to accommodate future population growth. During the 2003 city-wide visioning process, Duvall citizens indicated that the ideal location for a new City Hall would be in Old Town. Potential sites for a new building are the public works yard at Riverside Avenue/Stella Street or at a site along First Avenue. However, the City may also consider other possible City Hall sites in Old Town or elsewhere in the city.

Public Works Building – Existing

The existing public works building is located south of Old Town at 14525 Main Street NE between Kennedy Drive and NE 145th Street. The building contains approximately 1,700 square feet of office space and 1,925 square feet of garage and unfinished storage space. The building currently houses the engineering and building departments, including the permit center, archives, and a garage/shop.

Public Works Building – Future

The existing public works building can be reconfigured to accommodate additional employees in the future. The site is directly adjacent to the sewer treatment plant and is well suited for municipal operations such as a future public works yard.

Public Works Yard – Existing

The existing storage yard and office is located between Stella and Cherry streets at Riverside Avenue. This facility houses equipment, materials, Public Works Crew office, and has some shop functions. A new covered structure for the site was completed in 1997 after the collapse of the old structure during a snowstorm in 1996.

Public Works Yard – Future

The City would like to relocate this facility because space is limited for equipment storage and the current downtown location is ideal for redevelopment and revitalization. A new facility could be situated at city-owned property adjacent to the sewer treatment facility or a new facility could be developed in the southern portion of the city. The City may also consider selling the existing property for redevelopment or use the property as a site for a new city-owned facility such as a new City Hall.

Police Services – Existing

The Police Department is currently located in a facility completed in 2004 at the end of Stephens Street adjacent to Depot Park. The facility, which is located on approximately 6.7 acres, is a 3,900 square foot modular building including a 1,350 square foot uncovered sally port, 7 space parking lot reserved for police, and a 49 space parking lot for public and police uses.

Police Services – Future

The existing facility is projected to accommodate up to 20 police staff members. The City expects that this facility will be able to provide police services for about 8 to 10 years. Secure storage is limited at the site and construction of a covered, secure sally port and additional storage is required. The City will likely need to either expand this facility or relocate to another part of the city as city population and the demand for increased police services and protection increases.

Fire & Emergency Services – Existing

Duvall/King County Fire District 45 encompasses approximately 50 square miles and serves the City of Duvall, communities of Lake Margaret and Lake Marcel, and surrounding areas. The estimated population of the District is between 12,000 and 14,000. The District provides fire suppression, rescue, emergency medical, prevention, public education, and many other services to the community. These services are provided 24 hours a day by a combination of volunteer and career personnel.

The District has three fire stations located throughout the area, one of which is located in Duvall. The Duvall Station (Station 66) is the administrative headquarters and is located at the corner of First Avenue and NE Stella Street in Duvall. It usually houses an engine, an aid unit, a rescue unit, a water tender, a brush unit, and a rescue boat and is staffed 24/7. The station was completed in June 2003.

The Big Rock station is just outside the City limits but serves much of the southeast portion of the city when it is staffed (part-time days as of 9/2010).

Fire & Emergency Services – Future

The District does not anticipate the need for a greater number of facilities but is looking at options for upgrading the current Big Rock facility to support 24-hour staffing. The District also has a site in the Kelly Road/Lake Margaret area for a future station to replace the small, volunteer station presently serving that area. The economy, population changes, and the resulting demand for emergency services will drive the timeline for and extent of capital facilities development in the future.

Old Library Location

The City owns a 3,790 square foot, 2-story building which was built in 1934 and is located at 15619 Main Street NE. This building served both as the City's community center/meeting room and the Duvall Library Branch of the King County Library System (KCLS) from the 1930's to 2012. There is also a small parking lot on the west side of the building adjacent to Riverside Drive that is accessible to the community meeting room on the lower floor. The City continued use of the site as the Duvall Visitor and Centennial Center starting in 2013.

New Library

In fall 2004, the voters approved a capital structures levy for purposes of constructing a new library in the City of Duvall. KCLS completed construction an 8,000 square foot LEED® certified building at a new location at the intersection of Main/Stephens streets in August 2012. The library program in Duvall dates back to 1932, and as of the 2000 Census, served approximately 12,675 people

Duvall Community Center – Existing

The City owns the 3,000 square-foot W.R.E.C.K. Center building located on Stella Street between 1st and 2nd avenues. The building in the past has been used as a church, housed the police department, City Hall, and served as city storage. The first floor of the building was renovated and expanded to accommodate a youth center in 2002. Youth center operations ended in 2008. The center is currently being used as a public facility for meetings and is leased to a preschool for daytime operations.

Duvall Community Center – Future

The existing basement of the building will be developed as a 24 x 40 daylight basement for additional office and storage space. Site grading and improvements will be required to accommodate daylight basement accessibility.

Duvall Depot

In 2001, the original Chicago/Milwaukie railroad depot was given to the city of Duvall. It was moved to its present location adjacent to McCormick Park in 2002. The 960 square foot building is used as city rental facility, with priority use given to local arts organizations. Future improvements include interior renovations to make the facility more usable and additional landscaping improvements.

Creek and River Improvements

The Snoqualmie River and three creeks, Coe-Clemons, Cherry, and Thayer, are located in Duvall. The Snoqualmie River and Coe-Clemons and Thayer Creeks have salmonid species present in them. The City has begun implementing the 2002 Stream Habitat Assessment Report through projects funded by the King Conservation District. Duvall has completed three projects and received grant funding for a fourth. Projects completed to date include the Habitat Assessment Report, a Fish Habitat Restoration Plan, and the removal of two culverts on Coe-Clemons Creek and replacement with bridges. Other funds may be available from the state to implement the Snohomish Basin Habitat Conservation Plan and the City's Stream Habitat Assessment Report.

General Government Capital Improvement Plan

As required by the GMA, the City has prepared a capital improvement program that identifies projects needed to expand, maintain and upgrade general government facilities in the next six years. In 2012 the City commenced work on an expanded General Governmental Facilities Strategy to identify required capital improvements and liabilities. Much of the capital maintenance and operation improvement costs cannot be accurately forecasted. Therefore, an estimate has been prepared for general improvements encompassing all of the sites. The current general government CIP is shown in Table CF - 7: General Government Capital Improvement Plan.

**Table CF - 7:
2014 to 2019 General Government Capital Improvement Plan**

Project	2014	2015	2016	2017	2018	2019	Total Funds ¹
Duvall Depot	\$90,000						\$90,000
City Hall	\$400,000	\$0	\$0	\$0	\$0	\$0	\$400,000
Old Library Site	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000
General improvements as required for maintenance and operations (all sites)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
TOTAL²	\$590,000	\$100,000	\$100,000	\$100,000	\$100,000	\$200,000	\$1,190,000

Source: City of Duvall Public Works Department

- 1 Local and grant funds. Local funds are primarily from real estate excise tax funds (REETs) and the general fund.
- 2 Costs in 2010 Dollars

Riverview School District Facilities

The Riverview School District services three jurisdictions: King County, the City of Carnation, and the City of Duvall. The district encompasses 250 square miles and is located in northeast King County serving the Snoqualmie River valley from the King/Snohomish County line south approximately 16 miles, and from the western ridge of the valley to the cascade foothills. The district educational facilities consist of three elementary schools, one middle school, one high school, an alternative high school program, and two alternative elementary school programs. The grade configuration is kindergarten through fifth grade for elementary school, sixth through eighth for middle school, and ninth through twelfth for high school. One of the alternative programs, housed at Carnation Elementary School, serves grades K-12. The Riverview School District Capital Facilities Plan shall be considered a part of this Capital Facilities Element and as such is adopted as part of the Duvall Comprehensive Plan upon adoption of this element.

Reassessment Strategy

GMA requires that provision should be made to reassess plan elements periodically in light of the evolving capital facilities plan. This is to determine if probable funding for capital facilities is insufficient to meet existing needs. If a funding shortfall occurs, the Land Use Element must be reassessed. Changes can then be made to rectify the shortfall either by restricting land use development or by lowering the facility standard.

In the event that the City cannot fund the capital improvements needed to maintain required service levels (as identified in the Capital Facilities Plan), then the City shall take one or a combination of the three following actions:

1. Phasing of proposed developments that are consistent with the Land Use Element until such time that adequate resources can be identified to provide adequate capital facility improvements.

2. Reassessment of the City's financing strategy to find additional opportunities. These could include federal and regional grants, loans, and funding programs; partnerships with King County or other service providers; or partnerships with the private sector.
3. Reassessment of the City's adopted service standards to reflect service levels that can be maintained given known financial resources.

Goals and Policies

Goal CF – 1 Ensure that public facility plans adequately address existing service deficiencies and future needs.

Policies

- CF – 1.1 Establish a policy that results in the timely review of all city capital facilities plans on a regular basis to ensure that the plans provide for appropriate levels of infrastructure development.
- CF – 1.2 Ensure that the public funding for infrastructure development is accounted for in city budgets.

Goal CF – 2 Ensure that adequate public facilities and services serving new developments are concurrent at the time of land use approval of such developments and that services for new developments will not negatively impact existing service levels.

Policies

- CF – 2.1 Establish strategies to address facility and service needs that are consistent with the land use and transportation elements, existing facility plans, and are financially feasible.
- CF – 2.2 Phase development so that public facilities and services can be provided for both existing and future growth in a manner that does not outpace the City’s ability to provide and maintain adequate levels of service.
- CF – 2.3 The City shall extend services to properties within the Urban Growth Area upon annexation while maintaining levels of service for existing customers.
- CF – 2.4 Management of capital facilities should emphasize the following concepts:
 - a. Provide preventive maintenance and cost effective replacement of aging elements;
 - b. Plan for extension and upgrades of capital systems while recognizing that system extension associated with new development should be the responsibility of those desiring service;
 - c. Inspect systems to ensure conformance with design standards and reduce the potential for service rate increases through effective fiscal management and fair and equitable rate structures.

Goal CF – 3 Finance the City’s needed capital facilities in an economic, efficient and equitable manner.

Policies

- CF – 3.1 Use Duvall’s Six Year Capital Improvement Plans (CIP) to prioritize the financing of capital facilities within projected funding capacities and to clearly identify sources of public money for each project.
- CF – 3.2 Equitably distribute the cost of capital facilities among the primary beneficiaries of the facility.
- CF – 3.3 Future development shall bear facility improvement costs necessitated by the development to achieve and maintain adopted level of service standards and efficient service provision.
- CF – 3.4 Pursue all available funding sources for proposed community facilities, downtown improvements, park and recreation facilities, trails/walkways, road improvements and utilities.
- CF – 3.5 Adopt and collect impact fees in accordance with the GMA as part of the financing for public facilities. Such financing shall provide for a balance between impact fees and other sources of public funds and shall not rely solely on impact fees. Public facilities for which impact fees may be collected include: public streets and roads, publicly owned parks, open space and recreation facilities, school facilities, and fire protection services.
- CF – 3.6 Seek public and private partnerships for new facilities where possible that share an equitable share of expenses.

Goal CF – 4 Ensure the efficient and equitable siting of public facilities through coordinated planning within City departments, between City and non-city providers and with other jurisdictions.

Policies

- CF – 4.1 Siting of capital facilities shall be based upon criteria including, but not limited to:
 - a. Specific facility requirements, such as acreage, transportation access, etc.;
 - b. Land use compatibility;
 - c. Potential environmental or traffic impacts;
 - d. Consistency with the Comprehensive Plan.
- CF – 4.2 Capital facilities shall not be located in areas designated as critical or environmentally sensitive unless no other alternative is available.

CF – 4.3 The City should not provide for the extension of public facilities and services outside the Urban Growth Area, excepted as noted in Policy 5.9 regarding water services.

Goal CF - 5 Maintain and enhance the development and operation of an effective and efficient water system at fair market value that will meet the needs of Duvall’s present and future population.

Policies

CF – 5.1 Continue to work with Seattle Public Utilities and with East King County Regional Water Association in order to achieve goals and objectives of providing reliable levels of service for Duvall residents and those within the water service area.

CF – 5.2 Support and implement water conservation and reuse measures that reduce water use, such as:

- a. Public education;
- b. Billing rate structures which encourage conservation;
- c. Reclamation of wastewater for irrigation use;
- d. Encourage drought tolerant plantings and native vegetation for public and private development, and;
- e. Impose water restrictions during droughts.

CF – 5.3 Maintain an updated comprehensive water system plan that is coordinated with the Land Use Element so that new development is located where sufficient water system capacity exists or can be efficiently and logically extended.

CF – 5.4 Ensure that water service necessary to support development will be adequate to serve the residents at the time new development is available for occupancy and use.

CF – 5.5 Establish a reserve fund and pursue outside funding services to finance needed improvements to the water system.

CF – 5.6 Coordinate with Duvall/King County Fire District 45 to ensure adequate fire flow in all areas of the city.

CF – 5.7 Ensure all new development within the service boundary is served by the municipal water system.

CF – 5.8 Monitor the City’s water supply to ensure that future water supply needs and water quality requirements will be met.

CF – 5.9 Continue to provide water service to those properties that receive water from the City and which are located outside the City’s Urban Growth Area.

Goal CF – 6 Maintain and enhance the development and operation of an effective and efficient sewer treatment plant and collection system that will meet the needs of Duvall’s present and future population.

Policies

- CF – 6.1 Require all properties that develop or redevelop within the city limits to connect to the City’s sewer system.
- CF – 6.2 Increase sewer treatment plant and collection line capacities to meet the needs of Duvall residents and land within the Urban Growth Area, as well as meet state and federal discharge standards. Service to the UGA shall not occur until such properties are annexed into Duvall.
- CF – 6.3 Increase capacity to reflect increased usage trends influenced by the City’s growth and economic development.
- CF – 6.4 Maintain an updated comprehensive sewer system plan that is coordinated with the Land Use Element so that new development is located where sufficient sewer system capacity exists or can be efficiently and logically extended.
- CF – 6.5 Ensure that existing deficiencies in the sewer system are upgraded.
- CF – 6.6 Encourage all non-redeveloping properties that annex into the city to phase out their septic systems and connect to the City sewer system.

Goal CF – 7 Maintain and enhance the development and operation of an effective and efficient stormwater treatment system that will meet the needs of Duvall’s present and future population.

Policies

- CF – 7.1 Manage the quality of stormwater runoff to protect public health and safety, surface and groundwater quality and the natural drainage system.
- CF – 7.2 Require design of storm drain lines or pathways to minimize potential erosion and sedimentation, discourage significant vegetation clearing, and preserve the natural drainage systems such as rivers, streams, lakes and wetlands.
- CF – 7.3 Require development regulations that encourage the reduction of impervious surface and retention of natural vegetation.
- CF – 7.4 Ensure that storm drainage facilities necessary to support construction activities and long-term development are adequate to serve the development at the time of construction and when the development is available for occupancy and use.

- CF – 7.5 Require design of new development to allow for efficient and economical provision of storm drainage facilities and require new development to pay general facility charges.
- CF – 7.6 New development should minimize increases in total runoff quantity, should not increase peak storm water runoff, and should prevent flooding and water quality degradation.
- CF – 7.7 Review and update as necessary City stormwater and flood hazard regulations. Participate in regional water quality and flood hazard reduction efforts within all drainage basins that affect the city.
- CF – 7.8 Comply with all NPDES Phase II permit requirements.
- CF – 7.9 Regularly update stormwater development standards and guidelines to be consistent with state guidelines.

Goal CF – 8 Ensure the transportation system program provides for future road projects throughout the city to allow growth-related improvements.

Policies

- CF – 8.1 The City should continue to improve roads throughout the city that are in disrepair or are in need of safety improvements.
- CF – 8.2 Assess impact fees to help alleviate the City’s burden of funding transportation projects.
- CF – 8.3 Seek state and local grants to help fund all road improvements within the city.
- CF – 8.4 When improving new roads the city should consider under-grounding of facilities (electrical, phone, cable, etc.) and repair and replacement of sewer, water, and stormwater facilities that are in disrepair if funding allows.

Goal CF – 9 Effectively develop, manage and maintain high quality parks, trails and open space facilities which meet the needs of Duvall’s present and future population.

Policies

- CF – 9.1 Seek innovative methods of financing those projects listed on the six-year and twenty-year parks, trail, and open space plan capital improvement plan.
- CF – 9.2 Consider joint ventures with public, private, and nonprofit agencies and user groups such as youth sports leagues to assist in facility development, maintenance and operation, and overall reduction of costs.

- CF – 9.3 Encourage park facilities that are of low maintenance and high capacity design in order to reduce ongoing facility maintenance.
- CF – 9.4 Consider ongoing maintenance costs and how those ongoing needs will be addressed prior to the development of new park facilities.
- CF – 9.5 Develop an “Adopt-a-Park” program to give opportunities for community members to provide park improvements and maintenance.

Goal CF – 10 Provide cost effective municipal public facilities to all residents of Duvall in a manner that protects investment in existing facilities, maximizes use of existing facilities, expands facilities in a cost efficient manner, and promotes orderly urban growth.

Policies

- CF – 10.1 Ensure public safety services are adequately funded to provide the necessary level of services for present and future needs of the community.
- CF – 10.2 Set aside funds for the City’s share of improvements required by growth to achieve an efficient level of service for essential public services and facilities. Apply for grants whenever feasible to finance public facilities.
- CF – 10.3 Support and encourage joint development and use of community facilities with other governmental or community organizations in areas of mutual concern and benefit.
- CF – 10.4 To the maximum extent possible, consider opportunities to co-locate activities and otherwise optimize public facility utilization in order to delay the need for new facilities.

Goal CF – 11 Work in cooperation with Riverview School District to help the District accomplish their capital improvement objectives and mitigate, where possible, the impacts of growth to ensure that adequate school facilities are provided for Duvall’s growing population.

Policies

- CF – 11.1 Require impact fees to ensure that school facilities will be provided concurrently with future development within the city.
- CF – 11.2 Annually review and adopt the District’s six-year capital facilities plan.

Goal CF – 12 Ensure that the Capital Facilities and Land Use Elements are reassessed for consistency on a regular basis and propose changes for any insufficient levels of funding.

Policies

CF – 12.1 In the event anticipated funding levels fall short of planned essential capital facilities needed to serve projected population, reassess the Land Use Element and propose modifications as necessary to ensure that the Land Use Element remains consistent with the capital facilities financing plan.

Goal CF – 13 Ensure that the Capital Facilities Element is consistent with County Wide Planning Policies (CWPP).

Policies

CF – 13.1 Regularly review King County’s CWPP to ensure coordination and consistency with the City’s Capital Facilities Element.

References

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