City of Sherwood Oregon

Home of the Tualatin River National Wildlife Refuge

RESOLUTION 2016-075

ADOPTING THE SANITARY SEWER SYSTEM DEVELOPMENT CHARGE RATE METHODOLOGY REPORT, SELECTING THE "AREA SPECIFIC" METHODOLOGY OPTION TO ESTABLISH SANITARY SEWER SYSTEM DEVELOPMENT CHARGE RATES, AND UPDATING THE CITY'S MASTER FEES AND CHARGES SCHEDULE

WHEREAS, System Development Charges (SDCs) are one-time fees assessed on new development to recover the fair share cost of existing and planned facilities that provide capacity to serve future growth; and

WHEREAS, Oregon Revised Statutes (ORS 223.297 to 223.314) authorize local governments to impose, assess, collect and utilize SDCs in a prescribed manner; and

WHEREAS, the City accepted a Sanitary Sewer System Master Plan by Resolution 2007-071; and

WHEREAS, the City continues to experience development growth pressures, and prepared and adopted an updated City's Sanitary Sewer System Master Plan by Ordinance 2016-014; and

WHEREAS, in January 2015 the City contracted with Murray Smith Associates Inc. (MSA) and Galardi Rothstein Group to conduct and prepare an updated Sanitary Sewer System Development Charge Methodology Rate Report, with the intent of providing the City with a recommendation of an appropriate SDC rate methodology and rate; and

WHEREAS, the City has provided proper public notification as required by ORS 223.304(7)(a) with the 90-day notice issued 09/14/2016 and 60-day notice issued on 10/21/2016 for a 12/20/2016 City Council public hearing date; and

WHEREAS, the Sanitary Sewer System SDC Methodology Rate Report analyzed and provided a two methodology options including a citywide "uniform" and an "area specific" SDC rate methodology based on a flow of 150 gpd per EDU; and

WHEREAS, the City Council has considered all of the information presented within the Council agenda packet materials and during the public hearing and determined that the "area specific" methodology was the most appropriate.

NOW, THEREFORE, THE CITY OF SHERWOOD RESOLVES AS FOLLOWS:

Section 1. The City hereby adopts the Sanitary Sewer System Development Charge Methodology Report as prepared by Murray Smith Associates Inc. and Galardi Rothstein Group, dated October 2016, a copy of which is attached hereto as Exhibit A.

Section 2. The City hereby establishes that the sanitary sewer citywide area specific SDC rate methodology described in Exhibit A.

Section 3. The City hereby modifies the City's Master Fees and Charges schedule to reflect the updated sanitary sewer SDC rate as established in Section 2 above. Adopted amendments to the City's Master Fees and Charges schedule are attached hereto as Exhibit B.

Section 4. This Resolution shall be effective February 1, 2017.

Duly passed by the City Council this 17th of January, 2017.

Krisanna Clark, Mayor

Attest:

Sylvia Murphy, MMC, City Recorder

Methodology Report

Sanitary Sewer System Development Charges

Prepared For

City of Sherwood

October 21, 2016
(Minor edits incorporated December 7, 2016)

MSA
Murray, Smith & Associates, Inc.
Engineers/Planners

GALARDI ROTHSTEIN GROUP

SECTION 1

Introduction

Oregon legislation establishes guidelines for the calculation of system development charges (SDCs). Within these guidelines, local governments have latitude in selecting technical approaches and establishing policies related to the development and administration of SDCs. A discussion of this legislation follows, along with the methodology for calculating updated sanitary sewer SDCs for the City of Sherwood (the City) based on the recently completed Sanitary Sewer System Master Plan (Murray Smith & Associates, August 2016).

SDC Legislation in Oregon

In the 1989 Oregon state legislative session, a bill was passed that created a uniform framework for the imposition of SDCs statewide. This legislation (Oregon Revised Statute [ORS] 223.297-223.314), which became effective on July 1, 1991, (with subsequent amendments), authorizes local governments to assess SDCs for the following types of capital improvements:

- Drainage and flood control
- Water supply, treatment, and distribution
- Wastewater collection, transmission, treatment, and disposal
- Transportation
- Parks and recreation

The legislation provides guidelines on the calculation and modification of SDCs, accounting requirements to track SDC revenues, and the adoption of administrative review procedures.

SDC Structure

SDCs can be developed around two concepts: (1) a reimbursement fee, and (2) an improvement fee, or a combination of the two. The **reimbursement fee** is based on the costs of capital improvements *already constructed or under construction*. The legislation requires the reimbursement fee to be established or modified by an ordinance or resolution setting forth the methodology used to calculate the charge. This methodology must consider the cost of existing facilities, prior contributions by existing users, gifts or grants from federal or state government or private persons, the value of unused capacity available for future system users, rate-making principles employed to finance the capital improvements, and other relevant factors. The objective of the methodology must be that future system users contribute no more than an equitable share of the capital costs of *existing* facilities. Reimbursement fee revenues are restricted only to capital expenditures for the specific system with which they are assessed, including debt service.

The methodology for establishing or modifying an **improvement fee** must be specified in an ordinance or resolution that demonstrates consideration of the *projected costs of capital improvements identified in an adopted plan and list*, that are needed to increase capacity in the system to meet the demands of new development. Revenues generated through improvement fees are dedicated to capacity-increasing capital improvements or the repayment of

debt on such improvements. An increase in capacity is established if an improvement increases the level of service provided by existing facilities or provides new facilities.

In many systems, growth needs will be met through a combination of existing available capacity and future capacity-enhancing improvements. Therefore, the law provides for a **combined fee** (reimbursement plus improvement component). However, when such a fee is developed, the methodology must demonstrate that the charge is not based on providing the same system capacity.

Credits

The legislation requires that a credit be provided against the improvement fee for the construction of "qualified public improvements." Qualified public improvements are improvements that are required as a condition of development approval, identified in the system's capital improvement program, and either (1) not located on or contiguous to the property being developed, or (2) located in whole or in part, on or contiguous to, property that is the subject of development approval and required to be built larger or with greater capacity than is necessary for the particular development project to which the improvement fee is related.

Update and Review

The methodology for establishing or modifying improvement or reimbursement fees shall be available for public inspection. The local government must maintain a list of persons who have made a written request for notification prior to the adoption or amendment of such fees. The legislation includes provisions regarding notification of hearings and filing for reviews. The notification requirements for changes to the fees that represent a modification to the methodology are 90-day written notice prior to first public hearing, with the SDC methodology available for review 60 days prior to public hearing.

Other Provisions

Other provisions of the legislation require:

- Preparation of a capital improvement program (CIP) or comparable plan (prior to the establishment of a SDC), that includes a list of the improvements that the jurisdiction intends to fund with improvement fee revenues and the estimated timing, cost, and eligible portion of each improvement.
- Deposit of SDC revenues into dedicated accounts and annual accounting of revenues and expenditures, including a list of the amount spent on each project funded, in whole or in part, by SDC revenues.
- Creation of an administrative appeals procedure, in accordance with the legislation, whereby a citizen or other interested party may challenge an expenditure of SDC revenues.

The provisions of the legislation are invalidated if they are construed to impair the local government's bond obligations or the ability of the local government to issue new bonds or other financing.

SECTION 2

Sanitary Sewer SDC Methodology

Overview

The general methodology used to calculate sanitary SDCs begins with an analysis of system planning assumptions to determine growth's capacity needs, and how they will be met through existing system available capacity and capacity expansion. Then, the capacity to serve growth is valued to determine the "cost basis" for the SDCs, which is then divided by the total growth capacity units to determine the system wide unit costs of capacity. The final step is to determine the SDC schedule, which identifies how different developments will be charged, based on their estimated capacity requirements.

Projected Flows and Equivalent Dwelling Units

Table 1 shows the projected flows and equivalent dwelling units (EDUs) for the sanitary sewer system based on the Sanitary Sewer System Master Plan (Master Plan). The primary relavent design criteria for the sanitary sewer system is peak flow, which includes dry weather flow (DWF), groundwater infiltration, and wet weather flow.

Based on customer billing data provided by the City, the sanitary system currently serves 8,090 EDUs. Based on the current average DWF identified in the Master Plan, each EDU contributes just over 150 gallons per day (gpd) to the sanitary system. The flow per EDU was used to estimate future EDUs at build-out based on the projected flows from Master Plan. As shown in Table 1, the projected future EDUs total 13,025, an increase of 4,935. Table 1 also breaks out the projected increase in EDUs between three areas within the City: infill of the Urban Growth Boundary, Brookman Concept Area, and Tonquin Employment Area.

Table 1
City of Sherwood Sewer SDC Analysis
System Planning Assumptions

Item	Current	Build-out	Growth
Flow (gpd)			
Average DWF	1,244,160	2,003,040	758,880
Peak Flow	4,726,080	7,287,840	2,561,760
Flow (gpd) per EDU			
Average DWF	154	154	
Peak Flow			519
EDUs			
Infill Urban Growth Boundary			2,174
Brookman Concept Area			1,242
Tonquin Employment Area			1,518
Total System	8,090	13,025	4,935

Sources: Sanitary Sewer System Master Plan & City Billing Data

SDC Cost Basis

The capacity needed to serve new development will be met through a combination of existing available system capacity and additional capacity added by planned system improvements. The reimbursement fee is intended to recover the costs associated with the growth-related (or available) capacity in the existing system; the improvement fee is based on the costs of capacity-increasing future improvements needed to meet the demands of growth. The value of capacity needed to serve growth in aggregate within the planning period is referred to as the "cost basis".

Reimbursement Fee Cost Basis

Table 2 shows the existing system value - based on original cost -- of the City's sanitary sewer system. As shown in Table 2, of the $12.9 million of existing system cost, almost $3.5 million was funded by private development, so is excluded from the cost basis. For the remaining $9.4 million, the growth share was determined by the City's Master Plan consultant, based on the weighted average available capacity in the trunk sewer system (as determined from hydraulic modeling). The growth share is estimated to be 47 percent, or $4.4 million.

Table 2
City of Sherwood Sewer SDC Analysis
Reimbursement Fee Cost Basis

Description	Original Cost	City Cost	Growth Share Total %	Growth Share Total $
Infrastructure				
Original Assets (Pre - 2000)	$6,867,563	$6,867,563	47%	$3,227,755
Private Development	$3,469,394	$0	47%	$0
Post 2000 Infrastructure	$2,554,973	$2,554,973	47%	$1,200,837
Total	**$12,891,930**	**$9,422,536**		**$4,428,592**

Source: Costs from City fixed asset records; growth % from MSA

Improvement Fee Cost Basis

Planned future capacity-increasing improvements are shown in Table 3. System capacity may be expanded through the upgrade of existing facilities or the construction of new facilities. Based on the capital improvements identified in the Master Plan, capacity increasing improvements in the City's local collection system include new pipe and upsizing of existing pipe to be funded by the City[1]. Table 3 identifies the portion of each project that is related to meeting the capacity needs of future growth, as determined by the City's Master Plan consultant. The primary growth-related improvements are new pipes within the Brookman Concept and Tonquin Employment areas. These improvements account for $4.9 million out of the total $5.3 million of estimated growth-related costs.

A portion of Master Plan costs are also included (based on the portion of the City-funded project costs that are growth related). The cost basis also includes the full cost of the SDC study.

The methodology further allows for the improvement fee cost basis to be reduced to reflect available cash balances in the City's SDC Inprovement Fund from improvement fees

[1] For pupose of evaluating the City's local sanitary sewer SDC, the cost of improvements to the regional system operated by Clean Water Services (CWS) are excluded.

collected previously. The City reported a Fund cash balance of $2,675,538 as of June 30, 2015 the end of the most recent Fiscal Year. After deduction of the fund balance, the improvement fee cost basis is calculated at $2,577,234, which is 49.1% of the calculated total value of growth-related costs listed in the Capital Improvements Program.

Table 3
City of Sherwood Sewer SDC Analysis
Improvement Fee Cost Basis

PROJECT	Time Period	Cost Estimate	SDC Portion %	SDC Portion $
CAPITAL IMPROVEMENT PROGRAM				
CWS Projects				
Rock Creek Trunk	5-Year	$2,430,000	0%	$0
Sherwood Pump Station	10-Year	TBD	0%	$0
Upper Tualatin Interceptor	10-Year	TBD	0%	$0
Sherwood Trunk	10-Year	$7,130,000	0%	$0
Subtotal		**$9,560,000**		$0
City - New Pipe				
South Tonquin Employment Area pipeline	10-Year	$630,000	100.0%	$630,000
North Tonquin Employment Area pipleine	10-Year	$2,370,000	100.0%	$2,370,000
Brookman pipeline extension	10-Year	$1,870,000	100.0%	$1,870,000
Subtotal New Pipe		**$4,870,000**		$4,870,000
City - Upsize Pipe				
Rock Creek Trunk	5-Year	$780,000	33.0%	$257,400
Subtotal		**$780,000**		$257,400
Condition Projects				
Old Town Mains	5-Year	$240,000	0.0%	$0
SW Washington, SW Schamburg	5-Year	$250,000	0.0%	$0
Rock Creek Trunk	5-Year	$1,400,000	0.0%	$0
SW Park St, SW Park Row, SW Columbia	10-Year	$1,980,000	0.0%	$0
Upstream end of Onion Flats to SW Langer Farms	20-Year	$90,000	0.0%	$0
U-haul/McKillian Industrial area	20-Year	$380,000	0.0%	$0
SW Ladd Hill Rd.	20-Year	$20,000	0.0%	$0
Burried manhole, SW Forest Ave	20-Year	$3,000	0.0%	$0
SW Handley St.	20-Year	$4,000	0.0%	$0
Along railroad tracks	20-Year	$340,000	0.0%	$0
SW Willamette at Orcutt Place	20-Year	$80,000	0.0%	$0
SW Willamette at Highland Drive	20-Year	$140,000	0.0%	$0
SW Gleneagle Drive	20-Year	$31,000	0.0%	$0
SW Sunset Blvd	20-Year	$169,000	0.0%	$0
Old Town Laterals	20-Year	$52,000	0.0%	$0
Subtotal		**$5,179,000**		$0
Other Projects				
Master Plan	10-Year	$250,000	47.3%	$118,372
SDC Study	5-Year	$7,000	100.0%	$7,000
Subtotal Other		**$257,000**		**$125,372**
Total - Capital Improvement Program		**$20,646,000**		**$5,252,772**
DEDUCTIONS				
Less Improvement Fee Fund Balance (b)				**(2,675,538)**
TOTAL IMPROVEMENT FEE COST BASIS				**$2,577,234**

(a) Source: Sanitary Sewer System Master Plan
(b) Source: City staff, as of June 30, 2016 (end of FY15/16)

SDC Schedule

System-Wide SDC Schedule

The reimbursement and improvement unit costs of capacity are determined by dividing the reimbursement and improvement fee cost bases, by the growth-related EDUs shown in Table 1. As shown in Table 4, on a system-wide basis, the SDC per EDU is $1,420 and is comprised of $522 improvement fee and $897 reimbursement fee. Based on a projected peak flow per EDU of 519 gpd (from Table 1), the system-wide cost per unit of flow is $2.74 per gpd.

Clean Water Services returns a portion of their Sanitary Sewer SDC back to the City. Currently this amount is $212 per EDU. It is recommended the City reduce their City SDC fee by the amount returned from Clean Water Services. This results in a recommended net Sanitary Sewer SDC of $1,208.

Table 4
City of Sherwood Sewer SDC Analysis
SDC Calculation - System-wide

	Improvement	Reimbursement	Total
Cost Basis	$2,577,234	$4,428,592	$7,005,826
Growth EDUs	4,935	4,935	4,935
Sanitary Sewer SDC, per EDU	**$522**	**$897**	**$1,420**
Less City portion of CWS Sanitary Sewer SDC			$212
Recommended City Sanitary Sewer SDC (System-wide)			**$1,208**

Area-Specific SDC Schedule

Due to the significant improvement costs associated with the Brookman and Tonquin Employment Area (TEA) planning overlay areas, City staff requested that an area-specific SDC structure be developed for consideration.

To calculate an area-specific Improvement Fee SDC, growth-related capital improvement costs were itemized for Brookman and TEA areas, and for all other infill areas remaining within the City Urban Growth Boundary (UGB), minus the Brookman and TEA planning areas. The SDC-eligible projects were allocated to the three specific study areas. Table 5 summarizes the calculated improvement fee cost basis for each area.

In cases where SDC-eligible costs for a CIP-listed project could be attributed to multiple areas, further analysis was done to assign a proportion of the costs attributed to each area. For the Rock Creek Trunk Sewer, analysis from the Master Plan effort shows that 19.0% of the SDC-eligible capacity is to be allocated to TEA, and the remaining 81.0% to the infill areas of the UGB. For the growth-eligible costs associated to the Master Plan Update and SDC study, proportions were assigned according to the ratio of the area's SDC-eligible capital improvement cost to the total SDC-eligible capital improvement cost. Improvement Fund cash balances were allocated to each area based on the same proportion, and then deducted to calculate the area-specific improvement fee cost basis.

The improvement fee SDCs are determined by dividing the improvement fee cost basis for each area by the number of growth-related EDUs for that area as provided in Table 1. For the reimbursement fee calculation, all developments system-wide are assumed to pay for a portion of the existing system assets, so the reimbursement fee cost basis remains at $4,428,592 as in the system-wide option. Reimbursement unit cost of capacity therefore remains $897 per EDU.

Table 5
City of Sherwood Sanitary Sewer SDC Analysis
Area-Specific Improvement Fee Cost Basis

CIP PROJECT	Time Period	System-wide SDC-Eligible Cost	Area-specific SDC-Eligible Cost %	Area-specific SDC-Eligible Cost $
Brookman Concept Area				
Brookman pipeline extension	10-Year	$1,870,000	100.0%	$1,870,000
Master Plan	10-Year	$118,372	36.47%	$43,171
SDC Study	5-Year	$7,000	36.47%	$2,553
Subtotal – Brookman Concept Area CIP				$1,915,724
Less Proportion of Fund Cash Balance			36.47%	($975,788)
Total – Improvement Fee Cost Basis				**$939,936**
Tonquin Employment Area (TEA)				
South Tonquin Employment Area pipeline	10-Year	$630,000	100.0%	$630,000
North Tonquin Employment Area pipleine	10-Year	$2,370,000	100.0%	$2,370,000
Rock Creek Trunk Upsize	5-Year	$257,400	19.0%	$48,906
Master Plan	10-Year	$118,372	59.46%	$70,388
SDC Study	5-Year	$7,000	59.46%	$4,162
Subtotal - TEA				$3,123,456
Less Proportion of Fund Cash Balance			59.46%	($1,590,955)
Total – Improvement Fee Cost Basis				**$1,532,501**
UGB Infill minus Brookman, TEA Areas				
Rock Creek Trunk Upsize	5-Year	$257,400	81.0%	$208,494
Master Plan	10-Year	$118,372	4.07%	$4,813
SDC Study	5-Year	$7,000	4.07%	$285
Subtotal - TEA				$213,592
Less Proportion of Fund Cash Balance				($108,795)
Total – Improvement Fee Cost Basis				**$104,797**

Table 6
City of Sherwood Sanitary Sewer SDC Analysis
SDC Calculation (Area-Specific)

Item	Improvement	Reimbursement	Total City SDC	Recommended Net City SDC
Growth-related CIP cost				
Brookman Concept Area	$939,936			
Tonquin Employment Area (TEA)	$1,532,501			
UGB Infill minus Brookman, TEA Areas	$104,797			
	$2,577,234	$4,428,592	$7,005,826	
Growth EDUs				
Brookman Concept Area	1,242			
Tonquin Employment Area (TEA)	1,518			
UGB Infill minus Brookman, TEA Areas	2,174			
	4,935	4,935	4,935	
SDC per EDU				
Brookman Concept Area	$757	$897	**$1,654**	**$1,442**
Tonquin Employment Area (TEA)	$1,009	$897	**$1,907**	**$1,695**
UGB Infill minus Brookman, TEA Areas	$48	$897	**$946**	**$734**

The total SDCs per EDU range from $946 per EDU in the infill area to $1,654 in the Brookman Concept Area, and $1,907 in the Tonquin Employment Area.

Similar to the system-wide SDC schedule, it is recommended that the City reduce the City SDC by the amount Clean Water Services returns from their Sanitary Sewer SDC back to the City, so that the total amount received by the City is no more than the recommended Total City SDC shown in Table 6.

SECTION 7: SYSTEM DEVELOPMENT CHARGES

B) Sewer SDC:

UGB minus Brookman and Tonquin Employment Area

Use Type	Reimbursement	Improvement	Flow Count
Single family residence	$~~0~~.094272	$~~0~~.27462	~~535 gallons~~1 EDU
Two family residence (duplex)	$~~0~~.094272	$~~0~~.27462	~~535 gallons~~1 EDU
Manufactured home/ single lot	$~~0~~.094272	$~~0~~.27462	~~535 gallons~~1 EDU
Manufactured home parks	$~~0~~.094272	$~~0~~.27462	based on Engineer estimate
Multi-family residential	$~~0~~.094272	$~~0~~.27462	based on Engineer estimate
Commercial	$~~0~~.094272	$~~0~~.27462	based on Engineer estimate
Industrial	$~~0~~.094272	$~~0~~.27462	based on Engineer estimate
Institutional uses	$~~0~~.094272	$~~0~~.27462	based on Engineer estimate

1 Equivalent Dwelling Unit (EDU) = 150 gallons per day (gpd)
Engineers Estimate is calculated from facility design flow divided by 150 gpd per EDU
Regional connection charge (SDC set by CWS) $212.00 (Per dwelling unit or EDU)
See appendix A for SDC's collected on behalf of CWS

Brookman Area

Use Type	Reimbursement	Improvement	Flow Count
Single family residence	$534	$908	~~535 gallons~~1 EDU
Two family residence (duplex)	$534	$908	~~535 gallons~~1 EDU
Manufactured home/ single lot	$534	$908	~~535 gallons~~1 EDU
Manufactured home parks	$534	$908	based on Engineer estimate
Multi-family residential	$534	$908	based on Engineer estimate
Commercial	$534	$908	based on Engineer estimate
Industrial	$534	$908	based on Engineer estimate
Institutional uses	$534	$908	based on Engineer estimate

1 Equivalent Dwelling Unit (EDU) = 150 gallons per day (gpd)
Engineers Estimate is calculated from facility design flow divided by 150 gpd per EDU
Regional connection charge (SDC set by CWS) $212.00 (Per dwelling unit or EDU)
See appendix A for SDC's collected on behalf of CWS

Tonquin Employment Area

Use Type	Reimbursement	Improvement	Flow Count
Single family residence	$627	$1068	~~535 gallons~~1 EDU
Two family residence (duplex)	$627	$1068	~~535 gallons~~1 EDU
Manufactured home/ single lot	$627	$1068	~~535 gallons~~1 EDU
Manufactured home parks	$627	$1068	based on Engineer estimate
Multi-family residential	$627	$1068	based on Engineer estimate
Commercial	$627	$1068	based on Engineer estimate
Industrial	$627	$1068	based on Engineer estimate
Institutional uses	$627	$1068	based on Engineer estimate

1 Equivalent Dwelling Unit (EDU) = 150 gallons per day (gpd)
Engineers Estimate is calculated from facility design flow divided by 150 gpd per EDU
Regional connection charge (SDC set by CWS) $212.00 (Per dwelling unit or EDU)
See appendix A for SDC's collected on behalf of CWS