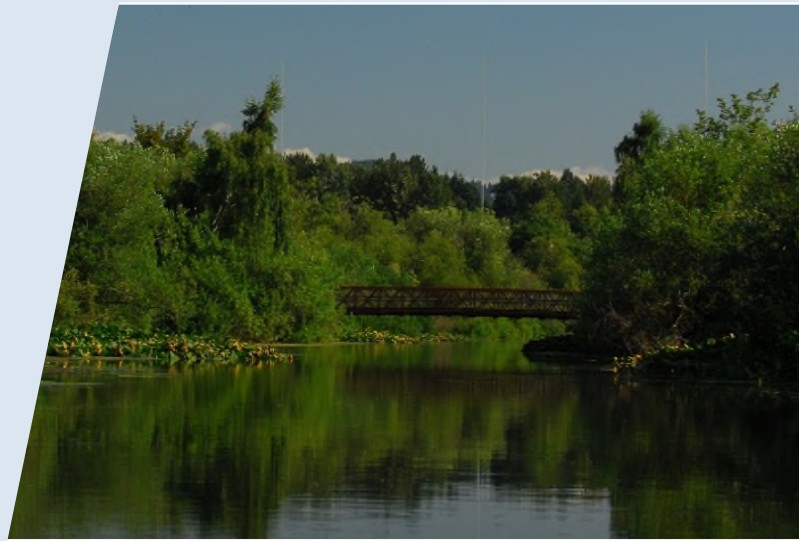




City of Bellevue Wastewater System Plan

Volume 2 Appendixes

**Bellevue City Council
Resolution No. 8771
July 7, 2014**



Appendix A

SEPA



DEVELOPMENT SERVICES DEPARTMENT
 ENVIRONMENTAL COORDINATOR
 450 110th Ave NE
 BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: City of Bellevue Utilities Department

LOCATION OF PROPOSAL: Citywide

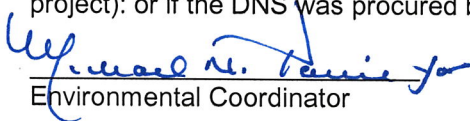
DESCRIPTION OF PROPOSAL: Review of the City of Bellevue Wastewater System Plan. The 2013 Wastewater System Plan (the Plan) is an update of Bellevue's 2002 Wastewater Functional Plan (previously titled 2002 Wastewater Comprehensive Plan). The Plan is a functional planning document that establishes wastewater policies designed to implement the City's *Comprehensive Plan*. The Plan provides direction on improvement, operation, and repair of the wastewater utility and is a tool for future planning of the system. Finally, it assists the City in compliance with federal, state, and regional regulations.

FILE NUMBERS: 13-131390-LM **PLANNER:** David Pyle

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

- There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **2/27/2014**
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.


 Environmental Coordinator

2/13/2014
 Date

OTHERS TO RECEIVE THIS DOCUMENT:

- State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
- State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
- Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
- Attorney General ecyolyef@atg.wa.gov
- Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us



**City of Bellevue
Development Services Department
Land Use Staff Report**

Proposal Name: City of Bellevue Wastewater System Plan

Proposal Address: Citywide

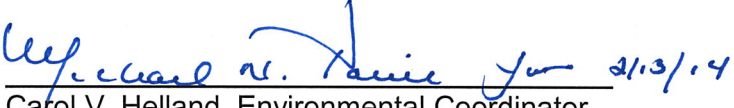
Proposal Description: The 2013 Wastewater System Plan (the Plan) is an update of Bellevue's 2002 Wastewater Functional Plan (previously titled 2002 Wastewater Comprehensive Plan). The Plan is a functional planning document that establishes wastewater policies designed to implement the City's *Comprehensive Plan*. The Plan provides direction on improvement, operation, and repair of the wastewater utility and is a tool for future planning of the system. Finally, it assists the City in compliance with federal, state, and regional regulations.

File Number: 13-131390-LM

Proponent: City of Bellevue Utilities Department
Contact: Doug Lane, 425-452-6865

Planner: David Pyle, Planner

**State Environmental Policy Act
Threshold Determination:** **Determination of Non-Significance**


Carol V. Helland, Environmental Coordinator
Development Services Department

Application Date: October 17, 2013
Notice of Determination Date: November 14, 2013
SEPA Comment Period Deadline: December 2, 2013
SEPA Appeal Deadline: February 27, 2014

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

I. Proposal Description

The 2013 Wastewater System Plan (the Plan – Attachment 1) identifies the risks and opportunities of the City's wastewater system, and lays the groundwork for continued economic expansion, excellent quality of life, and sustained growth and development over a 20-year planning horizon. The City of Bellevue (the City) wastewater utility service area includes the Cities of Bellevue, Issaquah, Clyde Hill and Medina, and the Towns of Hunts Point and Yarrow Point. Since the founding of the original Bellevue Sewer District on Meydenbauer Bay in 1952, the utility has protected water quality and public health, while facilitating economic vitality, desirable neighborhoods and significant growth.

The 2013 Wastewater System Plan (the Plan) reflects back on more than a decade of change since Bellevue's 2002 Wastewater Functional Plan (titled 2002 Wastewater Comprehensive Plan), while charting a course to navigate the challenges ahead. The Plan addresses aging of infrastructure, system expansion to accommodate development, revised policies and practices, newly available analytical data, finances, revised forecasting of growth, and recommended improvements.

The Plan does not authorize construction and is not a Capital Improvement Plan (CIP). Rather, the Plan provides direction to the Utilities Department in how to manage the system to meet current and future needs. All future actions prompted by this Plan must demonstrate compliance with applicable codes and policies. Prior to construction of any repair, replacement, or expansion of the system construction permits are required and project level SEPA analysis may be necessary.

This Wastewater System Plan is consistent with Bellevue's Comprehensive Plan policies, and serves as the functional plan to implement those policies. Furthermore, the Wastewater System Plan itself defines Utilities-specific policies as subordinate to the City's Comprehensive Plan. These Utilities-specific policies, found in the Plan (Attachment 1 - Chapter 2), focus on:

- Customer Service
- Service Area
- Water Quality
- Regional Policy Interface
- Financial Policies

The Plan includes the following elements:

Asset Management

Planning for system renewal and replacement (R&R) is necessary to ensure adequate long-term financing and to manage the risk of system failures. Bellevue's Utilities Department has established a strong long-term financial position, by incorporating the five core components of the EPA asset management framework:

1. Determine Current State of the Assets
2. Define Service Levels
3. Determine Asset Criticality and Risk
4. Determine Best Operating and Maintenance (O&M) and Capital Improvement Program (CIP) Strategies to Minimize Life Cycle Costs
5. Determine Funding Strategy

Based on industry standards for asset life expectancy, as well as local factors specific to the City's wastewater system, Bellevue has developed a schedule of annual costs for funding anticipated R&R projects through the year 2100.

Growth and Demand

Bellevue's sewer service area experienced significant population growth throughout the 2000's, particularly in downtown Bellevue. Although the recession slowed growth in 2008-2009, Bellevue's service area population continues to expand and is projected to surpass 166,000 by 2030. Most of this growth will occur Downtown and in the Bel-Red Corridor.

To estimate future wastewater flows, the Wastewater System Plan uses population and land use projections developed by the Bellevue Planning and Community Development Department and computer modeling (described in the Plan – Attachment 1) to evaluate the system's current hydraulic capacity and its ability to meet projected capacity requirements. The projections consider the Bellevue Comprehensive Land Use Plan, and are consistent with Puget Sound Regional Council data and forecasts, and U.S. census data. Population and sewage flow projections consider ultimate growth within the City's urban growth boundary limits, in accordance with GMA requirements.

In addition to population growth from within, Bellevue's sewer utility service system has grown since 2002 through expansion of the service area boundaries. In 2003, Bellevue assumed Coal Creek Utility District's water and sewer infrastructure located inside Bellevue City limits. The service area was also extended in the Cougar Mountain area to the Urban Growth Boundary. Population and employment projections are used to evaluate the system's ability to meet future needs, and form the basis of recommendations for capacity expansion projects.

Regulatory Compliance

The Plan has been prepared in conformance with Washington Department of Ecology criteria, as defined in WAC 173-240-050, *Summary of Financial Health*, and provides a basis for capital improvement planning for the next 6 years. The Plan also forecasts anticipated needs within the next 20 years and for ultimate system build-out based on land use zoning.

The City has consulted with Bellevue's Environmental Services Commission (ESC) in public meetings for review and direction of the Plan at key points of Plan development, including policy clarifications, evaluation criteria, results analysis and recommendations. The ESC advises Bellevue City Council on utilities planning and related topics, and is comprised of seven residents from within the city's service area.

Current and Future System Infrastructure

Bellevue's sewer system includes approximately 525 miles of sewer mains, 130 miles of service stubs (within public rights of way), 18.7 miles of "lake line" sewer pipe, 10 flush stations, 36 pump stations, and 14,360 manholes.

Since the 2002 Plan, the City has continued to improve its system assessment and understanding, through systematic video inspection, flow monitoring, and other investigative techniques that are best practices for utility asset management. System infrastructure is also observed during regular cleaning and flushing, and in response to customer complaints. While the system overall is well-maintained and functional, recent information has indicated several emerging challenges for the wastewater system:

- **Lake Line Condition.** The City's lake lines are sewer pipes that follow the shorelines

of Lake Washington and Lake Sammamish, underwater and in some cases on land adjacent to the lakes. Two issues have emerged that indicate a need to replace the oldest sections of this piping soon:

- Assessment of asbestos cement lake line pipes in Meydenbauer Bay revealed significant deterioration of this piping in some locations. These are some of the first pipes installed in the original Bellevue Sewer District, circa 1952. It is anticipated that unacceptable structural failures of these pipes could occur within about 10-15 years if they are not replaced or rehabilitated.
- Overflows have occurred upstream of lake line piping, due to reduced lake line capacity from sedimentation. Due to relatively flat installation, these pipes are particularly susceptible to sedimentation and require daily flushing.

Replacement of the lake lines is expected to be technically challenging, environmentally sensitive, and expensive compared to other sewer projects. It is anticipated that no single solution will work at all locations, such that a variety of options may be needed based on site-specific factors. Stakeholder input will be critical to making final decisions. Any option selected will impact entire neighborhoods and require consensus among diverse interest groups. Capital Improvement Plan No. S-58 – Sewer Lake Line Replacement Program has been created to evaluate lake line replacement options, and is recommended to continue.

- **Inflow and Infiltration (I&I).** Flow monitoring data from King County's 2002 Infiltration study and subsequent investigations revealed that stormwater and groundwater flows into Bellevue's wastewater system are significantly higher than previously assumed. If not mitigated, these I&I flows could cause downstream capacity problems, increase the potential risk of overflows, and necessitate additional capital investments. The Plan recommends targeted investigation and reduction of I&I.
- **Storm Frequency and Vulnerabilities.** The City's experiences in wind storms, ice storms, prolonged power outages and other extreme weather events in 2006, 2007 and 2010 provided valuable experience to guide the Plan.
 - **Storm Frequency.** The frequency and severity of extreme weather events that resulted in one or more sewer overflows in the system have increased since the 2002 Plan. Subsequently, some locations that were perceived to have an acceptable risk of overflow only during extreme (greater than 20-year frequency) events could be more susceptible, given changing event-frequencies. The City has always investigated known overflows, but now recognizes that the frequency of overflows could increase if nothing is done. The Plan recommends I&I investigation and reduction (where feasible), and capacity improvements where necessary to manage the risk of overflows.
 - **Storm Vulnerabilities.** Recent storms have validated the City's utility emergency management procedures, but also revealed some vulnerabilities in the wastewater system. The City's strategy to equip critical pump stations with permanent on-site backup power has worked well. However, utility staff found it difficult to access less critical pump stations with portable generators when roads were blocked by downed trees, ice and other obstacles. Difficulty accessing these pump stations subsequently increased overall response times. The Plan recommends more pump stations be equipped with permanent on-

site backup power.

- **Asbestos Cement Pipe Failures.** The City's potable water distribution system has experienced a high rate of asbestos cement (AC) pipe failures, relative to other pipe materials. Subsequently, an AC water main replacement program has been implemented by the water utility. Bellevue's wastewater system also has some AC piping. AC gravity sewer piping has a lower criticality and consequence of failure, because they are not pressurized. However, there are some AC force mains (pressurized pipes) in the City's wastewater system that is now perceived by the City to have a high consequence of failure. The Plan recommends establishing a program to inspect and prioritize replacement of AC force mains.

Future Improvements

As Bellevue continues to grow the wastewater system must be improved to meet increased demand. Recommended sewer system improvements fall into three general categories:

- **Existing System Capacity Improvements.** These projects address known or potential system capacity or reliability problems in the existing system.
- **System Capacity Expansion to meet Planned Growth.** These projects and programs address projected system capacity problems due to forecasted future development.
- **Infrastructure Renewal and Replacement.** These projects and programs are intended to reduce the number and severity of system failures due to age.

Ongoing annual improvement programs and one time projects recommended to maintain, rehabilitate, and upgrade the City's existing infrastructure over the next 6 years are summarized in the Plan (Attachment 1).

II. Policies

The City prepared and adopted Bellevue's Comprehensive Plan (City Ordinance No. 5570, November 29, 2004) as required by the Washington State Growth Management Act (GMA). Consistent with the GMA, Bellevue's Comprehensive Plan policies require the Utilities Department to anticipate and facilitate growth. Specifically:

POLICY UT-4. Base the extension and sizing of [Utilities] system components on the land use plan of the area. System capacity will not determine land use.

POLICY ED-21. Continue to identify, construct and maintain infrastructure systems and facilities required to promote and sustain a positive economic climate. Anticipate needs and coordinate city infrastructure investments with economic development opportunities.

This Wastewater System Plan is consistent with Bellevue's Comprehensive Plan policies, and serves as the functional plan to implement those policies. Furthermore, the Wastewater System Plan itself defines Utilities-specific policies as subordinate to the City's Comprehensive Plan. These Utilities-specific policies, found in the Plan (Attachment 1 - Chapter 2), focus on:

- Customer Service
- Service Area
- Water Quality

- Regional Policy Interface
- Financial Policies

Minor changes have been made to several policies since the 2002 Plan. Significant policy changes (Attachment 1 -Chapter 2) since the 2002 Plan adoption include:

- Inflow & Infiltration (I&I) policy language has been made clearer and more concise.
- A new policy regarding City participation in regional policy development has been added. This new policy was added to guide Bellevue's role in influencing regional decision-making in the interests of the City and Bellevue's rate payers.

III. Public Notice and Comment

Application for project SEPA review was submitted on October 17, 2013. Following initial review of project documentation submitted, a notice of application and intent to issue DNS under the SEPA Optional Process was issued in the November 14, 2013 City Permit Bulletin and an initial comment period held open for 14 days. Comments were collected and a detailed review of environmental documentation completed.

Noticing for SEPA review has been completed as follows:

| | |
|---------------------------|-------------------|
| Application Date: | October 17, 2013 |
| Public Notice (500 feet): | November 14, 2013 |
| Minimum Comment Period: | December 2, 2013 |
| Appeal period ends: | February 27, 2014 |

This Notice of SEPA Threshold Determination was published in the City of Bellevue weekly permit bulletin on February 13, 2014. There is a 14 day appeal period ending on February 27, 2014.

In response to the City's Weekly Permit Bulletin notice of application and notice of intent to issue DNS under the SEPA Optional DNS process only one comment was received from the Muckleshoot Indian Tribe Fisheries Division, although several comments were received in response to distribution of the Plan to other jurisdictions by Utilities Department staff. Additional outreach was also completed by the Utilities Department including City publications and an open house and the Plan was presented to the City of Bellevue Environmental Services Commission for review and comment.

Comments received have been focused on:

- **Aquatic Resources and Habitat:** Construction, operations, and repair can be impactful to aquatic resources. Mitigation of impacts to aquatic resources and habitat from sewer lake lines and linear river crossings should be required. This comment was made by Karen Walter of the Muckleshoot Indian Tribe Fisheries Division and is included as Attachment 2. Mitigation of these impacts is required through application of the City's Critical Areas requirements, Land Use Code section 20.25H.

- **Plan Content:** Comments from other jurisdictions including King County, Issaquah, Redmond, Coal Creek Utility District, Water District #117 (Hilltop Community), Beaux Arts, Hunts Point and Yarrow Point and the Environmental Services Commission on general Plan content. These comments were focused on plan details and were not related to plan impacts. These comments are included as Attachment 3.

IV. Environmental Review

Purpose and Need to which the Proposal is Responding

The Utilities Department is proposing updates to Bellevue's 2002 Wastewater Functional Plan (titled 2002 Wastewater Comprehensive Plan). Bellevue City Code section BCC 22.02.033 requires submittal of an environmental checklist and any relevant supporting materials for any proposal that is not deemed to be exempt from SEPA review as listed in BCC 22.02.032. This report summarizes the environmental consequences that could result from adoption of the proposed Wastewater System Functional Plan consistent with WAC 197-11-060(3).

Major Conclusions, Significant Areas of Controversy, and Uncertainty

The updated Plan includes a summary of actions needed to continue to operate the wastewater system, including repair and replacement of existing infrastructure to meet current use patterns, and improvement to meet increased demand. As operation, repair, and expansion of the system is implemented, decisions will be made as to the type of infrastructure being used, capacity, and location.

The following actions are contemplated with the Plan. These future actions will require construction and activity implementation in accordance with applicable policies and regulations:

- **Existing System Capacity Improvements.** These projects address known or potential system capacity or reliability problems in the existing system.
- **System Capacity Expansion to meet Planned Growth.** These projects and programs address projected system capacity problems due to forecasted future development.
- **Infrastructure Renewal and Replacement.** These projects and programs are intended to reduce the number and severity of system failures due to age.

Issues to be Resolved Including Environmental Choices to be Made Between Alternative Course of Action

One of the major areas of controversy or uncertainty for the system is with the system's lake lines that are located in Lake Washington and Lake Sammamish. A second area of uncertainty is with the wastewater system's crossing of surface water features (wetlands and streams) where potential impacts to aquatic habitat exist. A third is where the system is located within the City's Shoreline in areas subject to the requirements of the Shoreline Management Act and the City Shoreline Master Program. In addition to these it is probable that other areas of conflict will be identified. In each location or with each conflict decisions regarding system design, system location, and construction impacts must balance system needs with protection of sensitive resources. In all circumstances theories of mitigation sequencing must be applied and when impacts are unavoidable adequate mitigation provided.

SEPA Checklist/SEPA Threshold Determination

The applicant has provided a complete SEPA checklist (Attachment 4) supported by detailed analysis for review in demonstrating the no significant adverse environmental impact. Staff have reviewed the Plan, the checklist, and supporting documentation and have determined that, for the proposed non-project action, environmental review indicates no probability of significant adverse environmental impacts provided that applicable city codes and standards are implemented. Therefore, issuance of a Determination of Non-Significance pursuant to WAC 197-11-340 and Bellevue City Code 22.02.034 is appropriate.

Other adverse impacts that are less than significant may be mitigated pursuant Bellevue City Code 22.02.140, RCW 43.21C.060, and WAC 197-11-660.

Mitigation Measures

The lead agency has determined that the requirements for environmental mitigation have been adequately addressed in the development regulations and comprehensive plans adopted under Chapter 36.70A RCW and in other applicable local, state or federal laws or rules, as provided by RCW 42.21C.240 and WAC 197-11-158. As identified in this SEPA analysis, the City's Comprehensive Plan, Land Use Code, Clearing and Grading Code, Stormwater Code, and Transportation Code include provisions designed to avoid and minimize environmental impacts through design. When impacts are unavoidable, specific mitigation is prescribed by applicable codes and designed to offset impacts. Consequently, no specific SEPA mitigation measures are required for this Threshold Determination.

A. Earth

The actions of the Bellevue Utilities Department in implementing the Plan that affect earth include:

- Capital facilities construction which will involve earth displacement for installation and maintenance of publicly owned facilities. These project-specific actions will undergo separate SEPA project review (as needed) and are not included in this analysis.
- The operation of city-owned and privately-owned facilities to control the transport of effluent, preventing it from contaminating the surface water system.
- Measures implemented by city codes for private and public projects that include engineering requirements and design standards for infrastructure construction.
- Measures implemented by city codes for private and public projects that include site management practices requiring erosion control in order to keep pollutants, including sediment, out of the City's surface water system. Such programs are supported in the Plan, but are implemented by the Development Services Department as part of implementation of Clearing and Grading Permit requirements.

The construction, maintenance and operation of wastewater facilities that exceed clearing and grading permit (BCC 23.76) and critical area requirement (LUC 20.25H) thresholds will obtain necessary permit review and measures will be implemented that ensure earth resources are preserved and impacts are avoided or minimized.

Adoption of the Plan will not result in direct or indirect impacts on earth that will result in significant adverse impacts. For the most part, the Plan will result in beneficial impacts on earth.

B. Water

The actions of the Utilities Department in implementing the Plan that affect water include:

- Control of impervious surface and preservation of native forest cover, which influences the amount of runoff versus infiltration, addressed in policies that support LID.
- Source controls, which are measures that keep pollutants out of the stormwater runoff (for example, erosion control and spill containment). In general, source controls are specific to a given site while preventative measures are applied across the landscape.
- Head-of-the-pipe treatment, such as oil/water separators and sedimentation ponds that reduce the rate of discharge and remove pollutants from runoff before they enter the main stormwater conveyance system. Treatment is different from preventative measures; prevention avoids water quality problems.
- Preventative measures, which are limitations on the presence of such substances, and include reduction in use or prohibition of polluting materials, such as lead in gasoline and copper in brake pads or the reduction in cleared area from land development.
- There are a wide variety of federal, state and local programs that address water resources and water quality. The federal and state Clean Water Acts (CWA) include major policy direction for water quality. The City's NPDES municipal stormwater permit provides a mandate to implement policies of the CWA and also implements capital projects and other programs in addition to the mandates to improve surface water quality.

The construction, maintenance and operation of wastewater facilities that exceed clearing and grading permit (BCC 23.76) and critical area requirement (LUC 20.25H) thresholds will obtain necessary permit review and measures will be implemented that ensure water resources are preserved and impacts are avoided or minimized.

Adoption of the Plan will not result in direct or indirect impacts on water that will result in significant adverse impacts. In fact, the Plan will result in beneficial impacts on water through transport of effluent for treatment.

C. Plants and Vegetation

The actions of the Bellevue Utilities Department in implementing the Plan that affect plants include:

- Capital facilities construction which will involve earth displacement for installation of publicly owned facilities. These project-specific actions will undergo separate SEPA project review and are not included in this analysis. The restoration of disturbance associated with capital facility construction is required by Bellevue's clearing and grading code. If the work is within a regulated critical area, then restoration is required by the Land Use Code.
- Measures implemented by city codes for private and public projects that include preservation of native vegetation through LID in order to preserve more natural hydrologic patterns.

The construction, maintenance and operation of wastewater facilities and programs that exceed clearing and grading permit (BCC 23.76) and critical area requirement (LUC 20.25H) thresholds will obtain necessary permit review and measures will be implemented that ensure plant resources are preserved or restored.

Adoption of the Plan will not result in direct or indirect impacts on plants that will result in

significant adverse impacts. For the most part, the Plan will result in beneficial impacts on plants through proper planning and desing.

D. Animals

A major effect of wastewater management is on fish and other aquatic species. Potential adverse impacts of urban effluent are largely related to water quality. Enhanced wildlife habitat is one of the primary reasons for the Plan. The overall, cumulative impact of the Plan would be to reduce pollutant discharges to water or land (by reducing the frequency and severity of sewer overflows) and improved habitat overall. Impacts abated by the Plan include:

- Nutrients can result in excessive or accelerated growth of vegetation, such as algae. When algae die, they absorbs oxygen from the water during decomposition. This harms fish.
- Some hydrocarbon compounds in effluent are toxic to aquatic organisms at low concentrations.
- Metals are toxic to aquatic organisms and can bioaccumulate in fish.
- Synthetic organic compounds (adhesives, cleaners, sealants, solvents, etc.) cause harm to aquatic life.
- Maintenance practices (i.e. Lake Lines) may interrupt natural, habitat forming processes.

Programs in the Plan and existing policies that address these impacts include:

- Implementation of LID to preserve more natural hydrology
- Source reduction practices such as erosion control measures on new construction
- Operation and maintenance of city facilities and inspection of private facilities to implement maintenance standards and ensure proper system functions.
- Public education and outreach
- Public involvement and participation
- Capital projects
- Spill control and water quality response

Adoption of the Plan will not result in direct or indirect impacts on animals that will result in significant adverse impacts. In fact, the Plan will likely result in beneficial impacts through the conveyance of effluent for treatment.

E. Energy and Natural Resources

After completion of all recommended projects, the Plan would require energy and natural resources primarily to meet operations and maintenance needs. Ongoing operations & maintenance activities use fossil fuels in vehicles to transport maintenance crews and equipment to system infrastructure. Spare parts and/or replacement piping are used when needed for maintenance. Pump stations use electricity.

Operations & maintenance vehicles are well-maintained at Bellevue's Service Center to avoid leaks and optimize fuel economy. Maintenance crews only drive where needed to perform maintenance activities. Pumps are appropriately sized to provide reasonable efficiency in the pertinent operating conditions. The recommended pump station rehabilitations would improve efficiency to conserve energy.

Bellevue's economic incentive is to obtain the required construction quality for the minimum price. The market response to this economic incentive is to minimize the

resources used to build and maintain wastewater facilities. During design, engineers would optimize pump curves, earthwork quantities, concrete volumes and pipe sizes/lengths to meet the reliability and performance criteria with reasonable cost. During construction, the public bidding procedure requires the low-bid contractor to conserve resources as much as reasonable in order to earn a profit on the project(s).

Adoption of the Plan will not result in direct or indirect impacts on energy and natural resources that will result in significant adverse impacts.

F. Environmental Health

The overall, cumulative effects of the Plan would likely be decreased environmental hazards, due to reduced frequency and severity of sewer overflows and pollutant discharges. Sewage is the primary hazardous material associated with Bellevue's wastewater system. In general, no hazardous chemicals are kept at Bellevue's sewer facilities, except for diesel fuel for pump station on-site generators, and potassium permanganate and/or activated carbon for odor control systems at 2-3 lift station facilities. The Plan would add 3 diesel generators and may add new or upgraded odor control facilities (at replaced pump stations). For ongoing (permanent) maintenance activities, chemicals would be stored with double-containment where required. OSHA rules would be followed, and MSDS sheets and other pertinent information would be provided.

Some temporary environmental health hazards and risks could occur during specific projects, commensurate with typical construction-related hazards. These would include exposure to construction chemicals (epoxies, paints, concrete admixtures, curing compounds, diesel fuel and fumes, etc.) and common risks associated with construction. Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided. In general, the contractor for each project would be required to implement appropriate safety measures, develop and execute spill response plans in case of accidental discharge, and follow all applicable regulations and permit conditions.

Adoption of the Plan will not result in direct or indirect impacts on environmental health that will result in significant adverse impacts.

G. Land Use

The City of Bellevue's policies require the Utilities Department to support proposed land use and the City's Comprehensive Plan. The Plan is compatible with the City's Comprehensive Plan, as required by the City Council. See Comprehensive Plan policies UT-4 and ED-21.

Adoption of the Plan will not result in direct or indirect impacts on land use that will result in significant adverse impacts.

H. Transportation

Impacts on transportation from utility facilities are largely limited to transportation of construction materials and transportation related to routine maintenance of facilities and inspection. These activities generate relatively few trips compared to peak hour commuting.

Adoption of the Plan will not result in direct or indirect impacts on transportation that will result in significant adverse impacts.

I. Public Services and Utilities

The City has a sound financial base that can finance the recommended capital improvements. Bond ratings from Moody's Investors Service and Standard and Poor's indicate a high level of confidence in the ability of the City's utilities to repay debt obligations, if needed. The sewer utility currently has no outstanding debt.

Adoption of the Plan will not result in direct or indirect impacts on public services that will result in significant adverse impacts.

City of Bellevue Submittal Requirements

Attachment 4
SEPA Checklist **27a**

ENVIRONMENTAL CHECKLIST

10/17/13

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

BACKGROUND INFORMATION

Property Owner: N/A
 Proponent: City of Bellevue Utilities Department
 Contact Person: Douglas Lane, PE
 Address: Utilities Department
 City of Bellevue
 PO Box 90012
 Bellevue, WA 98009-9012
 Phone: (425) 452-6865

City of Bellevue File Number 13-131390-LM
 11/14/2013
 2013 Wastewater System Plan
 Program SEPA Checklist
 SEPA Checklist Reviewed By:
 David Pyle, Land Use Planner
 425-452-2973 - dpyle@bellevuewa.gov

Proposal Title: City of Bellevue 2013 Wastewater System Plan

Proposal Location: N/A

Give an accurate, brief description of the proposal's scope and nature:

1. General description:

The City of Bellevue 2013 Wastewater System Plan (the Plan) is an update to the City of Bellevue's 2002 Comprehensive Wastewater Plan, as required by Washington Administrative Code WAC 173-240-050. The general purpose of the Plan is to evaluate the existing wastewater system, identify current and future needs, and develop a plan to meet those needs. Additionally, this plan is intended to:

- Disseminate information and develop consensus among stakeholders
- Document sewer utility-specific policies
- Serve as a reference document for Utility staff and for partner utilities
- Comply with, and demonstrate conformance with applicable regulations

Received
OCT 17 2013

Permit Processing
City of Bellevue

As part of planning to meet current and future needs, the Plan recommends specific programs and projects. The limited, generalized information that is currently known about these projects and programs is presented below. More detailed information would become available for each project during preliminary design studies, and provided in separate SEPA documentation for each specific project.

Recommended sewer system improvements fall into three general categories:

- **Existing System Capacity Improvements.** These projects address known or potential system capacity or reliability problems in the existing system.
- **System Capacity Expansion to meet Planned Growth.** These projects and programs address projected system capacity problems due to forecasted future development.
- **Infrastructure Renewal and Replacement.** These projects and programs are intended to reduce the number and severity of system failures due to age.

Within each of these categories, some projects are recommendations that are currently funded in the City's Capital Investment Program (CIP), while others are proposed new recommendations to address emerging issues. Specific projects are listed below, with information regarding environmental and community impacts provided in Table 1:

- *Recommended Improvements to address capacity concerns in the existing system:*
 - *Flow Monitoring Due to Model Results (New)*
 - *I&I Investigations (New)*
 - *Add On-site Power at Sewer Pump Stations (CIP Plan No. S-59)*
 - *Capacity Projects if I&I Investigation does not Resolve Capacity Concerns (New)*
 - *Newport Capacity Improvements (New Project)*
- *Recommended System Capacity Expansion to meet Planned Growth:*
 - *Sewer Service Extensions Program (CIP Plan No. S-30)*
 - *East CBD Trunk Capacity Improvements (CIP Plan No. S-52)*
 - *Bellefield Pump Station Capacity Improvements, Phase II (CIP Plan No. S-53)*
 - *Wilburton Sewer Capacity Upgrade (CIP Plan No. S-60)*
 - *Midlakes Pump Station Capacity Improvement (CIP Plan No. S-61)*
 - *Utility Facilities for 120th Ave NE Segment 2 (CIP Plan No. S-63)*
- *Recommended Infrastructure Renewal and Replacement:*
 - *Downtown Park Sewer Replacement (Proposed as part of CIP S-66)*
 - *Asbestos Cement Force Main Replacement Program (Proposed New CIP)*
 - *Sewage Pump Station Improvements (CIP Plan No. S-16)*
 - *Sewer System Trunk Rehabilitation Program (CIP Plan No. S-24)*
 - *Minor Capital Improvement Projects (CIP Plan No. S-32)*
 - *Sewer Lake Line Replacement Program (CIP Plan No. S-58)*
 - *Sewer System Pipeline Replacement (CIP Plan No. S-66)*

Table 1 – Specific Projects/Programs and Known Impacts*

| Project or Program | Environmental Impacts of Recommended Project/Program* | Environmental Impacts if No Action Taken | Other Alternatives <u>Not</u> Recommended |
|---|--|---|--|
| Flow Monitoring Due to Model Results (New) [See Figure 1 for specific locations] | None | Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) during heavy rainfall events; Potential to limit development/growth due to lack of available capacity (violation of City policy) | Perform capacity improvements without verifying model predictions (community impacts; large expense; ratepayer funds could be spent on projects that may not be necessary) |
| I&I Investigations (New) [See Figure 1 for specific locations] | Momentary discharge of smoke from sewers | Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) during heavy rainfall events; Higher King County wastewater treatment costs to utility rate payers (due to higher flow); Potential to limit development/ growth due to lack of available capacity (violation of City policy) | Perform capacity improvements without verifying model predictions (community impacts; large expense; ratepayer funds could be spent on projects that may not be necessary) |
| Newport I&I Investigations and Capacity Improvements (New) [See Figure 1 for location] | Short-term construction-related impacts (mitigated by BMPs) in existing roadway and/or pipeline easements during construction. No impacts would be anticipated after construction is complete. | Increased frequency and severity of sewage overflows from location of known discharge (pollution of water and land; potential private property damage and claims; violation of applicable laws) | Recommendation includes I&I investigations prior to capacity improvements. If capacity improvements are implemented without I&I investigations, then an opportunity to save costs and reduce the scope of the project could be missed. |

Impacts shown are based on limited, planning-level information. Environmental studies, reports, and permits would be developed during the preliminary design phase of each project. More detailed information would be provided in a project-specific SEPA review at that time.

Table 1 – Specific Projects/Programs and Known Impacts*

| Project or Program | Environmental Impacts of Recommended Project/Program* | Environmental Impacts if No Action Taken | Other Alternatives Not Recommended |
|--|---|--|---|
| <p>Add On-site Power at Sewer Pump Stations (CIP Plan No. S-59)</p> | <p>Brief periods of diesel emissions and noise during periodic maintenance and testing. Continuous diesel emissions and noise during power outages. Potentially marginal increase in stormwater runoff (mitigated by BMPs as required by code) due to construction of small generator building.</p> | <p>Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) and unplanned shutoff of sewer service to upstream customers during power outages. City resources that could provide critical services elsewhere during emergency conditions would need to continue navigating downed trees, snow/ice, etc to bring portable generator to existing remote sites.</p> | <p>No other feasible alternatives (add on-site power or don't)</p> |
| <p>Sewer Service Extensions Program (CIP Plan No. S-30)</p> | <p>Short-term construction-related impacts (mitigated by BMPs) in existing roads and/or new pipeline easements during construction. No impacts would be anticipated after construction is complete.</p> | <p>Potential to limit development/growth due to lack of available capacity (violation of City policy and Growth Management Act); potential King County Dept of Public Health violations due to septic system failures (if homeowners cannot fully fund the extensions and delay connection)</p> | <p>Require property owners to fully-fund all sewer extensions (rather than the City) in all areas (similar to existing sub-area policy for Bridle Trails only), and allow property owner to then collect latecomer fees from future connections by other homeowners or developers; this makes connection to sewer unaffordable except to wealthy developers</p> |
| <p>East CBD Trunk Capacity Improvements (CIP Plan No. S-52) [This project accommodates downtown development] [See Figure 2 for location]</p> | <p>Short-term construction-related impacts (mitigated by BMPs) to increase pipe size in existing 112th Ave SE ROW during construction. No impacts would be anticipated after construction is complete.</p> | <p>Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) during heavy rainfall events; Potential to limit development/growth due to lack of available capacity (violation of City policy)</p> | <p>No other feasible alternatives.</p> |

Impacts shown are based on limited, planning-level information. Environmental studies, reports, and permits would be developed during the preliminary design phase of each project. More detailed information would be provided in a project-specific SEPA review at that time.

Table 1 – Specific Projects/Programs and Known Impacts*

| Project or Program | Environmental Impacts of Recommended Project/Program* | Environmental Impacts if No Action Taken | Other Alternatives <u>Not</u> Recommended |
|---|---|---|---|
| <p>Bellefield Pump Station Capacity Improvements, Phase II (CIP Plan No. S-53) [This project accommodates downtown development] [See Figure 2 for location]</p> | <p>Short-term construction-related impacts (mitigated by BMPs) to replace existing pump station at existing site near Mercer Slough during construction. Nearby wetlands would be protected in accordance with City code. Significant pumping of high groundwater may be required to dewater excavations during construction. Impacts after construction would be limited to (1) on-site generator noise and emissions during periodic maintenance and during power outages, and (2) marginal increase in stormwater runoff, mitigated by new stormwater BMPs per current code.</p> | <p>Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) during heavy rainfall events; Potential to limit development/growth downtown due to lack of available capacity (violation of City policy)</p> | <p>Build the needed additional capacity elsewhere, by finding a neighborhood amenable to hosting construction of a new sewage pump station, and acquiring new land (this is not considered politically feasible nor technically efficient, and would be significantly more expensive)</p> |
| <p>Wilburton Sewer Capacity Upgrade (CIP Plan No. S-60) [This project accommodates Wilburton rezoning and development] [See Figure 2 for location]</p> | <p>Short-term construction-related impacts (mitigated by BMPs) to increase pipe size in existing 114th Ave SE ROW during construction. No impacts would be anticipated after construction is complete.</p> | <p>Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) during heavy rainfall events; Potential to limit development/growth due to lack of available capacity (violation of City policy)</p> | <p>No other feasible alternatives.</p> |

Impacts shown are based on limited, planning-level information. Environmental studies, reports, and permits would be developed during the preliminary design phase of each project. More detailed information would be provided in a project-specific SEPA review at that time.

Table 1 – Specific Projects/Programs and Known Impacts*

| Project or Program | Environmental Impacts of Recommended Project/Program* | Environmental Impacts if No Action Taken | Other Alternatives <u>Not</u> Recommended |
|--|--|---|---|
| <p>Midlakes Pump Station Capacity Improvement (CIP Plan No. S-61)</p> <p>[This project accommodates Bel-Red rezoning and development]</p> <p>[See Figure 2 for location]</p> | <p>Short-term construction-related impacts (mitigated by BMPs) to replace existing pump station at existing site during construction. After construction, impacts would include continued on-site generator noise and emissions (similar to the existing site) during periodic maintenance and during power outages, and (2) stormwater runoff mitigated by new stormwater BMPs per current code (compared to the existing, fully-paved site).</p> | <p>Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) during heavy rainfall events; Potential to limit development/growth along Bel-Red corridor due to lack of available capacity (violation of City policy)</p> | <p>Build the needed additional capacity elsewhere, by finding a neighborhood amenable to hosting construction of a new sewage pump station, and acquiring new land (this is not considered politically feasible nor technically efficient, and would be significantly more expensive)</p> |
| <p>Utility Facilities for 120th Ave NE Segment 2 (CIP Plan No. S-63)</p> <p>[This project accommodates Bel-Red rezoning and development]</p> | <p>Short-term construction-related impacts (mitigated by BMPs) to increase pipe size in existing 120th Ave SE ROW during construction. No impacts would be anticipated after construction is complete.</p> | <p>Potential for sewage overflows (pollution of water and land; potential private property damage and claims; violation of applicable laws) during heavy rainfall events; Potential to limit development/growth due to lack of available capacity (violation of City policy)</p> | <p>No other feasible alternatives.</p> |
| <p>Downtown Park Sewer Replacement (Proposed as part of CIP S-66)</p> | <p>Short-term construction-related impacts (mitigated by BMPs) and some loss of park use along existing easement in the middle of Bellevue Downtown Park during construction. No impacts would be anticipated after construction is complete.</p> | <p>Potential for pipe failure due to age (unplanned shutoff of all sewer service to Bellevue Square Mall; sewer backups/overflows in Bellevue Square Mall); Potential to delay the proposed Bellevue Square expansion due to lack of available capacity (violation of City policy)</p> | <p>Abandon pipe and route all flows to Bellevue Way; this would disrupt sewer service to existing Bellevue Square tenants and require downstream improvements in Bellevue Way.</p> |

Impacts shown are based on limited, planning-level information. Environmental studies, reports, and permits would be developed during the preliminary design phase of each project. More detailed information would be provided in a project-specific SEPA review at that time.

Table 1 – Specific Projects/Programs and Known Impacts*

| Project or Program | Environmental Impacts of Recommended Project/Program* | Environmental Impacts if No Action Taken | Other Alternatives Not Recommended |
|---|---|--|---|
| Asbestos Cement Force Main Replacement Program (Proposed New CIP) | Short-term construction-related impacts (mitigated by BMPs) to rehabilitate or replace existing pipe roadways and/or existing easements. No impacts would be anticipated after construction is complete. | Potential for pressurized sewer pipe failure and sewer overflow due to age (unplanned shutoff of sewer service to upstream customers; pollution of water and land; potential private property damage and claims; violation of applicable laws) | Keep AC force mains on the same priority as gravity pipelines, despite greater consequence of failure, and delay inspection until failure. |
| Sewage Pump Station Improvements (CIP Plan No. S-16) | Short-term construction-related impacts (mitigated by BMPs) to rehabilitate or replace pumps and other components at existing pump station sites. No new impacts would be anticipated after construction is complete. | Potential for increased future maintenance; potential for sewer pump station failure and sewer overflow due to age (unplanned shutoff of sewer service to upstream customers; pollution of water and land; potential private property damage and claims; violation of applicable laws) | Increase funding for maintenance as equipment ages and hire additional staff. |
| Sewer System Trunk Rehabilitation Program (CIP Plan No. S-24) | Short-term construction-related impacts (mitigated by BMPs) to rehabilitate pipe in existing roadway ROW and/or existing easements during construction. No impacts would be anticipated after construction is complete. | Potential for sewer pipe failure due to age (unplanned shutoff of sewer service to upstream customers; sewer backups/overflows into homes; potential private property damage and claims; violation of applicable laws) | Pipe replacement as part of CIP Plan No. S-66 already has been or would also be evaluated (instead of rehabilitation); where rehabilitation is determined to be the more favorable alternative, pipe segments would be recommended for CIP Plan No. S-24. |
| Minor Capital Improvement Projects (CIP Plan No. S-32) | Unknown | Potential impacts vary depending on type of project. | Discontinue this existing program and prevent the utility from making important improvements as needs arise. |

Impacts shown are based on limited, planning-level information. Environmental studies, reports, and permits would be developed during the preliminary design phase of each project. More detailed information would be provided in a project-specific SEPA review at that time.

Table 1 – Specific Projects/Programs and Known Impacts*

| Project or Program | Environmental Impacts of Recommended Project/Program* | Environmental Impacts if No Action Taken | Other Alternatives <u>Not</u> Recommended |
|---|---|---|--|
| Sewer Lake Line Replacement Program (CIP Plan No. S-58) | Impacts vary; The Plan recommends further study prior to making recommendations. Potential impacts (depending on which alternative is selected) are temporary (during construction) but could include loss of recreational uses; significant disturbance to private waterfront property; in-lake construction and lake bed disturbance; etc | Increased frequency and severity of sewage overflows from locations of known illicit discharge (pollution of water and land; potential private property damage and claims; violation of applicable laws), both directly to Lake Washington and upstream in Medina, Hunts Point and Yarrow Point (due to lack of lake line capacity) | All alternatives are still being considered. No recommendation is made by the Plan, except to continue evaluations. |
| Sewer System Pipeline Replacement (CIP Plan No. S-66) | Short-term construction-related impacts (mitigated by BMPs) to replace pipe in existing roadway ROW and/or existing easements during construction. The Downtown Park sewer replacement would temporarily impact park recreation. No impacts would be anticipated after construction is complete. | Potential for sewer pipe failure due to age (unplanned shutoff of sewer service to upstream customers; sewer backups/overflows into homes; potential private property damage and claims; violation of applicable laws) | Pipe rehabilitation as part of CIP Plan No. S-24 already has been or would also be evaluated (instead of replacement); where replacement is determined to be the more favorable alternative, pipe segments would be recommended for CIP Plan No. S-66. |

Impacts shown are based on limited, planning-level information. Environmental studies, reports, and permits would be developed during the preliminary design phase of each project. More detailed information would be provided in a project-specific SEPA review at that time.

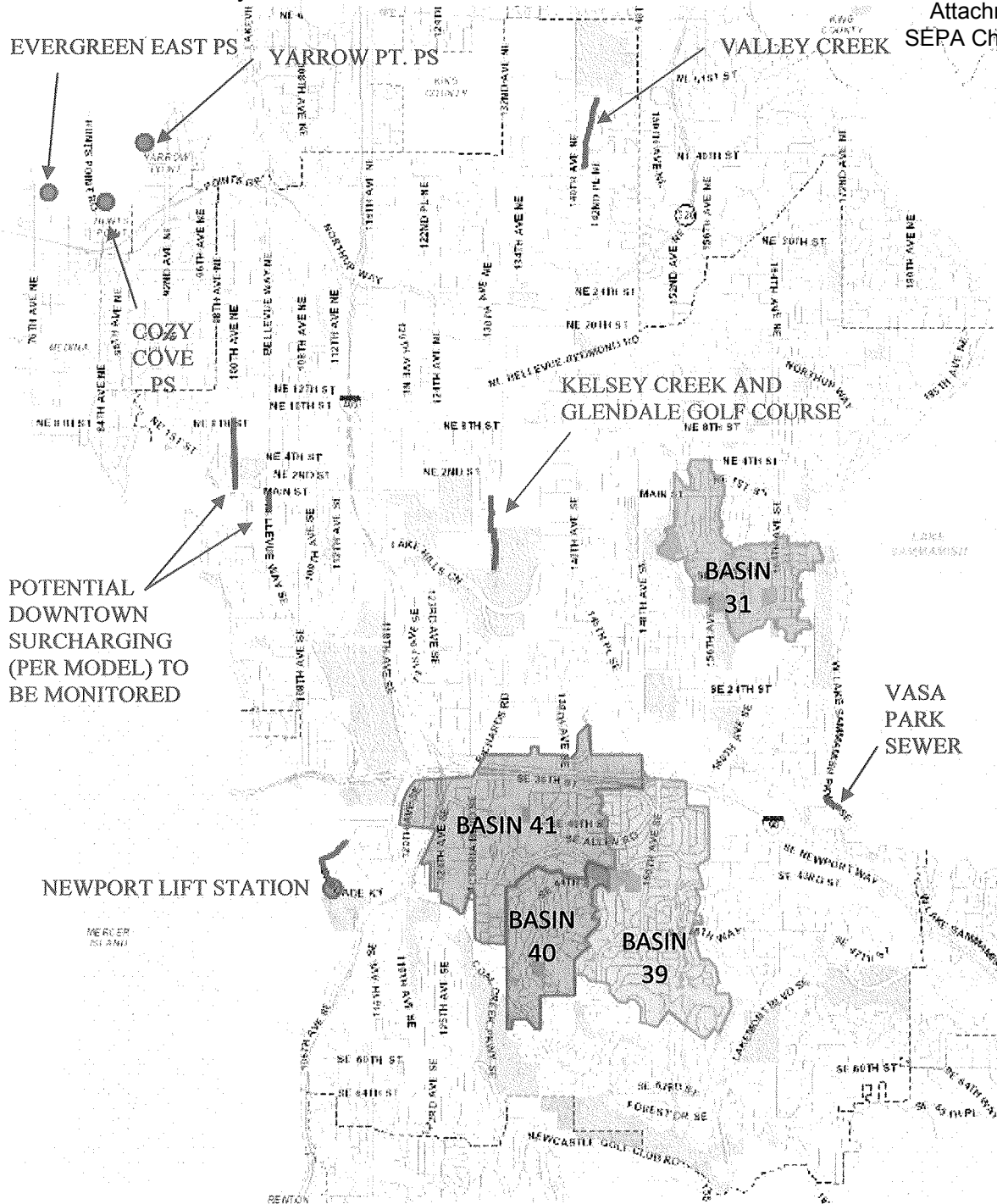


Figure 1: Recommended Locations for Flow Monitoring and I&I Investigation

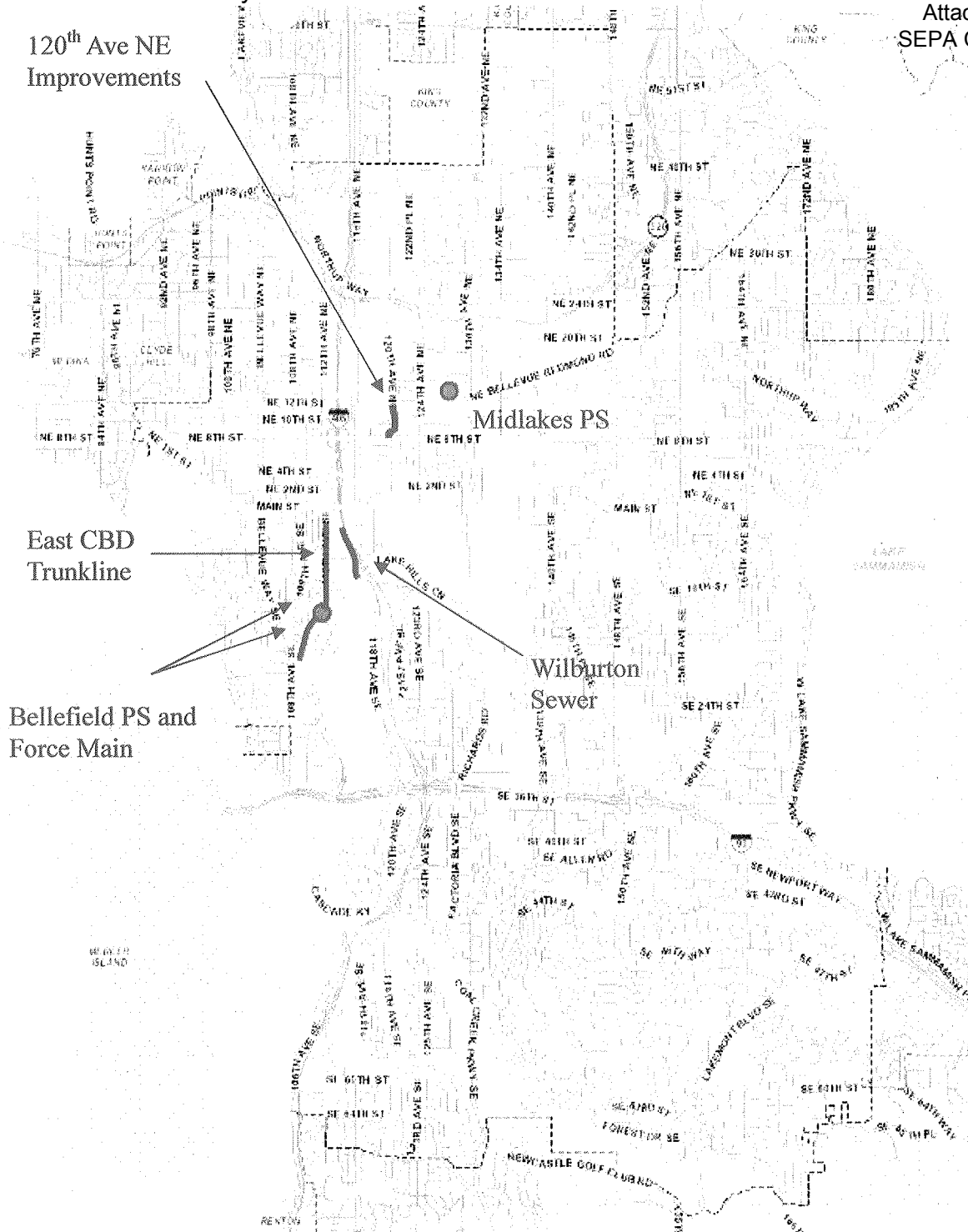


Figure 2: Recommended Capacity Improvements

2. Acreage of site: *Varies. Where applicable, acreage would be provided for each project-specific SEPA.*
3. Number of dwelling units/buildings to be demolished: *0 dwelling units would be anticipated to be demolished. A small number (0-3) of City-owned pump station buildings may be replaced.*
4. Number of dwelling units/buildings to be constructed: *3 small buildings may be constructed for on-site power generation equipment at pump station sites. 2-3 new vaults or buildings may be constructed to replace existing pump stations.*
5. Square footage of buildings to be demolished: *Unknown (would be provided in project-specific SEPA)*
6. Square footage of buildings to be constructed: *Unknown (would be provided in project-specific SEPA)*

7. Quantity of earth movement (in cubic yards): *Unknown (would be provided in project-specific SEPA)*
8. Proposed land use: *The Plan is based on existing zoning and comprehensive land use.*
9. Design features, including building height, number of stories and proposed exterior materials: *Most wastewater conveyance facilities are and would be below grade. Some pump stations and/or on-site generator buildings would be partially or fully above grade due to access or code requirements. Where applicable, design features would be provided in the project-specific SEPA for each project.*
10. Other:

Estimated date of completion of the proposal or timing of phasing:

Timing for the various recommended projects varies, but would be consistent with the City's existing and future CIPs.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Yes. Future recommended activity is described in Chapter 9 of the Plan and in the City's sewer CIP. Although other specific areas of expansion or timing cannot be precisely identified, in general the system would expand (1) for additional sewer capacity to accommodate future growth as required by the City's Comprehensive Plan policies, and (2) as requested to extend service to non-sewered parcels (existing septic or vacant lots).

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Geotechnical reports, wetlands evaluations, and other environmental information will be prepared soon for Bellefield Pump Station, Meydenbauer Bay Lake Lines, Midlakes Pump Station, and other current CIP projects, but are not yet available. These will be available as part of the project-specific SEPA process for all projects.

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

Permit applications are not yet available, but will be available as part of the project-specific SEPA process for all projects.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

Future government approvals will be required for the following projects. The type of approvals will generally be permits related to construction work such as right-of-way use and clearing and grading permits. Some projects in environmentally sensitive areas will require additional permits such as critical areas, shoreline substantial development, hydraulic permit approvals, etc.).

- Sewer Service Extensions Program (CIP Plan No. S-30)
- East CBD Trunk Capacity Improvements (CIP Plan No. S-52)
- Bellefield Pump Station Capacity Improvements, Phase II (CIP Plan No. S-53)
- Wilburton Sewer Capacity Upgrade (CIP Plan No. S-60)
- Midlakes Pump Station Capacity Improvement (CIP Plan No. S-61)
- Utility Facilities for 120th Ave NE Segment 2 (CIP Plan No. S-63)
- Downtown Park Sewer Replacement (Proposed as part of CIP S-66)
- Asbestos Cement Force Main Replacement Program (Proposed New CIP)
- Sewage Pump Station Improvements (CIP Plan No. S-16)
- Sewer System Trunk Rehabilitation Program (CIP Plan No. S-24)
- Minor Capital Improvement Projects (CIP Plan No. S-32)
- Sewer Lake Line Replacement Program (CIP Plan No. S-58)
- Sewer System Pipeline Replacement (CIP Plan No. S-66)

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone) Map of existing and proposed zoning

N/A. Projects would support current zoning per the City of Bellevue Comprehensive Plan.

- Preliminary Plat or Planned Unit Development
Preliminary plat map

N/A. No plats or planned unit developments are proposed as part of the Plan.

- Clearing & Grading Permit
Plan of existing and proposed grading
Development plans

Clearing & grading permits are not yet available and would be completed for each applicable project. Project-specific SEPA documents with this information will be prepared when appropriate.

- Building Permit (or Design Review)
Site plan
Clearing & grading plan.

Building permits are not yet available and would be completed for each applicable project. Project-specific SEPA documents with this information will be prepared when appropriate.

- Shoreline Management Permit
Site plan

Shoreline management permits are not yet available and would be completed for each applicable project. Project-specific SEPA documents with this information will be prepared when appropriate.

A. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site: Flat Rolling Hilly Steep slopes Mountains Other

- b. What is the steepest slope on the site (approximate percent slope)?

Unknown (would be provided in project-specific SEPA)

- c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

A variety of soils are found throughout Bellevue's wastewater service area. Information on specific sites would be gathered as part of early project planning, and would be provided in project-specific SEPA documentation.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Unknown (would be provided in project-specific SEPA)

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Unknown (would be provided in project-specific SEPA)

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. Attachment 4
SEPA Checklist

Yes. Erosion potential would generally be minimal for maintenance activities. For sewer pipeline construction in road rights-of-way, ground disturbance is typically in paved areas with established stormwater controls, where erosion potential would be limited. Specific projects may have erosion potential, however (project-specific SEPA would provide additional detail not known at this time).

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

N/A. The Plan applies to the entire sewer service area. Where applicable, information would be provided in project-specific SEPA documentation for specific project sites.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

In general, each project would (1) implement stormwater and erosion control best management practices (BMPs), (2) restrict wet-season excavation work, (3) include spill response plans in case of accidental discharge, and (4) follow all applicable regulations and permit conditions.

2. AIR

- a. What types of emissions to the air would result from the proposal (i.e. dust, automobile odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Permanent Impacts: *Some increased diesel emissions (to air) would be likely as a result of on-site power at sewage pump stations. These emissions would only occur during periodic maintenance and testing, and continuously during electrical power outages.*

Temporary Impacts: *Some temporary increases in air pollution could occur during construction projects. Air pollution could result from diesel emissions from construction equipment. Also, if smoke testing is used for I&I investigations, smoke will be emitted as part of testing (brief and local).*

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

- c. Proposed measures to reduce or control emissions or other impacts to the air, if any:

None. Impacts to air are generally minimal or temporary, and would only be created with the goal of reducing pollution overall (reducing water pollution in particular).

3. WATER

- a. Surface

- (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. The City's sewer service area borders Lake Washington and Lake Sammamish. The service area also includes Mercer Slough, approximately 82 miles of streams within the Bellevue city limits alone (not including neighboring cities in Bellevue's sewer service area), and 3 small lakes (Larsen Lake, Lake Bellevue, and Phantom Lake).

- (2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If Yes, please describe and attach available plans. Attachments #1
SEPA Checklist

Yes. Most work proposed in the Plan would not be within 200-feet of water bodies, however some significant projects would be. The Bellefield Pump Station Replacement would be within 200-feet of Mercer Slough. The Meydenbauer Lake Lines replacement project would be on the bank of Lake Washington. The lake line evaluations would be along the shorelines of both Lake Washington and Lake Sammamish.

- (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Unknown (would be provided in project-specific SEPA)

- (4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Most sewage facilities do not require surface water withdrawals, as the primary source of sewage flows is domestic water use. Sewer facilities are typically located in public right-of-way or on City-owned property or easements, and are designed not to interact with surface water.

However, the 10 flush stations located on the shores of Lake Washington and Lake Sammamish do withdrawal lake water on a daily basis to flush the downstream lake lines, as part of normal operations. Flush stations each operate for approximately one hour each night. Total daily withdrawal is estimated to be 115,000 gallons from Lake Washington (Flush Stations #1 – #8) and 41,000 gallons from Lake Sammamish (Flush Stations #9, #10). Additional information is provided in Table 5-3.

The only proposed capital improvement project with a foreseeable need for surface water withdrawals or diversions may be the replacement of lake lines. Depending on which alternative is selected, removal and/or replacement of the lake lines could involve the use of cofferdams, dewatering pumps, and or other temporary measures to facilitate pipeline inspection, removal and/or installation.

- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

The vast majority of sewer infrastructure is not close to the 100-year floodplain, however, two recommended projects (Bellefield Pump Station Capacity Improvements, Phase II and Kelsey Creek/Glendale Golf Course Flow Monitoring) are in close proximity to the floodplain. Project specific SEPA documents for Bellefield Pump Station will detail how the flood plain proximity is addressed for the replacement facility. For sewer mains in Kelsey Creek and Glendale Golf Course, only flow monitoring (installing meters inside existing manholes) is proposed at this time, so no construction in the flood plain is anticipated there.

- (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The overall, cumulative impact of the Plan would be decreased pollutant discharges to water (by reducing the frequency and severity of sewer overflows). Some temporary discharges to water could result from stormwater runoff or inadvertent spills at construction sites (would be mitigated by BMPs and discussed in project-specific SEPA).

b. Ground

- (1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

No groundwater will be withdrawn. Only groundwater at very shallow depths enters the wastewater system, and only inadvertently through infiltration.

Wastewater will be discharged to ground water primarily through septic tanks, as dictated by the King County Department of Public Health. The potential for wastewater to be discharged to groundwater from the sewer system is very low, since this would only occur inadvertently through leakage, particularly from pressurized piping. The system is not pressurized, except for very short force mains (shown in Figure 5-2).

- (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The City of Bellevue's sewer service area includes approximately x,xxx existing homes that are currently served by septic systems (shown on Figure 3-1). The type of waste is domestic sewage. The number of homes served by septic systems is expected to decline over time, as older septic systems fail and the sewer system is extended.

c. Water Runoff (Including storm water)

- (1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Most sewer infrastructure is buried, and does not increase runoff. The plan proposes minimal above-grade infrastructure (generally buildings to house pumps or generator equipment, and association driveways and parking). Further detail is not known at this time. Any proposed projects would be constructed in conformance with current stormwater code requirements, and would undergo a project-specific SEPA review.

- (2) Could waste materials enter ground or surface waters? If so, generally describe.

Yes. Stormwater from any developed site could carry some pollutants. Sewers and wet wells are covered, and no chemical or other pollutants would be exposed to the weather, so site runoff would be consistent with other non-pollution generating impervious surfaces such as residential or commercial properties.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided. In general, each project would (1) implement stormwater and erosion control best management practices (BMPs), (2) restrict wet-season excavation work, (3) limit construction working times to within restricted hours and days to limit noise impacts, (4) include spill response plans in case of accidental discharge, and (5) follow all applicable regulations and permit conditions.

4. Plants

a. Check or circle types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

A wide range of plants are found in the city.

b. What kind and amount of vegetation will be removed or altered?

The extent to which vegetation could potentially be removed or altered is not known at this time. In general, most existing and potential sewer utility sites are already developed, and would require minimal vegetation removal.

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided.

c. List threatened or endangered species known to be on or near the site.

No endangered plants are known to be found in the city.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Proposed vegetative restoration would be commensurate with vegetation removal, which is not known at this time. In general, vegetation removal would be minimized wherever feasible, and restoration would include similar plants where possible and appropriate.

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided.

5. ANIMALS

- a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

- Birds: hawk, heron, eagle, songbirds, other:
- Mammals: deer, bear, elk, beaver, other:
- Fish: bass, salmon, trout, herring, shellfish, other:

Most or all of the species listed are found in the City, except bear which only occasionally enter the City from wildlands outside of the City.

- b. List any threatened or endangered species known to be on or near the site.

Chinook Salmon and cutthroat trout are found in the City.

- c. Is the site part of a migration route? If so, explain.

Migration routes of anadromous fish and wildfowl are within the City.

- d. Proposed measures to preserve or enhance wildlife, if any:

Enhanced wildlife habitat is one of the primary reasons for the Plan. The overall, cumulative impact of the Plan would be to reduce pollutant discharges to water or land (by reducing the frequency and severity of sewer overflows) and improved habitat overall.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy need? Describe whether it will be used for heating, manufacturing, etc.

After completion of all recommended projects, the Plan would require energy and natural resources primarily to meet operations and maintenance needs. Ongoing operations & maintenance activities use fossil fuels in vehicles to transport maintenance crews and equipment to system infrastructure. Spare parts and/or replacement piping are used when needed for maintenance. Pump stations use electricity.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

- c. What kinds of energy conservation features are included in the plans of the proposal? List other proposed measures to reduce or control energy impacts, if any:

Permanent Impacts (Ongoing Maintenance): *Operations & maintenance vehicles are well-maintained at Bellevue's Service Center to avoid leaks and optimize fuel economy. Maintenance crews only drive where needed to perform maintenance activities. Pumps are appropriately sized to provide reasonable efficiency in the pertinent operating conditions. The recommended pump station rehabilitations would improve efficiency to conserve energy.*

Temporary Impacts (Construction Projects): *Bellevue's economic incentive is to obtain the required construction quality for the minimum price. The market response to this economic incentive is to minimize the resources used to build and maintain wastewater facilities. During design, engineers would optimize pump curves, earthwork quantities, concrete volumes and pipe sizes/lengths to meet the reliability and performance criteria with reasonable cost. During construction, the public bidding procedure requires the low-bid contractor to conserve resources as much as reasonable in order to earn a profit on the project(s).*

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Permanent Impacts: *The overall, cumulative effects of the Plan would likely be decreased environmental hazards, due to reduced frequency and severity of sewer overflows and pollutant discharges. Sewage is the primary hazardous material associated with Bellevue's wastewater system. In general, no hazardous chemicals are kept at Bellevue's sewer facilities, except for diesel fuel for pump station on-site generators, and potassium permanganate and/or activated carbon for odor control systems at 2-3 lift station facilities. The Plan would add 3 diesel generators and may add new or upgraded odor control facilities (at replaced pump stations).*

Temporary Impacts (Construction Projects): *Some temporary environmental health hazards and risks could occur during specific projects, commensurate with typical construction-related hazards. These would include exposure to construction chemicals (epoxies, paints, concrete admixtures, curing compounds, diesel fuel and fumes, etc.) and common risks associated with construction.*

- (1) Describe special emergency services that might be required.

There are no known emergency services that would be required by the Plan.

- (2) Proposed measures to reduce or control environmental health hazards, if any.

Permanent Impacts: *For ongoing (permanent) maintenance activities, chemicals would be stored with double-containment where required. OSHA rules would be followed, and MSDS sheets and other pertinent information would be provided.*

Temporary Impacts (Construction Projects): *Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided. In general, the contractor for each project would be required to implement appropriate safety measures, develop and execute spill response plans in case of accidental discharge, and follow all applicable regulations and permit conditions.*

b. Noise

- (1) What types of noise exist in the area which may affect your project (for example, traffic, equipment, operation, other)?

There are no known noises that would affect the wastewater utility.

- (2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Permanent Impacts: *Some increased noise would be likely as a result of on-site power at sewage pump stations. These emissions would only occur during periodic maintenance and testing, and continuously during electrical power outages.*

Temporary Impacts: *Some temporary increases in noise would be likely to occur during construction projects, primarily from construction equipment.*

- (3) Proposed measure to reduce or control noise impacts, if any:

Reasonable noise mitigation measures would be incorporated into on-site power generating equipment installations

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided. In general, each project would limit construction working times to within restricted hours and days to limit noise impacts.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties?

There is a variety of land uses throughout Bellevue's wastewater service area, including multiple densities of residential, commercial and industrial use, as well public spaces such as parks and schools.

- b. Has the site been used for agriculture? If so, describe.

Bellevue's wastewater service area no longer includes significant agriculture, except for the the Mercer Slough and Larsen Lake Blueberry Farms, which are not sewerred areas.

- c. Describe any structures on the site.

Generally the only structures pertinent to Bellevue's existing and proposed wastewater facilities are pump stations and on-site generator enclosures.

- d. Will any structures be demolished? If so, what?

0 dwelling units would be anticipated to be demolished. A small number (0-3) of City-owned pump station buildings may be replaced.

- e. What is the current zoning classification of the site?

There is a variety of zoning classifications throughout Bellevue's wastewater service area.

- f. What is the current comprehensive plan designation of the site?

There is a variety of comprehensive plan designations throughout Bellevue's wastewater service area.

- g. If applicable, what is the current shoreline master program designation of the site?

There is a variety of shoreline designations throughout Bellevue's wastewater service area.

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

A variety of areas in Bellevue are classified as environmentally sensitive, particularly critical areas.

- i. Approximately how many people would reside or work in the completed project?

The Plan would not affect housing or employment. A typical pump station site may be visited by 2-3 utility staff on a periodic basis for routine maintenance, and as needed for repair or in response to alarms.

- j. Approximately how many people would the completed project displace?

None

- k. Proposed measures to avoid or reduce displacement impacts, if any.

Not applicable

- i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The City of Bellevue's policies require the Utilities Department to support proposed land use and the City's Comprehensive Plan. The Plan is compatible with the City's Comprehensive Plan, as required by the City Council. See Comprehensive Plan policies UT-4 and ED-21.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Zero units would be provided. However, system expansion would occur to support development by others, in accordance with City Comprehensive Plan policies.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Zero.

- c. Proposed measures to reduce or control housing impacts, if any:

One explicit goal of the Plan would be to facilitate housing development through system expansion, in accordance with City Comprehensive Plan policies.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

No buildings or structures taller than about one story would be anticipated at this time. Project-specific SEPA documentation would provide additional details and notification if any taller structures are proposed.

- b. What views in the immediate vicinity would be altered or obstructed?

No known views would be anticipated to be altered or obstructed.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

Most sewer infrastructure is buried, so that aesthetic impacts are typically minimal. The City makes each project known to the surrounding neighborhood, and considers community input for design of above-grade structures.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Most sewer infrastructure is buried, so that light or glare is not produced. Some perimeter lighting would be proposed at future facility sites (pump stations and lift station) to enhance safety and security. Lighting would operate during the night.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. Security lighting would enhance safety by illuminating pathways.

- c. What existing off-site sources of light or glare may affect your proposal?

No

- d. Proposed measures to reduce or control light or glare impacts, if any:

The City makes each project known to the surrounding neighborhood, and considers community input for design of all facilities. If any impacts are identified, they would be addresses appropriately.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

There is a variety of recreational opportunities throughout Bellevue's wastewater service area.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

In general, the Plan would not typically affect recreation. However, some proposed projects would impact recreational activities in public waterways and/or parks:

- The replacement of lake line piping could affect recreation at various sites along the Lake Washington shore, and Meydenbauer Bay in particular. Activities and construction related to lake line inspection, removal and installation could entail parking, excavation, noise, impeded views and recreation, and other impacts along the shoreline, depending on which alternatives are selected at each site*
- The Downtown Park sewer replacement would impact use of the Downtown Park during construction. It passes beneath a public fountain, multiple other water features, the middle of the park lawn, and the park's southern parking lot. Due to the sensitive site location, it is anticipated that significant public involvement may be necessary.*

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Most aspects of the Plan would not affect recreation, and so would not require measures to control impacts on recreation.

For specific projects that may affect recreation (lake line replacement in particular), proposed measures to reduce or control impacts on recreation are not yet known. Project-specific SEPA documentation will detail this information as appropriate.

Replacement of the lake lines is expected to be technically challenging, politically sensitive, and generate significant community feedback, including input regarding impacts on recreation. It is anticipated that no one solution will work at all locations, such that a variety of options may be needed based on site-specific factors. Stakeholder input will be critical to making final decisions, including the measures chosen to reduce or control impacts to recreation. Any option selected will impact entire neighborhoods and require consensus among diverse interest groups.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

There is a variety of historic resources throughout Bellevue's wastewater service area.

- b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

No known significant landmarks would be impacted by the Plan, based on current known information. Each construction project would undergo its own separate project-specific SEPA process, during which more detailed and specific information will be provided.

- c. Proposed measures to reduce or control impacts, if any:

Not applicable at this time (no currently known impacts). Each construction project would undergo its own separate project-specific SEPA process, during which more detailed and specific information will be provided.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

There is a variety of streets throughout Bellevue's wastewater service area. Most sewer infrastructure is actually buried piping inside roadway right-of-way. For existing sewer facilities such as pump stations and lift stations, it is not anticipated that access to these sites would be changed by the Plan.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

There is a variety public transit routes throughout Bellevue's wastewater service area.

- c. How many parking spaces would be completed project have? How many would the project eliminate?

Sewer pipeline projects would not include parking. Sewer facility rehabilitation projects at pump station and lift station sites would typically include one or two parking spaces, consistent with the existing parking at those locations. It is not anticipated that the Plan would eliminate or create parking spaces, although this may occur if O&M staff indicate a need for more parking. Each project would undergo its own separate project-specific SEPA process, during which more detailed and specific information will be provided.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No road or street improvements would likely be required as part of the Plan. Road and street restoration would typically be required following pipeline repair or replacement projects, however.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. Attachment 4
SEPA Checklist

Given the wide variety of transportation facilities in the City, it is likely that some facility improvements proposed in the Plan would be located in the general vicinity of transportation facilities.

The Plan would not typically use water, rail or air transportation. However, some construction projects may use various modes of transportation to transport construction materials, and this would generally be outside the City's control. For the lake line replacement project(s), some water transportation would be required to facilitate lake line inspection, removal and/or installation in Lake Washington, depending on which replacement alternatives are selected.

Each project would undergo its own separate project-specific SEPA process, during which more detailed and specific information will be provided.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

After construction (completed projects), most sewer infrastructure is buried piping that does not require any vehicle trips, except for inspection approximately once every ten years. Most pump station and lift station facilities require two to three vehicle trips per month for routine maintenance.

- g. Proposed measures to reduce or control transportation impacts, if any:

No permanent measures to control transportation are proposed (there is no apparent need).

Temporary measures to reduce or control transportation impacts during Construction would be implemented, however. Depending on site location, construction traffic (concrete trucks, dump trucks, etc) may be required to follow specific haul routes to minimize neighborhood disruption. Construction parking would be restricted to minimize community impacts.

15. Public Services

- a. Would the project result in an increased need for the public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No

- b. Proposed measures to reduce or control direct impacts on public services, if any.

Not applicable

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

A variety of utility facilities are available throughout Bellevue's sewer service area.


- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Sewer services would be provided by the Plan to everyone in Bellevue's wastewater service area.

Electricity would be required for pump station and lift station projects, provided by Puget Sound Energy.

Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature.....  DOUGLAS LANE.....
Date Submitted..... 10/17/2013.....

SUPPLEMENTAL SHEET FOR NONPROJECT ACTION

Continuation of the Environmental Checklist

4/18/02

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment (see Environmental Checklist, B. Environmental Elements). When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms. If you have any questions, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Permanent Impacts: *The overall, cumulative impact of the Plan would be decreased pollutant discharges to water or land (by reducing the frequency and severity of sewer overflows). Some increased noise and diesel emissions (to air) would be likely as a result of on-site power at sewage pump stations. These emissions would only occur during periodic maintenance and testing, and continuously during electrical power outages.*

Temporary Impacts: *Some temporary increases in air or water pollution could occur during construction projects, while a temporary increase in noise would be likely. Air pollution could result from diesel emissions from construction equipment. Water pollution could result from stormwater runoff or inadvertent spills at construction sites. Noise would be generated primarily by construction equipment. If smoke testing is used for I&I investigations, smoke will be emitted as part of testing (brief and local).*

Proposed measures to avoid or reduce such increases are:

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided. In general, each project would (1) implement stormwater and erosion control best management practices (BMPs), (2) restrict wet-season excavation work, (3) limit construction working times to within restricted hours and days to limit noise impacts, (4) include spill response plans in case of accidental discharge, and (5) follow all applicable regulations and permit conditions.

Reasonable noise mitigation measures would be incorporated into on-site power generating equipment installations.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Permanent Impacts: The overall, cumulative effects of the Plan would likely be beneficial for plants, animals, fish, or marine life, due to reduced frequency and severity of sewer overflows and pollutant discharges. Most sewer infrastructure is buried (pipes, manholes, etc), so the system components typically have negligible effect on plants, animals, fish and marine life unless there is an overflow.

Temporary Impacts: Some temporary impacts to plants, animals, fish and marine life could potentially occur during construction projects. Most sewer projects occur in public rights-of-way, which are already impacted by streets and roads and do not support plant or animal habitat. Other projects are located on City-owned property that is already developed. The proposed Bellefield Pump Station replacement project would replace an existing pump station located adjacent to wetlands and Mercer Slough, and could therefore result in habitat impacts to these areas. The proposed lake line replacement program would be located along the shorelines of both Lake Washington and Lake Sammamish, and could therefore result in impacts to shoreline plant and animal habitat.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information will be provided.

In general, each project would (1) implement stormwater and erosion control best management practices (BMPs), (2) limit clearing and grading as much as reasonable, (3) avoid wetlands unless absolutely necessary to protect human health and the environment, (4) include spill response plans in case of accidental discharge, and (5) follow all applicable regulations and permit conditions.

3. How would the proposal be likely to deplete energy or natural resources?

Permanent Impacts: Ongoing operations & maintenance activities use fossil fuels in vehicles to transport maintenance crews and equipment to system infrastructure. Spare parts and/or replacement piping are used when needed for maintenance. Pump stations use electricity.

Temporary Impacts: Construction projects would require fossil fuels to operate construction vehicles, as well as for the manufacture and delivery of construction materials. Construction materials themselves would require natural resources such as minerals (concrete additives, etc), rubber (pipe gaskets, tires, etc) metals (ductile iron pipe), petroleum products for plastics (PVC pipe, paints, epoxies, etc), graded aggregate (sand, gravel, etc), and others.

Proposed measures to protect or conserve energy or natural resources are:

Permanent Impacts (Ongoing Maintenance): Operations & maintenance vehicles are well-maintained at Bellevue's Service Center to avoid leaks and optimize fuel economy. Maintenance crews only drive where needed to perform maintenance activities. Pumps are appropriately sized to provide reasonable efficiency in the pertinent operating conditions. The recommended pump station rehabilitations would improve efficiency to conserve energy.

Temporary Impacts (Construction Projects): Bellevue's economic incentive is to obtain the required construction quality for the minimum price. The market response to this economic incentive is to minimize the resources used to build and maintain wastewater facilities. During design, engineers would optimize pump curves, earthwork quantities, concrete volumes and pipe sizes/lengths to meet the reliability and performance criteria with reasonable cost. During construction, the public bidding procedure requires the low-bid contractor to conserve resources as much as reasonable in order to earn a profit on the project(s).

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The majority of the plan would have no effect on environmentally sensitive areas or areas designated for governmental protection.

The proposed Bellefield Pump Station replacement project would replace an existing pump station located adjacent to wetlands and Mercer Slough, and could therefore affect these areas.

The proposed lake line replacement program would be located along the shorelines of both Lake Washington and Lake Sammamish, and could therefore affect both lakes, as well as some adjacent parks. Affects could include inspection work, excavation, pipe removal, pipe installation, and other types of activity in the lakes.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information will be provided.

In general, each project would (1) implement stormwater and erosion control best management practices (BMPs), (2) limit clearing and grading as much as reasonable, (3) avoid wetlands unless absolutely necessary to protect human health and the environment, (4) include spill response plans in case of accidental discharge, (5) involve local stakeholders in decision-making, and (6) follow all applicable regulations and permit conditions (including federal permits and NEPA for in-water work).

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The majority of the plan would have no effect on environmentally sensitive areas or areas designated for governmental protection. The proposed Bellefield Pump Station replacement project would replace an existing pump station located adjacent to wetlands and Mercer Slough, and could therefore affect these areas. The proposed lake line replacement program would be located along the shorelines of both Lake Washington and Lake Sammamish, and could entail extensive construction activity along the shorelines, affecting views and shoreline use.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information will be provided.

In general, each project would (1) implement stormwater and erosion control best management practices (BMPs), (2) limit clearing and grading as much as reasonable, (3) avoid wetlands unless absolutely necessary to protect human health and the environment, (4) include spill response plans in case of accidental discharge, (5) involve local stakeholders in decision-making, and (6) follow all applicable regulations and permit conditions (including federal permits and NEPA for in-water work).

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Permanent Impacts: *The Plan would not increase demands on water utilities, wastewater utilities, or on Public Services (Police, Fire, etc). In general the Plan is intended to alleviate increased demands on wastewater utilities. The Plan would increase demands on electrical utilities where existing pump stations are replaced with larger pumps. Most of the Plan would have no effect on transportation, although on-site power at pump stations would reduce demands on roads in a power outage, because maintenance crews would have less urgency to visit those pump stations.*

Temporary Impacts: *Construction projects would increase demands on the regional transportation network, to allow for commuting of construction workers and delivery of construction materials. These impacts would only occur during construction.*

Proposed measures to reduce or respond to such demand(s) are:

Permanent Impacts: *Pumps would be appropriately sized to provide reasonable efficiency in the pertinent operating conditions, and where appropriate would be equipped with variable frequency drives (VFDs).*

Temporary Impacts: *Construction impacts to transportation networks would be temporary. Depending on site location, construction traffic (concrete trucks, dump trucks, etc) may be required to follow specific haul routes to minimize neighborhood disruption. Construction parking would be restricted to minimize community impacts.*

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The Plan complies with applicable laws. Construction contracts for specific projects would require compliance with local, state, or federal laws or requirements for the protection of the environment.

Appendix B

Adjacent Purveyor Agreements

REC NO. 34065
CITY OF BELLEVUE
DATE 6/3/03
M. J. O'Malley
CITY CLERK'S OFFICE
CCO FILE# 03-418

**FIRST AMENDMENT TO THE INTERLOCAL AGREEMENT
IMPLEMENTING THE CITY OF BELLEVUE'S PARTIAL
ASSUMPTION
OF THE COAL CREEK UTILITY DISTRICT**

This First Amendment to the Interlocal Agreement Implementing the City of Bellevue's Partial Assumption of the Coal Creek Utility District ("First Amendment") is made and entered into by and between the Coal Creek Utility District (the "District") and the City of Bellevue ("Bellevue") (collectively referred to herein as the "Parties") this 2 day of June, 2003, as follows:

Whereas, the District and Bellevue entered into a certain Interlocal Agreement Implementing The City of Bellevue's Partial Assumption of the Coal Creek Utility District (the "Agreement"), which Agreement was fully executed on June 3, 2002; and

Whereas, certain asbestos cement watermains located within the area to be assumed by Bellevue have experienced failures and are in need of replacement; and

Whereas, the District is willing to replace the asbestos cement watermains as further described herein prior to the Assumption Date set forth in the Agreement on the condition that Bellevue reimburse the District for Bellevue's agreed share of the cost of such replacement project; and

Whereas, the parties desire to amend the Agreement to clarify their respective rights and responsibilities with respect to the replacement of certain asbestos cement watermains within the area to be assumed by Bellevue, as more fully set forth below;

NOW THEREFORE, the parties agree as follows:

1. Agreement to Replace Watermains. The District and Bellevue agree that certain asbestos cement watermains (the "Project") located within the area of the District to be assumed by Bellevue pursuant to the Agreement will be replaced prior to the Assumption Date.

2. Project Description. The Project shall consist of replacing the existing asbestos cement watermains and appurtenances located in the SE 65th Place cul-de-sac east of 123rd Avenue SE; in the SE 65th Street cul-de-sac east of 123rd Avenue SE; in the SE 64th Place cul-de-sac just east of 123rd Avenue; and in 123rd Avenue from approximately 140 feet south of the SE 65th Place cul-de-sac to approximately 62 feet north of SE 64th Place. The scope and limits of the Project are also shown on Attachment A hereto.

3. Design and Construction Responsibilities. The District shall be the lead agency responsible for designing, obtaining permits, bidding and constructing the Project. The District shall be responsible for providing appropriate complete submittals and complying with permit conditions. Bellevue shall be given an opportunity to review, comment on and approve the design of the Project at the 75% and 100% completion

stage. Both Bellevue and the District shall approve the design prior to the advertisement for bids. Neither the District nor Bellevue shall unreasonably withhold its approval of the design.

4. Inspection. The District shall be responsible for inspection of the construction phase of the Project. Bellevue shall designate a Bellevue inspector to assist the District's inspector and to coordinate and/or resolve issues as they may arise during construction, provided Bellevue's inspector shall not instruct the Project contractor directly on any matters regarding Project contract performance. Bellevue shall work with the District in the development of the construction punch list and shall participate in the final inspection to assure that all contract requirements have been satisfied. Both Bellevue and the District shall provide final review and approval of the work performed under the contract. Neither agency shall unreasonably withhold their final approval of the Project.

5. Payments and Project Costs. The District shall be responsible for the payment of all costs and expenses for engineering, bidding, inspection, permitting and construction of the Project. All such expenses shall be considered part of the Project costs which costs shall also include the District's administrative and legal costs directly attributable to the Project (collectively referred to in this First Amendment as the "Project Costs"). The District shall not be responsible for costs incurred by Bellevue staff in the management of the project. Total Project Costs shall not exceed 110% of the actual contract bid award amount plus \$75,000 for engineering, permitting, administrative and legal services, and all other contingencies without prior written approval by both the District and Bellevue. Project costs shall not include costs for legal services incurred by either party arising from a dispute between the parties as to the interpretation or implementation of the First Amendment.

6. Warranties and Guarantees. The District shall cause any Project contractor(s) warranties and guarantees to the District to be fully assignable to Bellevue. The District shall assign all such warranties and guarantees to Bellevue upon the District's transfer of assets pursuant to the Agreement to Bellevue.

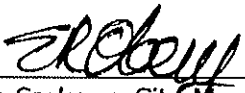
7. Payment of Project Costs by Bellevue. Bellevue shall reimburse the District fifty percent (50%) of the Project Costs within forty-five (45) days of Bellevue's receipt of an invoice from the District itemizing incurred Project Costs and Bellevue's portion of the Project Costs. Bellevue's payment(s) to the District shall accrue simple interest at the rate of one percent (1%) per month after forty-five (45) days until paid.

8. Indemnities. Each Party shall indemnify and hold harmless the other Party, its elected officials, employees and agents from any and all claims, damages, judgments, liabilities, settlements and costs (including attorney's fees) of whatever form or nature arising from or related to the negligent acts or omissions of the other Party, its elected officials, employees and/or agents in the performance and/or non-performance of its obligations under this First Amendment. For this purpose, the District, by mutual negotiation, hereby waives, as respects the City only, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW. For this purpose, Bellevue, by mutual negotiation, hereby waives, as

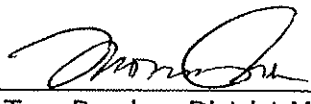
respects the District only, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW. The District shall require all contractors and subcontractors retained for purposes of designing, constructing and/or otherwise providing services on the Project to name the City as an additional insured on the contractors and/or subcontractor's insurance policy(ies).

9. Rights and Obligations. Nothing contained in this First Amendment shall be construed as waiving, modifying or otherwise altering the rights and/or obligations of either or both parties contained in the Agreement except as specifically provided in this First Amendment.

CITY OF BELLEVUE

By 
COC Steve Sarkozy, City Manager
Date Signed: 6/11/03


COAL CREEK UTILITY DISTRICT

By 
Tom Peardon, District Manager
Date Signed: 5/14/2003

Approved as to form:

By 
Siona D. Windsor
Assistant City Attorney

Approved as to form:

By 
John Milne, District's Attorney

N1/2 NW28-24-5

21
28

SE

64TH PL

SE 64TH PL

123RD AVENUE SE

SE 65TH ST

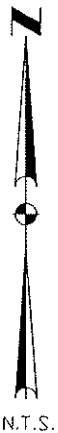
SE 65TH PL

123RD AVE SE

121ST PLACE SE

122ND PL SE

SE 67TH PLACE



N.T.S.

NEWPORT HILLS MO.17
NEWPORT HILLS MO.12

VALLEY PARK
200600

607265
NEWPORT HILLS MO.10

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Penhallegon Associates Consulting Engineers, Inc.
700 NORTH STREET SOUTH
(426) 627-2014

Engineering
Planning
Consulting
KIRKLAND, WA 98033
FAX: (426) 627-0643

Attachment A

NEWPORT HILLS
AC MAIN REPLACEMENT

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 5445

AN ORDINANCE authorizing the City Manager or his designee to execute an amendment to the Interlocal Agreement Implementing the City of Bellevue's Partial Assumption of the Coal Creek Utility District to share in costs with the District to replace an AC water main.

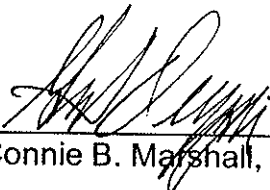
THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. The City Manager or his designee is hereby authorized to execute an amendment to the Interlocal Agreement Implementing the City of Bellevue's Partial Assumption of the Coal Creek Utility District to share in costs with the District to replace an AC water main, a copy of which Amendment has been given Clerk's Receiving No. 34065.

Section 2. This ordinance shall take effect and be in force five (5) days after passage and legal publication.

Passed by the City Council this 2nd day of June, 2003, and signed in authentication of its passage this 2nd day of June, 2003.

(SEAL)



Connie B. Marshall, Mayor

Approved as to form:

Richard L. Andrews, City Attorney



Patrice C. Cole, Assistant City Attorney

Attest:



Myrna L. Basich, City Clerk

Published June 2 2003

**INTERLOCAL AGREEMENT IMPLEMENTING
THE CITY OF BELLEVUE'S
PARTIAL ASSUMPTION OF THE COAL CREEK
UTILITY DISTRICT**

RECEIVED
CITY OF BELLEVUE
LEGAL DEPT

JUN 10 2002

between the City of Bellevue

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and the Coal Creek Utility District

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LIST OF EXHIBITS

- Exhibit A Service Area Boundaries After Assumption
- Exhibit B City of Bellevue—Coal Creek Utility District Common Service Boundary Line
- Exhibit C Water Joint Serving Facilities
- Exhibit D Physical Assets Located in Bellevue
- Exhibit E Water Master Meter Description (Map and Schedule)
- Exhibit F Direct Read Meter Areas
- Exhibit G Sewer Service Areas
- Exhibit H Methodology to Determine the Operation and Maintenance (O&M) Component of the Wheeling Charge for Joint Serving Facilities
- Exhibit I Agreed Upon Capital Cost Reimbursement Methodology—Water Joint Serving Facilities
- Exhibit J Designation of Sewer Ownership

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- Table 1 Water Joint Serving Facilities
- Table 2 "Old Water" Allocation

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INTERLOCAL AGREEMENT IMPLEMENTING THE CITY OF BELLEVUE'S
PARTIAL ASSUMPTION OF THE COAL CREEK UTILITY DISTRICT

THIS INTERLOCAL AGREEMENT is made between the City of Bellevue, a municipal corporation in King County, Washington ("Bellevue") and Coal Creek Utility District, a municipal corporation in King County, Washington ("District"), hereinafter referred to as the "Parties", implementing Bellevue's partial assumption of the District's service area and facilities lying within Bellevue's corporate limits.

WHEREAS the District provides water and sewer utility service within the corporate limits of the cities of Bellevue, Newcastle, Renton, and unincorporated King County; and

WHEREAS Chapter 35.13A RCW provides the authority for a city to assume all or a portion of the service area of a water-sewer district lying within and outside its corporate limits; and

WHEREAS on August 18, 2000, the Washington State Boundary Review Board for King County adopted its Resolution and Hearing Decision approving the proposed partial assumption of that portion of the District lying within the corporate limits of Bellevue and the area of unincorporated King County surrounded by Bellevue which has been subsequently annexed; and

WHEREAS on August 1, 2001, Bellevue and the District approved a settlement agreement ("Settlement Agreement") establishing that effective December 31, 2003, Bellevue shall assume that portion of the District lying within Bellevue's corporate limits (which includes the former unincorporated area of King County surrounded by Bellevue which was annexed to Bellevue pursuant to Ordinance No. 5270 passed February 5, 2001); and

WHEREAS the Settlement Agreement and Exhibit A to the Settlement Agreement set forth the terms and conditions under which Bellevue's partial assumption shall take place including each Party's responsibility to draft an interlocal agreement to effect the Parties' settlement and the assumption;

NOW THEREFORE, in consideration of the terms and conditions contained in the Settlement Agreement, which is incorporated herein as though fully set forth at this point, the Parties, further agree as follows:

I. PURPOSE

The purpose of this Interlocal Agreement is to provide further direction and/or details to the Parties to implement the Settlement Agreement and the assumption.

II. DEFINITIONS

For purposes of this Agreement, and unless otherwise provided in this Agreement, the following terms mean:

- A. "Assumption Date" – December 31, 2003 at 2:30 p.m.
- B. "Assumption Area" – that portion of the District lying within Bellevue's corporate boundaries to be assumed by Bellevue on the Assumption Date. The Assumption Area is shown on attached Exhibit A and the legal description of the common service area boundary is described in attached Exhibit B.
- C. "CIP Projects" – Capital Improvement Projects initiated by the District located, in whole or in part, within the Assumption Area.
- D. "Coal Creek Parkway Facilities" – the sewer interceptor, water main, and water main appurtenances located along Coal Creek Parkway within Bellevue as of the date of this Agreement, excluding those sewer mains within Bellevue tributary or parallel to the sewer interceptor.
- E. "Developer Projects" – extension projects initiated and constructed by owners/developers pursuant to Chapter 57.22 RCW.
- F. "Direct Read Meters" – individual customer water meters that are used to measure water use within the Direct Read Meter Areas.
- G. "Direct Read Meter Areas" – areas in Bellevue and the District where water use is read on Direct Read Meters. The Direct Read Meter Areas are shown on Exhibit F.
- H. "Inlet Meters" – water meters that are used to measure the volume of water delivered by regional water providers to Bellevue and the District from a regional water supply transmission system.
- I. "Interim Period" – the period between August 1, 2001 (the effective date of the Settlement Agreement) and the Assumption Date.
- J. "Master Meters" – water meters, excluding Direct Read Meters, that are used to measure the volume of water moving between the District and Bellevue service areas.
- K. "Old Water Allowance" – the historical average volume of water per month purchased by the District from the City of Seattle between January 1, 1979 through December 31, 1981 which was used for determining the cost for water supplied by Seattle to the District under the District's 1982 wholesale water supply contract as shown on Table 2.

- L. "Parties" – City of Bellevue and Coal Creek Utility District are the two Parties to this Agreement.
- M. "Physical Assets" – all District-owned real property, easements, personal property, and other property rights together with all water and sewer facilities.
- N. "Reporting Period" – the time interval between readings for the same Inlet Meter or Master Meter from which the total water volume delivered through the meter can be calculated.
- O. "Water Joint Serving Facilities" – water system facilities lying within the District that are used to deliver water to both Bellevue and District customers after the Assumption Date. Water Joint Serving Facilities are listed in Table 1 and are shown on Exhibit C.

III. ASSUMPTION

On the Assumption Date, Bellevue shall assume the Assumption Area, which consists of that portion of the District lying within Bellevue's corporate limits (which includes the former unincorporated area of King County surrounded by Bellevue which was annexed into Bellevue pursuant to Bellevue Ordinance No. 5270 passed February 5, 2001), subject to the terms and conditions of this Agreement and that certain Settlement Agreement entered into between the Parties dated 8/1/01. After the Assumption Date, the District shall revise its official boundaries to exclude the Assumption Area. Bellevue shall cooperate with the District in implementing the revision of the District's boundaries and shall not oppose this revision.

IV. DISTRICT AND BELLEVUE RESPONSIBILITIES DURING THE INTERIM PERIOD

- A. During the Interim Period, the District shall incur no new debt for which Bellevue would be responsible without Bellevue's written consent. During the Interim Period, Bellevue shall be responsible for relocation costs of District Facilities in the Assumption Area caused by Bellevue initiated projects other than the following:

PW-R-129 124TH Ave. SE Improvements
 PW-R-116 Factoria Blvd. Improvements

The maximum amount the District shall be responsible for relocation costs for these two projects shall be \$120,000.

- B. During the Interim Period, the District shall, at its own expense, continue to own, maintain, improve and operate the water and sewer infrastructure within the District, including the Assumption Area, in accordance with industry standards. During the Interim Period, the

District shall provide comparable levels of service throughout the entire District service area, including the Assumption Area.

- C. Recognizing the value of formalized ongoing communication between the Parties during the Interim Period, the Parties shall schedule quarterly or more frequent, if needed, meetings to discuss ongoing and new transition issues. All such issues shall be resolved no later than the Assumption Date.

V. BOUNDARY AND SERVICE AREAS

- A. On the Assumption Date, Bellevue shall become the water and sewer service provider for all customers and areas lying within the Assumption Area. After the Assumption Date, irrespective of the source of water provided to Bellevue customers, Bellevue shall bill Bellevue customers for the water and/or sewer service and shall be the point of contact for Bellevue customers with respect to said service.
- B. After the Assumption Date, the District shall remain the water and sewer service provider for all of its customers and areas outside of the Assumption Area. After the Assumption Date, irrespective of the source of water provided to District customers, the District shall bill District customers for the water and/or sewer service and shall be the point of contact for District customers with respect to said service.
- C. Exhibit A shows the boundaries and service areas for the District and Bellevue after the Assumption Date. Exhibit B provides the legal description of the common service area boundary between the District and Bellevue after the Assumption Date.

VI. ALLOCATION OF ASSETS

A. Physical Assets

On the Assumption Date, the Physical Assets of the District, with those exceptions identified in this Agreement, shall be allocated (split) along the boundary between Bellevue and the District, with Bellevue assuming ownership of the Physical Assets located within the Assumption Area and the District continuing to own its Physical Assets outside the Assumption Area; provided, however, that the District shall continue to own, operate, and maintain the Coal Creek Parkway Facilities, and any Master Meters to be installed as part of this Agreement within the Assumption Area.

If the District engages in any construction, maintenance, or other activities in Bellevue affecting the Coal Creek Parkway Facilities or Master Meters after the Assumption Date and while it still owns these facilities, the District shall obtain all necessary permits from Bellevue and pay those fees to Bellevue that any other public utility would be required to pay in

connection with such construction, maintenance, or other activities; provided, however, that the District shall not be required to obtain a franchise from Bellevue for the Coal Creek Parkway Facilities or Master Meters. In addition, the District shall pay for relocation expenses for the Coal Creek Parkway Facilities in accordance with Bellevue City Code Section 14.30.185; with the exception that for the period from the date of the Assumption through December 31, 2009 should the City require the District to relocate these facilities pursuant to BCC 14.30.185, the City shall reimburse the District for all reasonable costs it incurred to relocate the facilities including but not limited to costs of design, engineering, installation, construction management and restoration. Bellevue shall make payment to the District of these costs within ninety (90) days of receipt of the District's invoice. If at any time the District is required to relocate the Coal Creek Parkway Facilities, it shall do so within 365 days of City's written notice to the District to do so. Should the City's project requiring the relocation of CCUD facilities be delayed due to the failure to relocate during the 365 day window, CCUD will be responsible for any costs, penalties or damages resulting from said project delay. Provided further, however, that Bellevue Code Section 14.30.185C or its successor shall not apply until after such time as the District has paid relocation expenses as required under BCC 14.30.185.

The District shall indemnify, defend, and hold harmless Bellevue and its officials, officers, employees, agents, and representatives, when acting within such designated capacity, from all claims, losses, suits, actions, legal or administrative proceedings, costs, attorneys' fees, litigation costs, expenses, damages, penalties, fines, judgments, or decrees by reason of any death, injury, or disability to or of any person or party, including employees, and/or damage to any property or business, including loss of use caused by any negligent act, error, or omission of the District or its officials, officers, employees, agents, representatives, contractors, or subcontractors, when acting within such designated capacity, arising out of any construction, maintenance, or other activities undertaken by the District or its agents on the Coal Creek Parkway Facilities or Master Meters located in the Assumption Area. This indemnification provision applies only to the Coal Creek Parkway Facilities and/or any Master Meters and only to the extent that the claim or cause of action giving rise to the indemnification obligation occurs or arose while the District owned these facilities.

B. Service Lateral Ownership and Responsibility

In the Direct Read Meter Areas certain customers in one Party's service area will receive water service from water mains owned by the other Party. In these situations the Party whose customer is receiving water service shall own, operate, and maintain the customer meter, setter, meter box, and service line up to and including the saddle or tap on the water main. The side sewers of certain customers in one Party's service area will connect directly to a sewer main owned by the other Party. In these

situations the Party who serves these customers shall be responsible for the operation, ownership, and maintenance of the side sewer (or service lateral) within a right-of-way or easement up to and including the tee or saddle at the sewer main.

If emergency conditions arise in locations where one Party owns the water or sewer main and the other Party owns the appurtenant service lines, side sewers or laterals, the Party that owns the water or sewer mains shall have the responsibility for responding to and alleviating the emergency condition. If the responding Party finds there is reason to believe that the emergency condition may have been caused by the service lines, side sewers, or laterals the other Party shall be notified as soon as practicable.

C. Other Assets

The District shall continue to own its equipment, tools, materials, cash, investments, receivables and reserves, except as otherwise provided in this Agreement.

D. Assessments

Unpaid ULID 7-S assessments after the Assumption Date shall continue to be collected by King County. After the Assumption Date, the District shall annually pay Bellevue one-half of the ULID 7-S assessment revenue collected.

E. Contracts and Agreements

Any maintenance bonds, latecomers agreements, or CIP consultant design agreements for properties or facilities within the Assumption Area shall be assigned to Bellevue on the Assumption Date.

F. Developer Project Disposition within the Assumption Area

1. The District shall complete all review, inspection and administration of any Developer Project initiated within the Assumption Area prior to the Assumption Date. Prior to acceptance of these projects by the District, bills of sale, easements, maintenance bonds, and final engineering estimates of construction costs shall be obtained by the District naming Bellevue as owner/grantee and/or beneficiary.
2. The following documents shall be delivered to Bellevue as soon as possible after Developer Project acceptance by the District.
 - Copy of District Board Minutes accepting the developer extension
 - Bills of Sale

- Maintenance Bonds
- As-builts
- Final Engineering estimate of Construction Cost
- Developer Extension Agreement
- Recorded Easements
- Applicable Latecomer Agreements

3. Any accounts receivable due the District from the owner/developer of any Developer Project initiated by the District shall remain the receivable of the District.

G. Adjacent Water and Sewer Facilities

Both the District and Bellevue shall have the right to access manholes owned by the other Party for the purpose of inspecting and evaluating facilities that it owns. Similarly, adjacent water valves may be accessed. Each Party shall provide the other upon request copies of its adjacent as-built system and other maps. The Parties shall notify each other prior to accessing these manholes or water valves except in emergency situations.

VII. ALLOCATION OF LIABILITIES

A. 1994, 1998 (ULID 7-S), and 1999 Revenue Bond Issues

The District's total outstanding revenue bond principal and interest obligations for the 1994, 1998 (ULID 7-S), and 1999 Revenue Bond Issues shall be divided between the Parties on the Assumption Date. On or before the Assumption Date, Bellevue shall pay the District an estimated amount sufficient to retire Bellevue's share of the District's then outstanding revenue bonds. This estimated amount shall be equal to the percentage of District annual gross revenue on December 31, 2002 that is represented by District customers within the Assumption Area. The amount paid by Bellevue shall later be revised upward or downward no later than December 31, 2004, based upon a reconciliation using the District's 2003 audited financial statements. In calculating Bellevue's share, Bellevue shall receive credit for the concurrent reduction in the District's revenue bond reserve requirements as a reduction of the net amount to be paid by Bellevue to the District to retire its calculated share of the outstanding District bonds as of the Assumption Date. The District's revenue bond reserves, unspent bond proceeds, and unspent assessments collected as of the Assumption Date shall together be taken into account when calculating the final amount or percentage of the District's bonded indebtedness to be paid by Bellevue so that Bellevue does not, in effect, pay a share of the bonded indebtedness twice. Any allocation of the District's bonded indebtedness shall be subject to bond counsel and underwriter approval.

B. ULID 7-S

King County shall continue to be the collection agency for the ULID 7-S payments and shall be the responsible agency for any required ULID foreclosure proceedings.

C. District Loan to ULID 7-S

On the Assumption Date, Bellevue shall pay one-half of that portion of the District's loan of \$125,873 to ULID 7-S that is still outstanding on the Assumption Date. Bellevue may recover any such payments from future charges to properties in Bellevue that develop to higher densities than anticipated in ULID assessment rolls.

D. Special Connection Charge

After the Assumption Date, Bellevue shall collect from property owners within the Assumption Area subject to District Resolution No. 1193 at the time of the property owner's sewer connection any unpaid special connection charges for the Lake Washington Boulevard Sewer Extension as of the Assumption Date. Bellevue shall pay over these special connection charges to the District within forty-five (45) days of receipt.

E. Unsewered Area Lying Within the Assumption Area

After the Assumption Date, the District shall allow any unsewered properties within the Assumption Area to connect to District-owned facilities, provided that the owners of the connecting properties shall pay the District's then current General Facilities Charge and any special connection charges owed under applicable District resolutions. Bellevue shall collect such charges and pay them over to the District within forty-five (45) days of receipt.

F. Public Works Trust Fund Loans

On the Assumption Date, Bellevue shall pay the District twenty-eight point three percent (28.3%) of the District Public Works Trust Fund principal and interest loan balances outstanding on August 1, 2001. The loan balances shall only reflect loan proceeds that were received by the District as of August 1, 2001.

G. Accounts Payable

Except as otherwise provided in this Agreement, all accounts payable on the Assumption Date shall remain the full responsibility of the District.

H. Accrued Employee Benefits

Except as otherwise provided in this Agreement, the District shall be responsible for all liabilities for accrued employee benefits for former and current District employees as of the Assumption Date.

VIII. CAPITAL IMPROVEMENT PROJECTS

A. CIP Projects Initiated after January 1, 2003

The District shall provide Bellevue an opportunity to review and comment on all CIP projects in the Assumption Area initiated after January 1, 2003 that are not yet under construction.

B. CIP Projects in Design on the Assumption Date

All CIP projects in the Assumption Area where the design has not been completed on the Assumption Date shall be transferred to Bellevue for completion within a time frame as determined by the process identified in section IV C. The District shall provide copies of all contracts, plans and other related documents to Bellevue pursuant to Section XXI of this Agreement.

C. CIP Projects under Construction on the Assumption Date

CIP projects in the Assumption Area under construction on the Assumption Date shall be completed by the District. Bellevue shall be provided with an opportunity to attend inspections where punch list work items and final acceptance are developed. The District shall provide copies of all contracts, plans and other related documents to Bellevue pursuant to Section XXI of this Agreement.

IX. GENERAL WATER SYSTEM OPERATION DESCRIPTION

The Parties agree to coordinate water quality testing, monitoring, and compliance programs as necessary to meet state and federal water quality requirements. Bellevue and District shall give each other reasonable notice and coordinate operations of their respective facilities when the operations of one Party may impact operations of the other Party's facilities. The operation of the Assumption Area water system after the Assumption Date shall be divided into the following three areas:

- A. Factoria Service Area – The Factoria Area is essentially a stand-alone system. After the Assumption Date, Bellevue shall operate this portion of the water system without District input.

- B. 170 Zone Service Area – The area between I-405 and Lake Washington is generally known as the District’s 170 service area. After the Assumption Date, water will continue to be provided to this area by both the District and Bellevue. Accordingly, pressure reducing station settings shall be adjusted from time to time as necessary to maintain water quality throughout the system. The District and Bellevue agree to coordinate with each other with regard to any such changes in the system operation that may be required.
- C. Newport Hills Service Area – Except as provided in this Agreement, after the Assumption Date the District shall continue to supply water to the Assumption Area of Newport Hills through the Water Joint Serving Facilities and shall operate the Water Joint Serving Facilities without Bellevue’s input.

X. WATER JOINT SERVING FACILITIES

- A. Water Joint Serving Facilities are listed in Table 1 and shown on Exhibit C. Before and after the Assumption date, the District shall own and be responsible for the maintenance and operation of the following Water Joint Serving Facilities.

**TABLE 1
WATER JOINT SERVING FACILITIES**

| Serving Facilities Listed by Item | District’s Proportionate Share of Capacity | Bellevue’s Proportionate Share of Capacity |
|--|---|---|
| No. 1: 6” Asbestos Cement | 60.00% | 40.00% |
| No. 2: 8” Asbestos Cement | 60.00% | 40.00% |
| No. 3: 8” Cast Iron | 60.00% | 40.00% |
| No. 4: 8” Ductile Iron | 60.00% | 40.00% |
| No. 5: 12” Asbestos Cement | 50.00% | 50.00% |
| No. 6: 12” Cast Iron | 50.00% | 50.00% |
| No. 7: 12” Ductile Iron | 60.00% | 40.00% |
| No. 8: 16” Asbestos Cement | 50.00% | 50.00% |
| No. 9: 16” Ductile Iron | 50.00% | 50.00% |

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| No. 10: 18" Ductile Iron | 67.00% | 33.00% |
| No. 11: 440 Reservoir (5.0 MG) | 67.00% | 33.00% |
| No. 12: 580 Reservoir (1.0 MG) | 60.00% | 40.00% |
| No. 13: 580 Reservoir (2.5 MG) | 60.00% | 40.00% |
| No. 14: 440/580 Booster Station | 67.00% | 33.00% |
| No. 15: Metering Point 5 Booster Station | 67.00% | 33.00% |
| No. 16: Hazelwood Pump Station (1) | 100.00% | 0.00% |
| No. 17: Master Meters | 0.00% | 100% |

Note (1): The Hazelwood Pump Station is currently used as a backup facility. It is assumed that after the Assumption Date this facility shall continue to be used as a backup facility for the remaining portion of the District not assumed by Bellevue.

- B. The District agrees to provide use and capacity of the Water Joint Serving Facilities shown in Table 1 to Bellevue until December 31, 2028. The Parties may agree to extend the use of some or all of Water Joint Serving Facilities by mutual agreement in writing. If Bellevue and the District do not mutually agree to continue joint use of all or part of the Water Joint Serving Facilities beyond that date, Bellevue shall have up to December 31, 2033 to terminate its use of such Water Joint Serving Facilities. If Bellevue elects to continue use of the Water Joint Serving Facilities beyond December 31, 2028, Bellevue shall continue to pay for its fair share of wheeling charges required by this Agreement so long as it continues such use. Bellevue shall give the District at least six (6) months notice of its intent to terminate such use if such use continues beyond December 31, 2028.
- C. The District shall wheel water delivered from a regional water provider to Bellevue through the Water Joint Serving Facilities in an amount up to and including the proportionate share of capacity assigned to Bellevue for Water Joint Serving Facilities identified in Table 1.
- D. There are additional minor water joint serving facilities not listed in Table 1. On the Assumption Date, Bellevue and the District shall separately own and thereafter be responsible for maintaining these minor water joint serving facilities located within their respective boundaries. Bellevue and the District shall give each other reasonable notice and coordinate operations of their respective facilities when the operations of one Party may impact operations of the other Party's facilities.

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- E. As of the date of this Agreement, the number of water joint serving facilities in Bellevue, except for Master Meters and Coal Creek Parkway Facilities, shown on attached Exhibit D are minimal and the cost for their operation, maintenance, replacement, and repair are considered incidental. So long as the number of such facilities remain minimal and the costs nominal, Bellevue shall not charge the District a wheeling charge. If in the future a wheeling charge is applied it shall be based upon the same methodology as provided for in Section XI. The cost for water supplies delivered to District customers through Bellevue facilities shall be accounted for as provided in Section XIV.
- F. For those areas that utilize the Water Joint Serving Facilities, Bellevue shall not change the operation of its water system within the Assumption Area without approval by the District. Such approval shall not be unreasonably withheld. Bellevue shall have the option to terminate its use of Water Joint Serving Facilities at any time after the Assumption date subject to its obligations to pay as set forth in Sections XI and XII of this Agreement, after which time Bellevue shall have no obligations to inform or receive approvals from the District for operating Bellevue's water system. If Bellevue's operation of Seattle Inlet Metering Facility Number 6, located at SE 56th and 128th Avenue, results in the District incurring a demand metering charge, Bellevue shall be responsible for this charge.

XI. PAYMENT OF WHEELING CHARGE

A. Methodology for computation

Bellevue shall compensate the District for a proportionate share of costs incurred by the District for the operation and maintenance of Water Joint Serving Facilities through the payment of a wheeling charge determined using the methodology set forth in this Section. The wheeling charge shall commence on the Assumption Date and end on December 31, 2028, unless Bellevue continues to use the Water Joint Serving Facilities after that date in accordance with this Agreement, or the Agreement is terminated by operation of law or by mutual agreement of the parties prior to December 31, 2028. The annual wheeling charge shall be paid by Bellevue to the District in equal monthly installments. The wheeling charge shall be calculated for the year 2004 based upon 2002 District fiscal year-end financial statements. The wheeling charge will be reevaluated in 2005 for the 2006 wheeling charge and every five years thereafter based upon the then most current District fiscal year-end financial statement. In intervening years the wheeling charge shall be annually adjusted for inflation by taking the difference between the latest June Seattle-Tacoma-Bremerton Area Index measurement CPI-U and the immediately preceding June Seattle-Tacoma-Bremerton Area Index measurement CPI-U. Bellevue shall be responsible for costs associated with retaining financial consultants mutually acceptable to both Parties who will conduct

the financial analysis necessary to determine the wheeling charge for the year. The wheeling charge shall be based upon Bellevue's proportionate share of direct and customer related general and administrative costs incurred by the District for operating and maintaining Water Joint Serving Facilities using the methodology shown in Exhibit H. Bellevue's proportionate share of direct costs shall be determined by using Bellevue's share of capacity as shown in Table 1 whether or not Bellevue's full capacity in the Water Joint Serving Facilities is utilized. Direct costs for the maintenance and operations of Water Joint Serving Facilities shall be based upon a prorated share of District cost pools for all like facilities located within the District. In determining wheeling charges direct costs shall be increased by a factor to reflect District general and administrative (G&A) overhead expenses. The G&A factor will be calculated as of the Assumption Date and again when determining the 2006 wheeling charge. The G&A factor determined in 2005 for 2006 shall be used in all subsequent years. However, in subsequent five-year reevaluations either Party may elect to have the G&A factor recalculated. The Party electing to reevaluate the G&A factor shall be responsible for the additional costs to conduct the evaluation. Exhibit H provides additional background and information for ascertaining costs attributable to Water Joint Serving Facilities to be used in determining wheeling charges.

B. Special Assessments for Emergency Items

Special assessments may be made for emergency maintenance and emergency repair activities of the Water Joint Serving Facilities. For purposes of this section "emergency" means unforeseen circumstances beyond the control of the District that either: (a) present a real, immediate threat to the proper performance of essential functions; or (b) will likely result in material loss or damage to property, bodily injury, or loss of life if immediate action is not taken. Each Party shall be assessed and pay such special assessment based on its respective allocation of capacity set forth in Table 1 in the Water Joint Serving Facility.

C. Special Assessments for Major Maintenance

The following activities performed on Water Joint Serving Facilities shall be considered major maintenance activities: tank painting, pump and motor replacement, electrical equipment upgrades/replacement, telemetry upgrades, and altitude valve upgrades/replacement. Bellevue shall reimburse the District for the reasonable cost of such major maintenance items based on its respective allocation of capacity set forth in Table 1 in the Water Joint Serving Facility. This compensation shall be paid by Bellevue during the time period beginning on August 1, 2001 and ending on December 31, 2028, unless Bellevue continues to use the Water Joint Serving Facilities after that date in accordance with this Agreement. The District shall plan and schedule major maintenance items so as to give Bellevue one year's notice prior to commencement of work; provided, however, the District shall give two year's notice to Bellevue for any

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projected project cost of \$50,000 or more. Once completed the District shall invoice Bellevue for the Bellevue's share of costs for major maintenance activities and Bellevue shall make payment to the District within forty-five (45) days of receipt of the District's invoice.

D. Exemptions from the Water Joint Serving Facility O&M Cost Pool and Capital Cost Utility Plant Rate Base

When calculating wheeling or capital charges for Water Joint Serving Facilities, the District shall exclude all costs for performing major maintenance, emergency maintenance, emergency repair, and all other costs of activities for which Bellevue directly reimburses the District Bellevue's share. The District shall maintain records that separately account for all such costs identified in this Section.

E. Addition of State excise or other taxes to Bellevue payments to the District

Should the District be responsible for paying State excise taxes or future utility taxes on revenues received from Bellevue, payments for Water Joint Serving Facility wheeling charges, or capital cost reimbursements, Bellevue's payments to the District shall be increased to include the taxes payable by the District. Such tax payments shall be deducted from any cost pools used to calculate Bellevue's share of wheeling charges.

XII. CAPITAL COST REIMBURSEMENT FOR THE REPLACEMENT OF EXISTING WATER JOINT SERVING FACILITIES

A. After the Assumption Date Bellevue shall annually compensate the District for a share of the costs for replacing Water Joint Serving Facilities in accordance with the provisions of this Section. This compensation shall be paid by Bellevue during the time period beginning on the Assumption Date and ending on December 31, 2028, unless Bellevue continues to use the Water Joint Serving Facilities after that date in accordance with this Agreement. Cost recovery shall include two elements: 1) an annual depreciation expense, and 2) an annual rate of return on the Utility Plant Rate Base.

B. As of the Assumption Date Bellevue shall be considered to have fully compensated the District for its share of all Water Joint Serving Facilities constructed prior to the date of this Agreement. As such no capital cost recovery for use of these facilities shall be paid by Bellevue to the District.

C. After the date of this Agreement costs for projects to replace any Water Joint Serving Facility shall be determined by the District. Such costs shall include all expenses for designing, bidding, constructing, and inspecting the project. Bellevue shall have the opportunity to review and comment on any proposed project to replace any Water Joint Serving Facility. Bellevue shall be given the opportunity to review and comment on the

project scope and design. When each project is completed the cost for the project facility multiplied by Bellevue's proportionate share of capacity for the facility as delineated in Table 1 shall be added to a Utility Plant Rate Base. Costs for projects for which Bellevue pays a fair share of a special assessment for emergency maintenance, emergency repairs, or for major maintenance in accordance with this Agreement shall not be added to the Utility Plant Rate Base.

- D. A weighted average cost of capital will be computed for each project based upon the return on investment from District cash contributions, and the cost of each form of debt used to finance the project. Costs for any contributions made by developers, grants, or other contributions-in-aid-of construction (CIAC) shall be considered to have a 0% cost of capital. As additional projects are completed the applied rate of return shall be revised to reflect the weighted average cost of capital for the project combined with the existing costs of capital for all projects previously added to the Utility Plant Rate Base. The return on investment for District cash contributions shall be based upon the most current fiscal year-end State Investment Pool performance. A risk premium of 75 basis points (0.75%) will be added to the most current calculation of the weighted average cost of capital for all projects to establish the allowed rate of return (ROR) on Utility Plant Rate Base.
- E. An annual depreciation expense shall be calculated using a straight-line method for the assigned useful life of the facility with no salvage value for each project in the Utility Plant Rate Base. The cost basis for the depreciation expense shall be based upon the original cost for each project less any project costs attributable to any CIAC sources all multiplied by Bellevue's proportionate share of capacity for each facility as delineated in Table 1.
- F. For the purposes of this Agreement the assigned useful lives of new Water Joint Serving Facilities shall be:

| | |
|----------------------------|-----------|
| Water Mains | 75 years |
| Reservoirs | 100 years |
| Boosters and Pump Stations | 35 years |
| Master Meters | 35 years |
- G. Bellevue's total annual depreciation expense shall be the total of the annual depreciation expense for all projects in the Utility Plant Rate Base.
- H. The total Water Joint Serving Facilities Utility Plant Rate Base at any given time shall be the original costs for all projects added to the Utility Plant Rate Base less the accumulated depreciation for all projects in the Utility Plant Rate Base and less any portion of such rate base classified as CIAC.

- I. The total annual rate of return on the Utility Plant Rate Base shall be determined by multiplying the year-end total Utility Plant Rate Base times the allowed ROR.
- J. Bellevue's total annual compensation to the District for capital cost reimbursements shall be determined by adding the total annual depreciation expense to the annual ROR on the Utility Plant Rate Base. This annual compensation shall be paid by Bellevue to the District in twelve equal monthly installments.
- K. Prior to the Assumption Date Bellevue shall not be responsible for any compensation to the District for capital cost reimbursement, except as provided for in Section XI (B) and (C) and Section XIII (D).
- L. The District will have no restrictions on how it uses Bellevue capital cost reimbursements.
- M. All updates of the Utility Plant Rate Base and weighted average cost of capital shall be based on fiscal year ending financial subsidiary ledgers that record the capital costs, depreciation accounts, source of financing and amount of debt, and cost of capital for Water Joint Serving Facilities. These costs shall be reconcilable to District fiscal year-end financial statements.
- N. A theoretical example of how the capital cost reimbursement methodology would apply in this Agreement is described in Exhibit I.

XIII. WATER MASTER AND DIRECT READ METERS

A. Master Meter Service Area

Water flowing through the Water Joint Serving Facilities to Bellevue shall be measured by strategically placed Master Meters. These Master Meters shall be capable of measuring water flowing in both directions. The location and general description of each Master Meter site is shown on Exhibit E and the attached Water Master Meter Areas Schedule. Also shown on Exhibit E and its attachment are descriptions of other system improvements that are required as part of this Agreement. Master Meters are Water Joint Serving Facilities.

B. Master Meter Installation

The District shall engineer, specify, design, bid, construct, and install the Master Meters at Bellevue expense, subject to review and approval by Bellevue, which approval shall not be unreasonably withheld. Master Meters shall be designed, constructed, and operated in accordance with best industry practices and only to the extent and cost necessary to serve the purposes set forth in this Agreement. Construction of the Master Meters shall be completed no later than September 30, 2003.

C. Master Meter Ownership, Operation and Maintenance

Master Meters shall be owned, operated, and maintained by the District.

D. Payment for Master Meters

Bellevue shall pay costs for specifications, bidding, engineering, designing, constructing, and inspecting the Master Meters. The District shall invoice Bellevue for such costs on a regular basis, but no more frequently than monthly. Bellevue shall make full payment within 45 days of receipt of the District's actual invoice.

E. Master Meter Dispute Resolution

In the event a Master Meter fails to register any water service or does not register water service within the manufacturer's normal tolerances, the parties shall agree upon the length of meter malfunction. An appropriate adjustment shall then be made on the next monthly invoice based upon the estimated quantity of service delivered during such period of meter malfunction using the historical consumption for the malfunctioning meter during the preceding twelve (12) month period as the basis for estimating the quantity of service delivered.

XIV. WATER SUPPLY RESPONSIBILITY AND REPORTING

A. Water Supply

Each Party is responsible for acquiring and paying for the cost of water supplies to meet the needs of their own customers. At the time of the execution of this agreement both Parties purchase water supplies from the City of Seattle under separate contracts. Each Party reserves the right to change such wholesale water purchase arrangements.

B. Regional Water Delivery

1. Regional water providers will deliver water supplies to the District and Bellevue from a regional transmission system at points regulated by Inlet Meters.
2. The volume of water delivered through Inlet Meters shall be measured by the City of Seattle or its assignee.
3. The District and Bellevue shall be individually responsible for the purchase of all water delivered through an Inlet Meter used exclusively to serve the customers of only the District or Bellevue.

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4. The responsibility for the purchase of water jointly delivered to both the District and Bellevue through an Inlet Meter shall be determined by the methodology provided for in Section XIV E.

C. Master Meter Reading

1. The District shall be responsible for reading the Master Meters on the same frequency and as close as possible to the time that the City of Seattle reads Inlet Meters.
2. For the Reporting Period, Bellevue shall be assigned the volume of water delivered by Master Meters through the following procedure: The District shall record the differences in the meter readings for each Master Meter during the Reporting Period, adding the volume from those Master Meters where there is a net flow from the District to Bellevue, and subtracting the volume from those Master Meters where there is a net flow from Bellevue to the District. This sum shall then be multiplied by 1.024 to account for supply-side losses.

D. Direct Read Meter Areas

1. The District and Bellevue shall be responsible for reading Direct Read Meters within their own service areas.
2. Each calendar year the water use from all Direct Read Meters within the District and Bellevue shall be totaled for the previous year. The net volume of water to be assigned to Bellevue from the Direct Read Meter Areas shall be the difference between the total water volume from the Direct Read Meters within Bellevue and the total water volume from the Direct Read Meters within the District the result of which shall be multiplied by 1.024 to account for supply-side losses. An additional 480 hundred cubic feet (ccf) yearly allowance shall be added to this net volume to reflect the net yearly unaccounted-for-water use by Bellevue. Through a procedure agreed to by both Parties, this total shall be adjusted by estimated volumes resulting from line failures or fire fighting.
3. The total water volume from the Direct Read Meter Area serving Bellevue shall be used in the following year for calculating water purchases from regional water providers. The total water volume for the calendar year calculated in the previous section will be prorated for each Reporting Period based upon historical yearly use patterns agreed to by the District and Bellevue.
4. Bellevue shall not allow any hydrant meter sales from hydrants located within the Direct Read Meter Areas.

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E. Total Water Use

1. The total water volume assigned to Bellevue from Inlet Meters jointly serving the District and Bellevue shall be determined for each Reporting Period by adding the total net volume assigned to Bellevue from the Master Meters and the prorated volume assigned to Bellevue from the Direct Read Meter Area.
2. The total water volume to be assigned to the District from Inlet Meters jointly serving the District and Bellevue shall be the difference between the total amount of volume from Inlet Meters for the Reporting Period minus that water volume assigned to Bellevue for the same Reporting Period.
3. The District shall be responsible for reporting the water volumes assigned to Bellevue and to the District for the Reporting Period to regional water providers in a timely manner. At the same time the District will provide this information to Bellevue. Each Party is responsible for its own payment to its regional water provider for its assigned water volume.
4. In the future should an adjustment to volumes from Inlet Meters jointly serving the District and Bellevue be made by Seattle or the responsible regional water provider, the adjusted volume and responsibility for any payments or credits shall be assigned to the District.

XV. "OLD WATER" ALLOWANCE IN 1982 SEATTLE WATER PURVEYOR CONTRACT

The rights of both Parties under the 1982 Seattle Water Purveyor Contract include provisions for an "Old Water Allowance" that is used in determining the charges for purchased water. To the extent that there is any current or future benefit from "old water", one half (50.0%) of the District's "Old Water Allowance" shall be allocated to Bellevue as delineated in Table 2.

TABLE 2
"OLD WATER" ALLOCATION

| Month | District Old Water Allowance (ccf) | Amount to be Allocated To Bellevue (ccf) |
|----------|------------------------------------|--|
| January | 42,155 | 21,078 |
| February | 44,162 | 22,088 |
| March | 51,429 | 25,714 |
| April | 40,248 | 20,124 |
| May | 42,054 | 21,027 |

| | | |
|-----------|---------|---------|
| June | 64,898 | 32,449 |
| July | 72,616 | 36,308 |
| August | 110,805 | 55,403 |
| September | 36,589 | 18,294 |
| October | 39,198 | 19,599 |
| November | 42,783 | 21,392 |
| December | 48,877 | 24,438 |
| Total | 635,814 | 317,907 |

Note: ccf – hundreds of cubic feet

XVI. SEWER SERVICE AREAS

- A. Exhibit No. G identifies a number of areas within Bellevue and the District where sewer flows from one Party's service area to the other's service area. Each Party agrees to continue to accept current and future sewer flows from the other Party for each of the identified areas at no cost to the other Party based on sewage flows generated under existing land use zoning. If future land use zoning changes are proposed within Areas I, II, and III on Exhibit G, and such zoning changes would result in increased sewage flows, then the Party in whose service area the land use change is being proposed must obtain written verification from the other Party that either 1) there is enough sewerage capacity to handle the increased sewer flow resulting from the proposed changed land use zoning, or 2) there will be improvements constructed as necessary to handle the increased flows. The Party where the increased sewer flows are generated shall be responsible for all reasonable costs associated with any improvements within the other Party's service area needed to accommodate the higher flows.
- B. The Parties agree that upon the Assumption Date, the District shall continue to have sole ownership and all operation and maintenance responsibilities, including all associated costs, for the Coal Creek Parkway Interceptor within Bellevue's limits as shown on Exhibit B. The District shall accept sewer flows from Bellevue to this line at no charge.
- C. Each Party shall be fully responsible for all operation, maintenance, repair, and replacement of their own sewer facilities. The actual ownership of sewer facilities is shown on attached Exhibit J.
- D. Each Party is responsible for its own contract with King County Metro for sewage transmission, treatment and disposal, including reporting and payments for their customers.

TD

XVII. TELEMETRY

Bellevue shall provide its own telemetry at its own cost for the water and sewer facilities within the Assumption Area. After January 1, 2003 the District shall allow Bellevue reasonable access to the District's sewer and water facilities in order to permit Bellevue to design and construct new Bellevue telemetry facilities. After Bellevue's new telemetry is in operation, which shall occur before the Assumption Date, the District may remove, at its own cost, its old telemetry currently located within the Assumption Area. The District shall notify Bellevue no later than June 1, 2004, as to which telemetry components it intends to remove and which will remain. The District shall remove those telemetry components it elects to retain no later than August 1, 2004. Bellevue shall thereafter own all other remaining telemetry components.

XVIII. EMPLOYEES

- A. Before the Assumption Date, the District shall not exceed its current number of employees (as measured by their full time equivalents) or, if additional hires are required, Bellevue shall have no obligation to offer to employ such new employees as of the Assumption Date. The District may refill vacant positions to maintain its August 1, 2001 level of employment.
- B. By June 30, 2003, the District shall determine what positions, if any, it shall no longer need as of the Assumption Date and shall provide Bellevue with a list of those positions, associated job duties, and incumbent names. Bellevue shall offer to employ the incumbent(s) if any. Employees hired by Bellevue shall have the option of retaining or cashing in all or part of their accrued sick leave in accordance with the District's policies. Any sick leave so cashed in shall be deducted from the employee's accrued sick leave at the time that employee is hired by Bellevue. After this deduction, the employee shall otherwise retain all sick leave standing to the employee's credit in the District's plan. Employees hired by Bellevue shall be entitled to vacation as provided in RCW 35.13A.090. Employees hired by Bellevue shall otherwise receive credit for their years of service with the District in determining vacation accrual, sick leave benefits, service awards and layoffs, provided that such benefits for those employees who shall be subject to contracts with Bellevue's labor unions shall be contingent upon union approval. Such employees hired by Bellevue shall also retain their retirement benefits as provided under the statewide Public Employees Retirement System (PERS). To the extent permitted by law and applicable Bellevue employee plan provisions, employees hired by Bellevue may transfer personal retirement accounts to Bellevue retirement plans. Bellevue shall incur no costs associated with the transfer of personal retirement accounts. Except as provided in this Agreement, any employees hired by Bellevue shall be treated as new employees under applicable Bellevue policies and procedures and/or union contracts.

XIX. COSTS TO IMPLEMENT ASSUMPTION

Except as otherwise provided in this Agreement, each Party agrees to bear solely its respective costs of consultant, legal, and staff services incurred in connection with this Agreement.

XX. CUSTOMER BILLING

The District shall read all meters in the Assumption Area and prepare a final billing before the Assumption Date. The District shall be solely responsible for the collection of these receivables.

After the Assumption Date, Bellevue shall be responsible for billing customers located within the Assumption Area and the District shall be responsible for billing customers within the District's modified boundaries.

The District shall provide copies of customer records for customers in the Assumption Area, including water meter readings for 2001, 2002 and through September 1, 2003, to Bellevue by September 30, 2003. The balance of the billing records for the time period September 2, 2003, through the Assumption Date shall be provided to Bellevue not later than February 1, 2004. Bellevue shall promptly pay all reasonable costs for copying such customer records.

XXI. RECORDS

The District shall retain the original records for all business matters relating to the Assumption Area but shall make those records available to Bellevue for review and copying, as needed. Bellevue shall promptly pay all reasonable costs for copying any records it requests.

XXII. INDEMNITY AND INSURANCE

A. Additional Insured

If permitted by the terms of its insurance policies, the District agrees to name Bellevue as an additional insured during the Interim Period for all matters relating to the Assumption Area. If there are any additional premiums payable as a result of naming Bellevue as an additional insured, Bellevue shall pay any such additional premiums to the District within 45 days of the receipt of an invoice for such premiums.

B. Third Party Insurance

The District shall require any contractors or subcontractors performing work in the Assumption Area during the Interim Period to name Bellevue as an additional insured for all matters relating to the Assumption Area.

C. Non-Waiver of Other Rights or Remedies

Except as expressly provided by any indemnity provision in this Agreement, nothing in this Agreement is intended to release, waive, or otherwise modify or limit any party's right to assert any claim in law or equity against the other party arising from any act, error, or omission of that party or its officials, officers, employees, agents, representatives, contractors, or subcontractors, when acting within such designated capacity.

XXIII. DISPUTE RESOLUTION

Disputes between the Parties arising out of this Agreement or its on-going implementation shall be identified in writing and submitted to the District Manager and Bellevue's Director of Utilities who shall undertake a joint resolution process. Authorized, written agreement between the District Manager and Bellevue's Director of Utilities may be submitted to the District's Board of Commissioners and Bellevue Council for consideration. Matters that are not resolved by the Manager and Director may be submitted to mediation with the agreement of both Parties.

XXIV. NOTICE AND COMMUNICATIONS

Notice to the Parties shall be submitted to the following:

Director of Utilities
City of Bellevue
311 - 116th Avenue SE
P.O. Box 90012
Bellevue, WA 98009-9012

District Manager
Coal Creek Utility District
6801 - 132nd Place SE
Newcastle, WA 98059

XXV. REVIEW BY OTHER AGENCIES

This Agreement shall not be effective until reviewed and approved by the City of Seattle, King County (Metro), and the Washington State Department of Health. Once approved by these agencies the effective date of this Agreement shall be considered the date of execution by the last Party to sign. Should any agency decline to approve the Agreement because it does not have the authority or responsibility to approve such agreements (as opposed to declining to approve this Agreement because it is deficient or unacceptable), such agency's action in declining to review or approve the Agreement shall be considered approval for the purposes of this paragraph. The failure of any

agency to comment on this Agreement within 90 days of its submittal to that agency shall constitute approval under this paragraph. If the Parties later receive adverse comments from an agency, the parties shall work cooperatively to try to address and meet the concerns of that agency.

XXVI. EXECUTION OF DOCUMENTS

The Parties agree to execute promptly all documents necessary to implement the terms of this Agreement or to effect its purposes.

CITY OF BELLEVUE

By  _____
City Manager

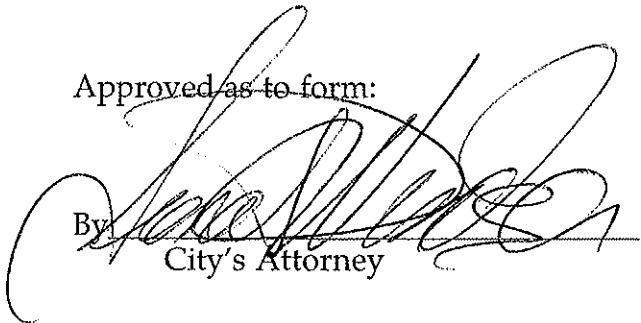
Date signed: May 23, 2002.

COAL CREEK UTILITY DISTRICT

By  _____
District Manager

Date signed: ~~May~~ ^{June} 3, 2002.

Approved as to form:

 _____
City's Attorney

Approved as to form:

 _____
District's Attorney

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Service Area Boundaries after Assumption

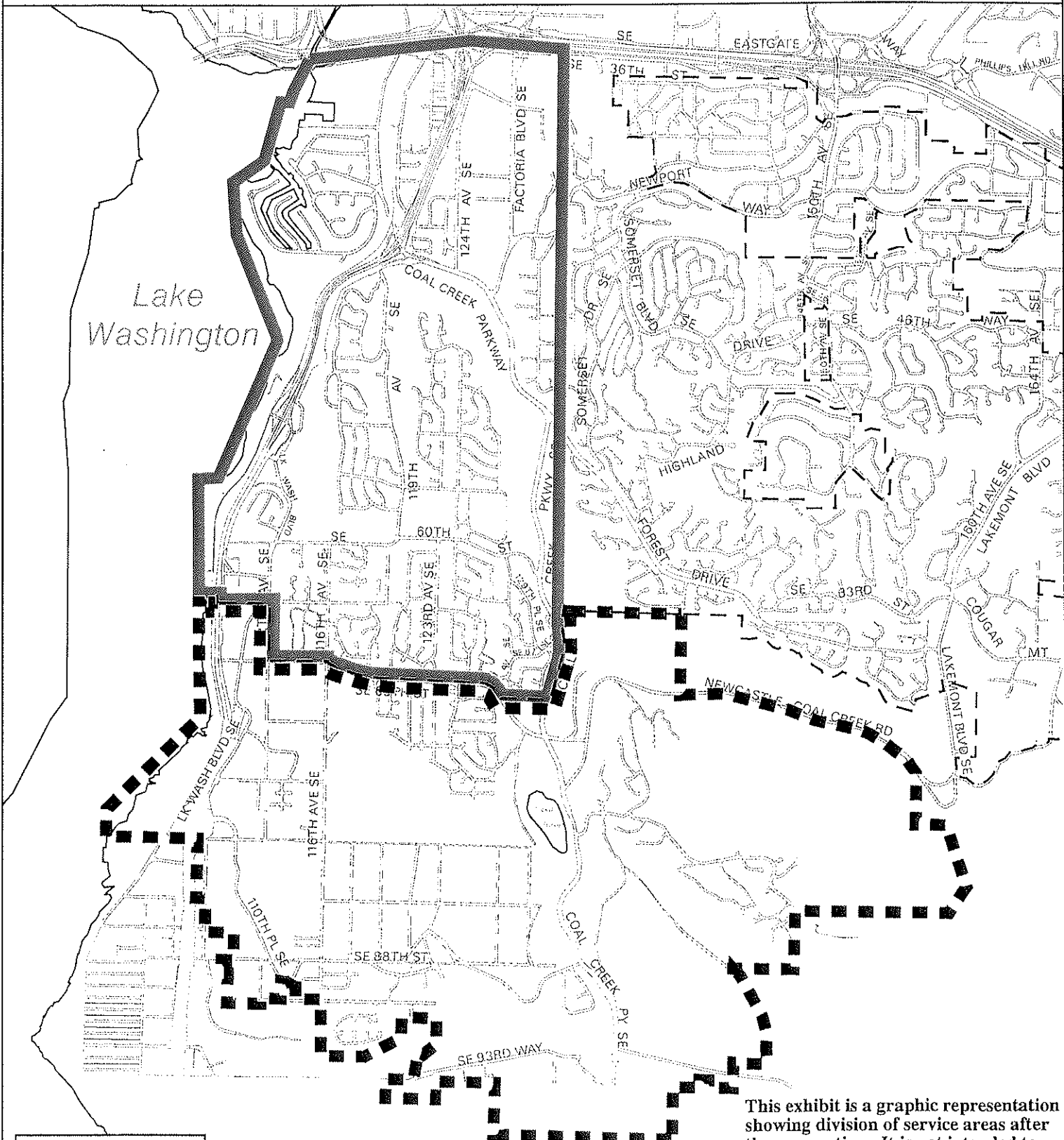





Exhibit A

This exhibit is a graphic representation showing division of service areas after the assumption. It is not intended to represent the legal service areas of Bellevue or CCUD.

Scale: 1 inch = 3000 feet
 Utilities Department
 Engineering Division
 Systems Planning and Mapping
 May 01, 2002
 v:\tup\taicud_a.xml

Legend

-  Coal Creek Utility District Service Areas
-  Bellevue Service Areas
-  Bellevue City Limit

This map is a graphic representation derived from the City of Bellevue Geographic Information System. It was designed and intended for City of Bellevue staff use only; it is not guaranteed to survey accuracy. This map is based on the best information available on the data shown on this map. Any reproduction or sale of this map, or portions thereof, is prohibited without express written authorization by the City of Bellevue.

NOTE: If you have specific questions concerning information contained on this map, please contact the sponsoring department as shown on this map.

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City of Bellevue - Coal Creek Utility District

Common Service Boundary Line

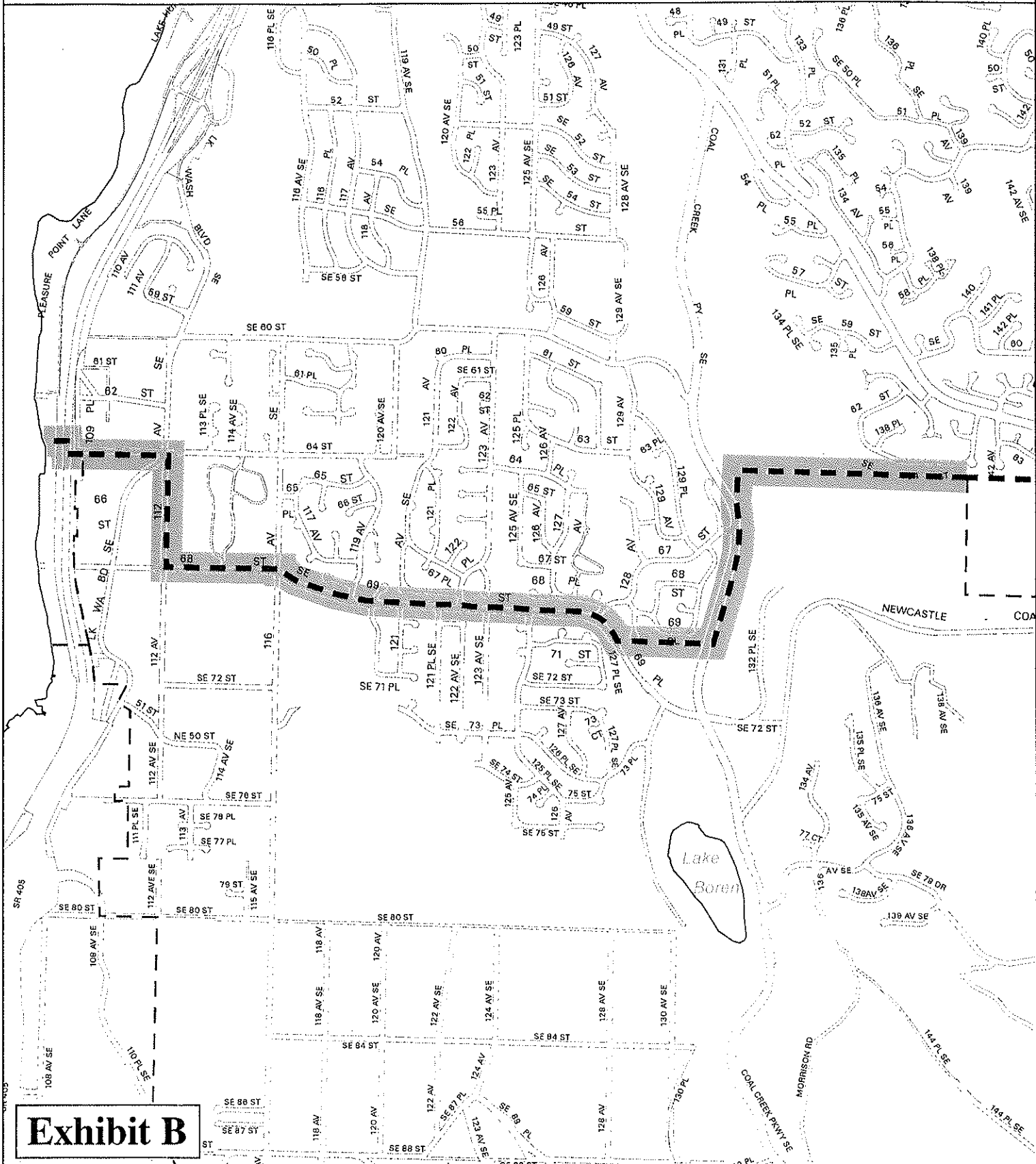


Exhibit B

Scale: 1 inch = 1500 feet
 Utilities Department
 Engineering Division
 Systems Planning and Mapping
 May 01, 2002
 v:\tup\laticud-cob_a.aml

Legend

- Common Service Boundary Line
- Bellevue city limits
- Other city limits

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NOTE: If you have specific questions concerning information contained on this map, please contact the sponsoring department as shown on this map.

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EXHIBIT B

City of Bellevue-Coal Creek Utility District Common Service Boundary Line **Boundary Line Description**

A line lying within Sections 20, 27, 28 and 29, Township 24 North, Range 5 East, W.M., in King County, Washington, described as follows:

Beginning at the Northeast corner of the Northwest quarter of said Section 27; thence Westerly along the North line thereof to the Northwest corner of said Northwest quarter; thence Southerly along the West line thereof to the Easterly margin of Coal Creek Parkway S.E.; thence Southerly along said Easterly margin to the South line of the North half of the Southeast quarter of the Northeast quarter of said Section 28; thence Westerly along said South line to the Northerly margin of S.E. 69th Street; thence Northwesterly and Westerly along said Northerly margin to the South line of the Northwest quarter of the Northwest quarter of said Section 28; thence Westerly along said South line to the East margin of 116th Avenue S.E.; thence Northerly along said East margin to the Easterly extension of the North margin of S.E. 68th Street; thence Westerly along said Easterly extension and North margin to the East margin of 112th Avenue S.E.; thence Northerly along said East margin to the South line of the North 30.00 feet of the Northeast quarter of said Section 29; thence Westerly along said South line to the Centerline of Right of Way, as shown on the S.R. 405(Primary State Highway No. 1), Kennydale North, sheet 3A of 4, dated July 17, 1951; thence Northerly along said centerline to the Easterly extension of the North line of Lot 35, Block A, C.D. Hillman's Lake Washington Garden of Eden Addition to Seattle Division No. 3, as recorded in Volume 11 of Plats, Page 81; thence Westerly along said Easterly extension to the Northeast corner of said Lot 35; thence continuing Westerly along the North line thereof and the Westerly extension of said North line to the Inner Harbor Line of the East shoreline of Lake Washington, as shown on sheet 30 of the State of Washington Commissioner of Public Lands, Maps of Lake Washington Shore Lands, filed in the office of the Commissioner of Public Lands, September 19, 1921 and the **Terminus of said Line.**

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MN/11-28-2001

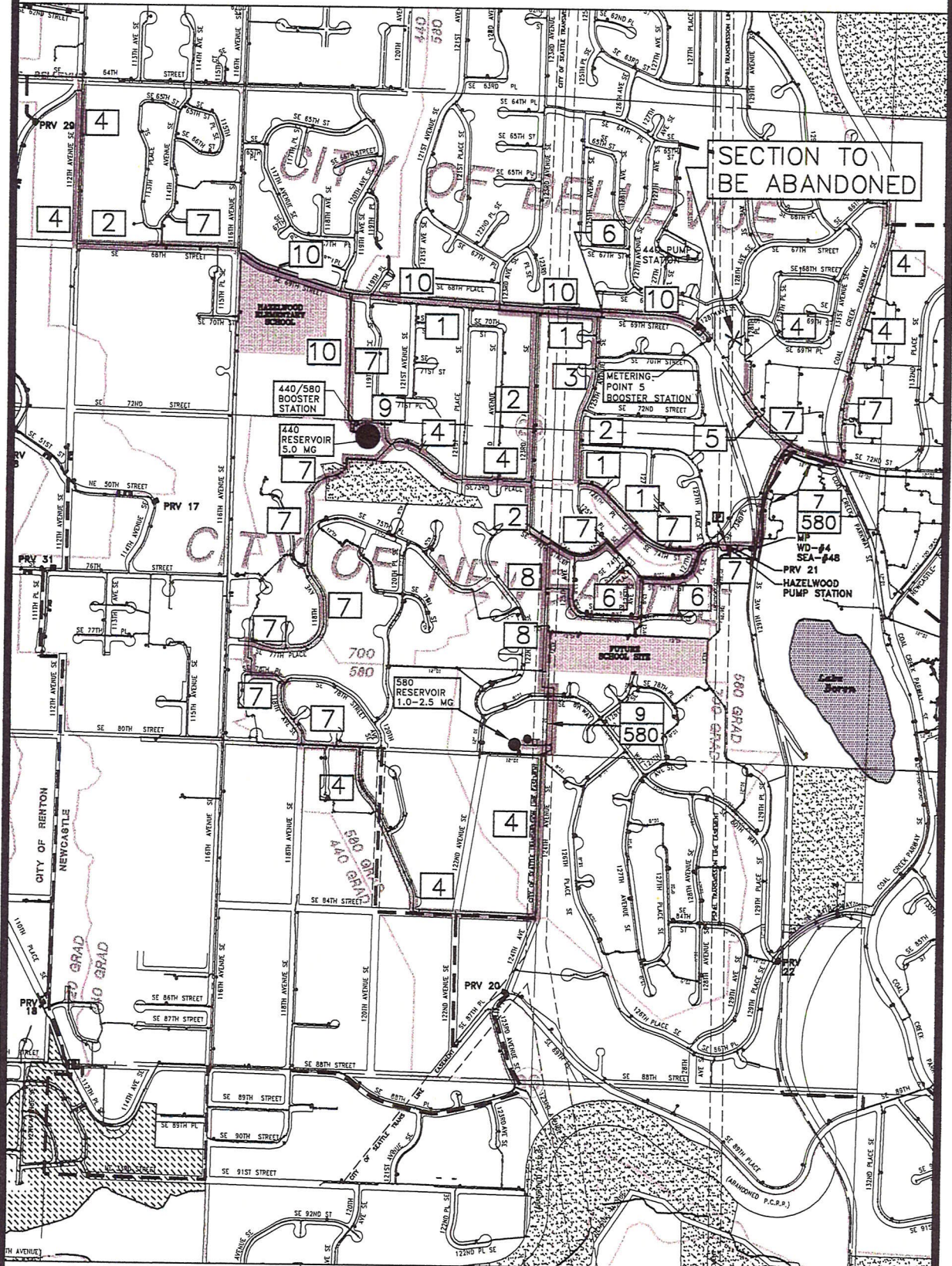
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- 1**
PIPELINE W/ REFERENCE NO. REQUIRED TO BE 'JOINT SERVING' FACILITIES
- 440 RESERVOIR 5.0 MG**
FACILITIES REQUIRED TO BE 'JOINT SERVING' FACILITIES
- 7**
580
REFERENCE NO. W/ ZONE



Penhallegon Associates Consulting Engineers, Inc.

COAL CREEK UTILITY DISTRICT
& CITY OF BELLEVUE
WATER JOINT SERVING
FACILITIES

EXHIBIT
C

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Physical Assets Located in Bellevue

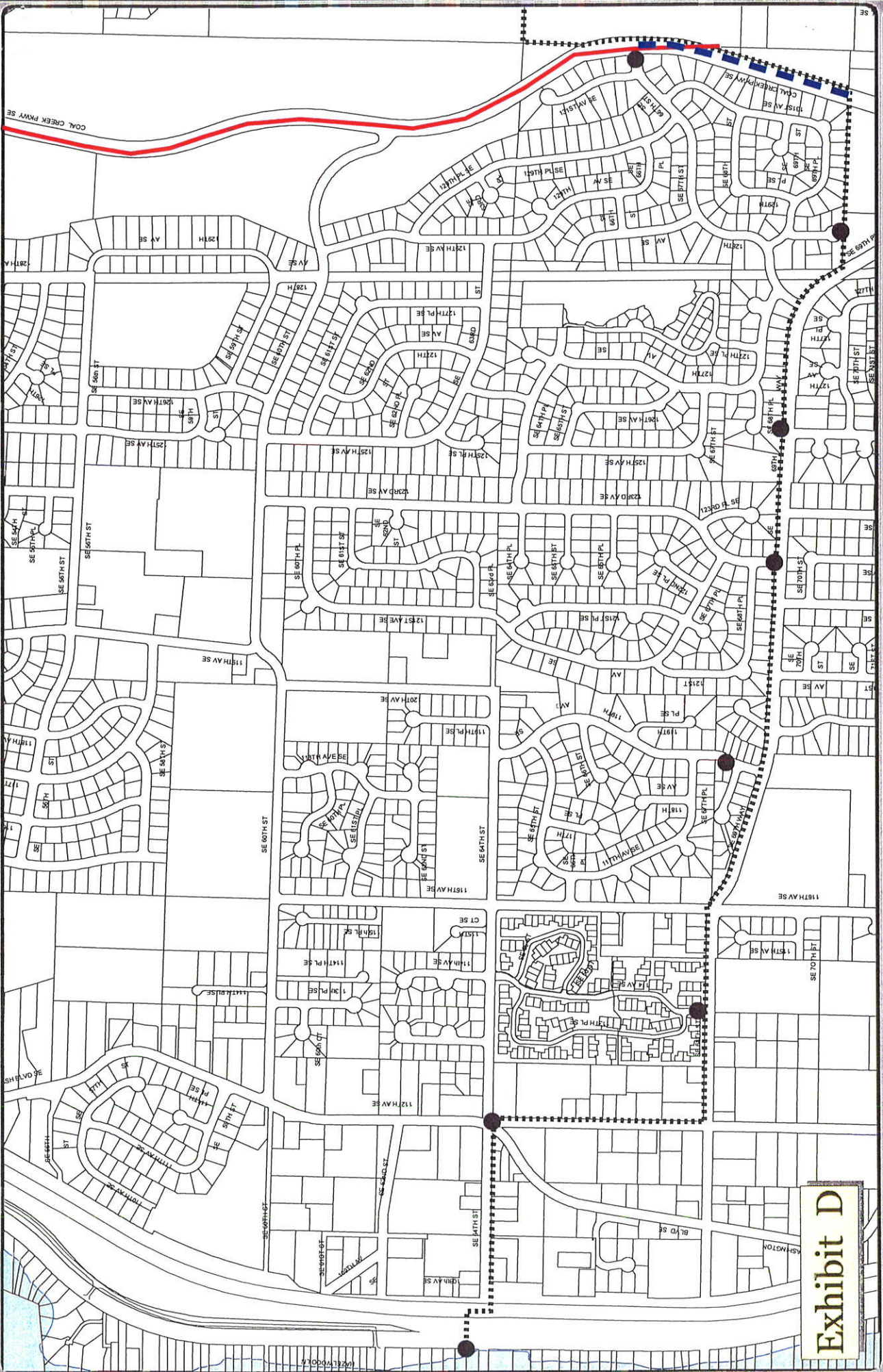


Exhibit D

Utilities Department
 Engineering Division
 Systems Planning and Mapping
 May 1, 2002



Coal Creek Utility District (CCUD) Owned Coal Creek Parkway Sewer Interceptor
 CCUD Owned Coal Creek Parkway Water Mains
 CCUD Master Meters that may be Located in Bellevue

Bellevue City Limits

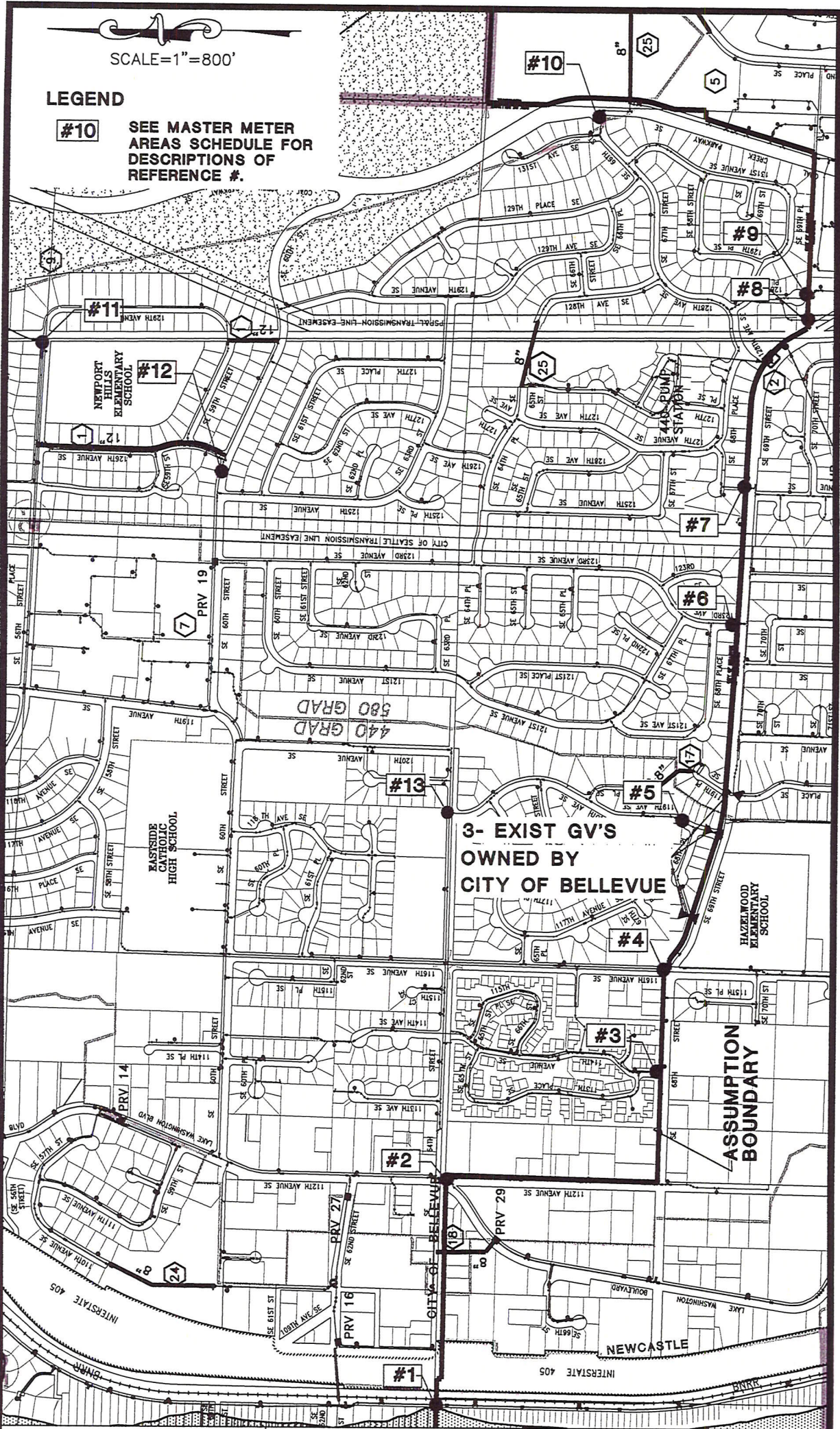


Scale: NTS

SCALE=1"=800'

LEGEND

#10 SEE MASTER METER AREAS SCHEDULE FOR DESCRIPTIONS OF REFERENCE #.



Fugro Associates Consulting Engineers, Inc.

COAL CREEK UTILITY DISTRICT
 & CITY OF BELLEVUE
**WATER MASTER METER
 DESCRIPTION**

EXHIBIT

E

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WATER MASTER METER AREAS
SCHEDULE

The following provides an itemized description of the reference numbers shown on Exhibit E - Master Meter Areas

| Reference # | Description of Item |
|-------------|---|
| #1 | A two-directional Master Meter 6± inch in size located at or near the City of Bellevue Corporate limits on Hazelwood Lane within the District's 170 Zone water system. |
| #2 | A two-directional meter or a one (Bellevue-to-District) directional emergency flow connect near the intersection of 112 th Ave SE and SE 64 th St. |
| #3 | A two-directional meter approximately 8-inch in size located on 114 th Avenue SE near SE 68 th St. |
| #4 | A closed valve to be owned and maintained by Bellevue and only opened under emergency situations. An existing valve on 116 th Ave SE near SE 68 th /69 th intersection shall be used for this purpose. |
| #5 | A two-directional meter approximately 8 inch in size on 119 th Ave SE just north of SE 68 th Place. |
| #6 | A two-directional meter approximately 8 inch in size on 123 rd Ave SE just north of SE 69 th Street. |
| #7 | A two-directional meter approximately 8 inch in size to be located on SE 72 nd St at 125 th Ave SE. |
| #8 | Close and abandon a 10-inch cast iron/12-inch A.C. main on SE 69 th St. and extending north to 128 th Pl. SE. Relocate existing services and fire hydrant as required. |
| #9 | A two-directional meter approximately 8 inch in size at the Bellevue/Newcastle Corporate limits and the extension of 128 th Pl SE. |
| #10 | Two 1-inch, one-directional service meters (one recording flow in each direction). This two-way connection is for the purpose of eliminating a dead end main. A main line 8-inch valve will be cut in at this location to isolate the Bellevue/District system. At such time as the District's main on Coal Creek Parkway is extended and looped to other District facilities, this meter cluster may be abandoned. |

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| | |
|-----|--|
| #11 | <p>An emergency Inlet Meter located at approximately SE 56th St and the East Side Supply Line (ESSL approximately 128th Ave SE). This connection will be designed as a pressure sustaining valve and will only open or pass water from the ESSL under emergency or fire flow conditions. This Inlet Meter shall be telemetered and the following shall be provided to the District so the District can monitor the use of this Inlet:</p> <ul style="list-style-type: none"> • Notice/alarm any time the inlet is used • Pressure/head at this location • Flow monitoring of the meter at this location |
| #12 | <p>Upsize an existing 6-inch main to 12-inch main approximately 200± feet in length on SE 60th St between 125th Ave SE and 126th Ave SE. Note this replacement to be accomplished by Bellevue and Bellevue agrees to have the improvement completed by 7/01/2004.</p> |
| #13 | <p>Three (3) valves on SE 69th St to be left normally open, shall be owned and maintained by Bellevue. The water main extending north of these valves is also owned and maintained by Bellevue.</p> |

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Direct Read Meter Areas



- Bellevue Water Customers
- Coal Creek Utility District Water Customers
- Bellevue City Limits

Utilities Department
Engineering Division
Systems Planning and Mapping
May 1, 2002



Scale: 1 inch = 800 feet

Exhibit F

Sewer Service Areas

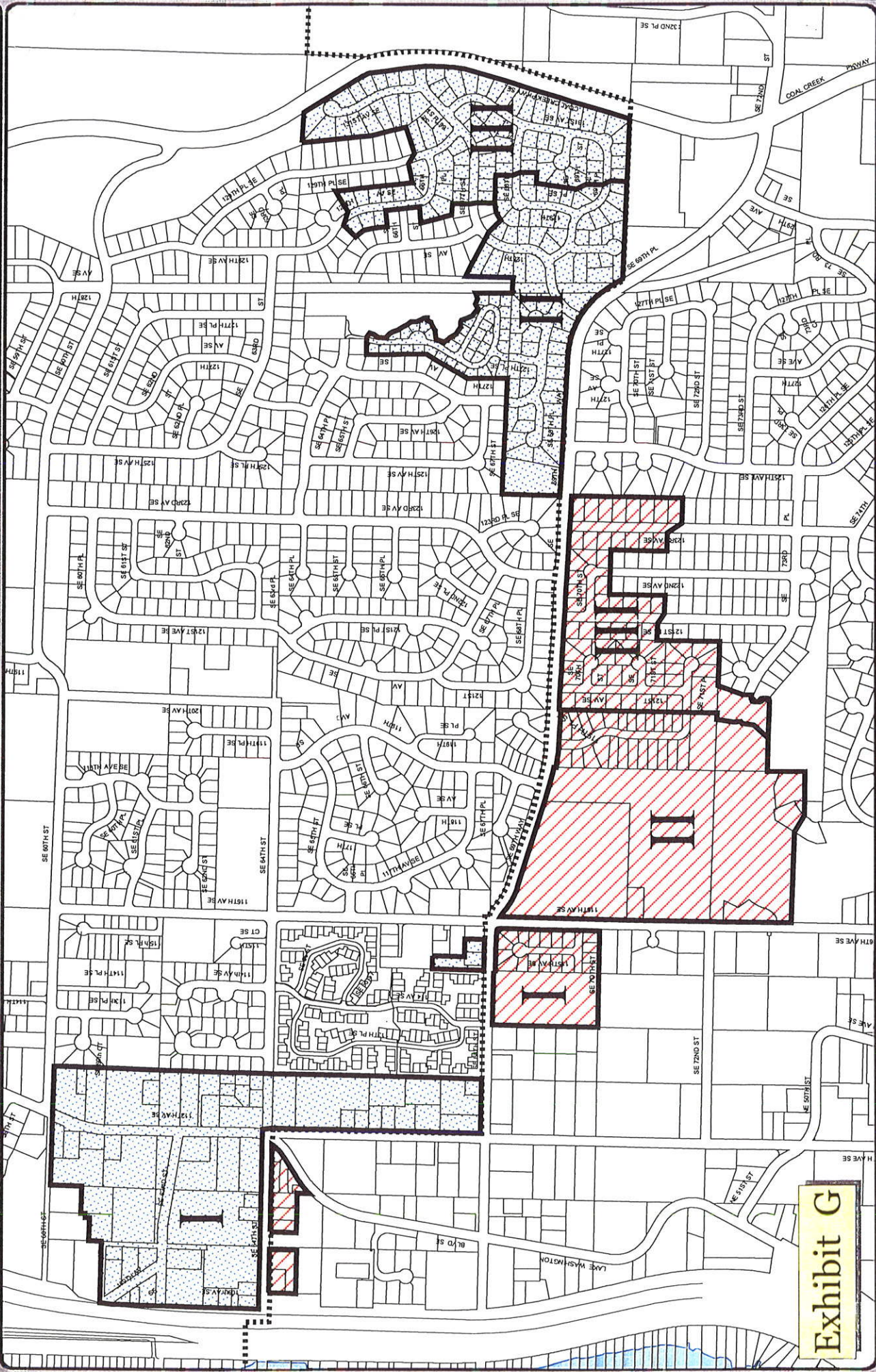





Exhibit G

-  Bellevue Sewer Service Areas Served by Coal Creek Utility District (CCUD) Facilities
-  CCUD Sewer Service Areas Served by Bellevue Facilities
-  Bellevue City Limits

Utilities Department
 Engineering Division
 Systems Planning and Mapping
 May 1, 2002



Scale: 1 inch = 800 feet.

EXHIBIT H

H.1. Methodology to Determine the Operation and Maintenance (O&M) Component of the Wheeling Charge for Joint Serving Facilities

Information Required:

1. Financial Statement Worksheet
2. Facilities Inventory
3. Appendix B of the Water and Sewer Rate Study dated 6 June 2001

Assumptions:

1. Until the Financial Statement Worksheet for 2004 is available (approximately May 2004), the O&M component will be determined by using the financial and facilities data for the District prior to assumption by Bellevue. After the Financial Statement Worksheet for 2004 is available, the O&M component will be determined by using the financial and facilities data for the District after the assumption. The example provided in Exhibit D.2 is based on financial and facilities data for 2000 (i.e., prior to assumption by Bellevue).
2. Number and size of master meters.
3. The quantity of water pumped by the District for use by Bellevue is 42 percent of the total water pumped by the District

Step 1. Allocate O&M Costs to Utility Activities

Prior to the availability of the Financial Statement Worksheet for 2004, the allocation of O&M costs shown in the general ledger accounts (Financial Statement Worksheet) to the water and sewer utilities is based on Appendix B of the Water and Sewer Rate Study dated 6 June 2001. After the availability of the Financial Statement Worksheet for 2004, the allocation factors must be adjusted to reflect the assumption by Bellevue. O&M costs for the stormwater utility are entirely included in general ledger accounts 510-000 and 515-000.

Step 2. Allocate Water Utility O&M and Customer-Related G&A Costs into Functional Categories

The functional categories and the general ledger accounts applicable to each category are shown in Table H.1-1. The O&M cost of telemetry is allocated based on a 50 percent allocation each to the water and sewer utility and the number of telemetered points in each functional category of the water utility. Please note that the functional category for hydrants and the general ledger account for water purchases will not be applicable for allocation to Bellevue after the assumption and the other functional categories must be adjusted to reflect the facilities assumed by Bellevue.

Step 3. Allocate the O&M and Customer-Related G&A Costs of the Functional Categories of the Water Utility to Bellevue

Based on the allocation criteria shown in Table H.1-2, the O&M and customer-related G&A costs of each functional category will be allocated to Bellevue. Please note that the allocation methodology differs prior to and after the Financial Statement Worksheet for 2004.

Step 4. Review and Compute G&A Multiplier

The G&A accounts, excluding customer-related G&A expenses will be reviewed for applicability and total G&A expenses adjusted. Inapplicable expenses include excise taxes, which will be discussed in Step 6, and surface water taxes. It should be noted that the Financial Statement Worksheets prior to fiscal year 2001 included both capital and O&M related expenses. Beginning in 2001 these costs will be separated and only O&M costs will be used for allocation purposes. In addition, if legal or engineering expenses are anomalous, they will be normalized. The customer-related G&A expenses are included as a functional category in Step 3. The G&A multiplier is based on the ratio of the total adjusted G&A expenses (excluding customer-related G&A expenses) to the total O&M expenses (plus customer-related G&A expenses), including the water, sewer, and stormwater utilities. Prior to the Financial Statement Worksheet for 2004, the G&A and O&M expenses will include the costs of the District's service area and the service area to be assumed by Bellevue. After the Financial Statement Worksheet for 2004, the G&A and O&M expenses will include only the costs of the District's service area. The District's current general ledger accounts for G&A expenses are shown in Table H.1-3.

Step 5. Determine Bellevue's Monthly Installment Payment

The sum of the O&M and customer-related G&A costs computed in Step 3 is Bellevue's allocated direct costs (i.e., excluding G&A multiplier and excise taxes) of the wheeling charges for the joint serving facilities. Bellevue's monthly installment payment for allocated direct costs is determined by dividing the total annual charge by twelve (12).

Step 6. Apply the G&A Multiplier and Excise Tax and Determine the Total Monthly Installment Payment

Based on the result of Step 5, the total allocated costs will be multiplied by one (1) plus the G&A multiplier determined in Step 4. There appears to be a deduction in computing excise taxes available to the District under RCW 82.16.050. If excise taxes were required, the applicable rate would be applied to the total. This total and any applicable excise tax will constitute the monthly Installment Payment by Bellevue to the District.

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H.2. Example of Calculation for the Operation and Maintenance (O&M) Component of the Wheeling Charge for Joint Serving Facilities

Basis of Information:

1. 2000 Financial Statement Worksheet
2. 2000 Facilities Inventory
3. Appendix B of the Water and Sewer Rate Study dated 6 June 2001
4. District report titled "Service Type and Meter Size Totals for Active Customers as of 2 Jan 2001"
5. 2000 metered water consumption data by route for Newcastle and Bellevue

Key Assumptions:

1. Financial and facilities information for 2000 was used to complete the example calculation.
2. It is assumed that there will be 7 master meters (6 – 8 inch meters and 1 – 6 inch meter).
3. The quantity of water pumped by the District for use by Bellevue is 42 percent of the total water pumped by the District.
4. It is assumed that Seattle Public Utilities (SPU) will bill the District directly for meter charges associated with metering point 5.

Step 1. Allocate O&M Costs to Utility Activities

See Table H.2-1.

Step 2. Allocate Water Utility O&M and Customer-Related G&A Costs into Functional Categories

See Table H.2-2, Columns B and C.

Step 3. Allocate the O&M and Customer-Related G&A Costs of the Functional Categories of the Water Utility to Bellevue

As shown in Table H.2-2, the O&M and customer-related G&A costs of each functional category are allocated to Bellevue based on the "Prior to 2004 FSW" allocation criteria shown in Table H.1-2. Additional information (not included in Table H.1-2) pertaining to the allocation of costs is summarized below.

Water Charges

Seattle Meter Charges: Expenses include meter charges paid to SPU for each meter to the District. The District currently has 10 meters of which meters 6, 7, 8, 9, 10 and 11 will be assumed by Bellevue. Metering point 1 will remain with the District. Metering point 5 will be shared by the District and Bellevue. Metering point 2 has been disconnected and metering point 4 is an emergency connection.

Only Bellevue's proportionate share of metering point 5 expenses were allocated to Bellevue. The allocation is based on Bellevue's proportionate share, 40 percent, of the total water pumped by the District from metering point 5. The quantity of water pumped to Bellevue was determined by a review of metered consumption data by route for Newcastle and Bellevue for 2000. The annual meter charge for 2000 was provided by District staff. The cost allocation calculation is shown below.

\$5,280 (annual meter charge) x 0.40 = \$2,112.00

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Reservoirs

Water - Maintenance of Distribution Reservoirs: Allocation of expenses to Bellevue is based on Bellevue's proportion of reservoir capacity of joint serving facilities and reservoir capacity assumed by Bellevue to total reservoir capacity, including reservoir capacity assumed by Bellevue. Reservoir capacities were obtained from Table 1-8 of the Engineering Evaluation of the City of Bellevue's Proposed Partial Assumption of Coal Creek Utility District. Bellevue's proportionate share of serving facilities (440 and 580 reservoirs) were taken from Table 1 of the Draft Interlocal Agreement for a Partial Assumption dated 3 December 2001. The calculation of the cost allocation is shown below.

Total reservoir capacity = 16 million gallons (MG)

| Reservoir and Capacity | City's Proportionate Share of Capacity | City's Share of Capacity in MG |
|-----------------------------|--|--------------------------------|
| Factoria Reservoir – 3.0 MG | 100% | 3.0 MG |
| 440 Reservoir – 5.0 MG | 33.06% | 1.653 MG |
| 580 Reservoir – 1.0 MG | 39.93% | 0.3993 MG |
| 580 Reservoir – 2.5 MG | 39.93% | <u>0.99825</u> |
| Total City Capacity | | 6.05055 MG |

$6.05055 \div 16 \text{ MG} = 0.37816$

$\$40,380.44 \times 0.37816 = \$ 15,270.27$

Pumping

Allocation of costs to Bellevue is based on Bellevue's proportionate share, 42 percent, of the total water pumped by the District. The quantity of water pumped to Bellevue was determined by a review of metered consumption data by route for Newcastle and Bellevue for 2000. The cost allocation calculation is shown below.

$\$69,249.03 \text{ (Total Water Pumping Costs, excluding Telemetry)} \times 0.42 = \$29,084.59$

Transmission and Distribution

Allocation of expenses to Bellevue is based on Bellevue's proportion of capacity allocation of joint serving facilities applied to diameter inch – linear feet of joint serving facilities to total diameter inch – linear feet of pipelines including District pipelines and pipelines to be assumed by Bellevue. The total linear feet of pipe-by-pipe size was provided by PACE. It should be noted that 2,838 linear feet of miscellaneous pipe was assumed to be 6 inch in diameter. The linear feet of pipe was then converted to diameter inch – linear feet. Bellevue's proportionate share of pipeline serving facilities was obtained from Table 1 of the Draft Interlocal Agreement for a Partial Assumption, dated 3 December 2001. Again the linear feet of pipe was converted to diameter inch – linear feet. The cost allocation calculation is shown below.

Total diameter inch – linear feet of pipelines = 4,813,770

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City's proportion of capacity allocation of joint serving facilities to diameter inch – linear feet of pipelines = 159,369

$$159,369 \div 4,813,770 = 0.03311$$

$$\$111,620.55 \text{ (Total Transmission and Distribution Costs)} \times 0.03311 = \$3,695.76$$

Meters and Service Lines

Allocation of expenses to Bellevue is based on diameter inch – meters of master meters to total diameter inch – meters, including District meters and meters to be assumed by Bellevue. The total number of meters by size for 2000 was obtained from Table 2-4 of the Water and Sewer Rate Study, dated 6 June 2001. The total number of meters was then converted to diameter inch - meters. It is assumed that there will be 7 master meters (6 – 8 inch meters and 1 – 6 inch meter). The master meters were then converted to diameter inch –meter. The cost allocation calculation is shown below.

$$\text{Total meters in diameter inch –meters} = 5,401$$

$$\text{Total master meters in diameter inch – meters} = 54$$

$$54 \div 5,401 = 0.01$$

$$\$124,138.31 \text{ (Total Meters and Service Line Costs)} \times 0.01 = \$1,241.38$$

General O&M

Allocation of expenses to Bellevue is based on Bellevue's proportion of direct O&M costs to total O&M costs for the District and Bellevue service areas. The calculation of the cost allocation is shown below.

(Total General O&M ÷ (Total Water Charges + Total Reservoirs + Total Pumping + Total Trans. & Dist. + Total Meters and Service Lines + Total Hydrants)) x (Total Water Charges + Total Reservoirs + Total Pumping + Total Trans. & Dist. + Total Meters and Service Lines + Total Hydrants) = City Allocation of Total General O&M

$$(\$182,660.39 \div \$1,638,104.15) \times \$54,415.06 = \$6,067.67$$

Customer-Related G&A

For General Ledger (GL) accounts 660-000 Operation Supervision and 903-000 Payroll-Office Salaries, customer-related G&A expenses were calculated based on an analysis of activities performed by the District's customer support people on a person-by-person basis. Customer –related expenses for GL accounts 408-200 Payroll Taxes, 926-000 Employee Pension & Insurance and 926-100 Employee Benefits-Vacation, Sick and Holiday is proportional to GL accounts 660-000 and 903-000. Customer-related expenses for GL account 921-000 Office Supplies and Other Expenses is based are review of annual expenditures and considers the number of customers to be assumed by Bellevue. Total customer-related costs of \$171,472.57 were then adjusted from the District's Administrative and General Expenses (which originally totaled \$1,633,642.49) included in Table H.2-3.

Allocation of customer-related G&A expenses to Bellevue is based on the number of master meter accounts to the total number of water and sewer accounts, including District accounts and accounts to be assumed by Bellevue. The total number of accounts for 2000 was obtained from

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District report titled "Service Type and Meter Size Totals for Active Customers as of 2 Jan 2001". It is assumed that there will be 7 master meter accounts. The cost allocation calculation is shown below.

Total number of water accounts = 6,450

Total number of sewer accounts = 4,474

Total number of master meter accounts = 7

$7 \div 10,931 = 0.00064$

$\$171,472.56$ (Total Customer Related G&A Costs) $\times 0.00064 = \$109.74$

Telemetry

The allocation of telemetry O&M costs to each functional category was described in Step 2. Allocation of expenses to Bellevue is based on Bellevue's proportionate share of telemetered facilities to be shared and assumed. Bellevue's proportionate share of joint serving facilities was obtained from Table 1 of the Draft Interlocal Agreement for a Partial Assumption, dated 3 December 2001. It is assumed that Bellevue will assume 100 percent of the Factoria reservoir and pump station. Bellevue's proportionate share of metering station 5 is based on Bellevue's share of the total water pumped by the District from metering station 5. The following summarizes Bellevue's proportionate share of the telemetered points in each functional category and calculates the cost allocation.

| Reservoirs | Fraction of Telemetered Facilities | City's Proportionate Share of Capacity | City's Share |
|----------------|------------------------------------|--|--------------|
| Factoria | — | 100% | 0.5 |
| 440 Reservoir | 1/3 | 33.06% | 0.1102 |
| 580 Reservoirs | 1 | 39.93% | 0.3993 |
| 700 Reservoir | — | 0% | <u>0.0</u> |
| Total | | | 1.0095 |

$1.0095 \div 8$ (total number of water telemetry points) = 0.12619

$\$4,897.50$ (Total Reservoir Telemetry Costs) $\times 0.12619 = \$618.02$

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| Pump Stations | Fraction of Telemetered Facilities | City's Proportionate Share of Capacity | City's Share |
|---------------|------------------------------------|--|--------------|
| Factoria | — | 100% | 0.5 |
| 440 BS | 1/3 | 33.06% | 0.1102 |
| 440/580 BS | 1/3 | 33.06% | 0.1102 |
| Hazelwood | 1 | 0% | 0.0 |
| Rainier Crest | — | 0% | <u>0.0</u> |
| Total | | | 0.7204 |

$0.7204 \div 8$ (total number of water telemetry points) = 0.09005

$\$5,597.14$ (Total Pumping Telemetry Costs) \times 0.09005 = $\$504.02$

| Metering Stations | Fraction of Telemetered Facilities | City's Proportionate Share of Capacity | City's Share |
|-------------------|------------------------------------|--|--------------|
| 5 | 1 | 40% | 0.4 |
| 8 | 1 | 100% | 1.0 |
| 11 | 1 | 100% | <u>1.0</u> |
| Total | | | 2.4 |

$2.4 \div 8$ (total number of water telemetry points) = 0.3

$\$6,296.78$ (Total Metering Station Telemetry Costs) \times 0.3 = $\$1,889.03$

Step 4. Review and Compute G&A Multiplier

The G&A multiplier is based on the ratio of the total adjusted G&A expenses, excluding customer-related G&A expenses (see Table H.2-3) to the total O&M expenses, plus customer-related G&A expenses (See Tables H.2-1 column G and Table H.2-2 column C) including water, sewer and stormwater utilities. The calculation for the G&A multiplier is shown below.

$\$1,462,169.93 \div (\$3,398,503.55 + \$171,472.56) = 0.40957$

Step 5. Determine Bellevue's Monthly Installment Payment

The sum of the O&M and customer-related G&A costs computed in Step 3 is Bellevue's allocated direct costs (i.e., excluding G&A multiplier and excise taxes) of the wheeling charges for the joint serving facilities. Bellevue's monthly installment payment for allocated direct costs is determined by dividing the total annual charge by twelve (12). Bellevue's monthly installment payment is calculated below.

$\$60,592.49 \div 12 = \$5,049.37$

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Step 6. Apply the G&A Multiplier and Excise Tax and Determine the Total Monthly Installment Payment

Based on the result of Step 5, the allocated direct costs are multiplied by one (1) plus the G&A multiplier determined in Step 4.

$$\$5,049.37 \times 1.40957 = \$7,117.44$$

There appears to be a deduction in computing excise taxes available to the District under RCW 82.16.050. If excise taxes were required, the applicable rate would be applied to the total. The current water excise tax rate is 0.05020. The total and applicable excise tax will constitute the monthly Installment Payment by Bellevue to the District.

Summary of Example Results

Based on the example presented in Exhibit H.2., the G&A multiplier is 40.957 percent of Bellevue's allocation of the District's operating expenses (column D of Table H.2-2). The sum of G&A costs and Bellevue's allocation of the District's operating expenses would be divided into twelve equal monthly payments.

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To: Lloyd Warren, Brad Miyake, and Siona Windsor - City of Bellevue
Tom Peadon - CCUD
Blair Burroughs, Attorney at Law
Marty Penhallegon - PACE Engineers
Lynn M. Takaichi, P.E. - Kennedy/Jenks Consultants

From: David W. Findlay, Principal - Financial Consulting Solutions Group, Inc.

Subject: **Agreed Upon Capital Cost Reimbursement Methodology - Water Joint Serving Facilities**

Purpose:

This memorandum describes and illustrates the final agreed upon method of calculating the Water Joint Serving Facilities Capital Cost Reimbursement as defined under Section XI of the Interlocal Agreement. This methodology was presented in draft to the negotiating committee members as Technical Memorandum(s) dated November 19th. and 26th., and discussed during several negotiating sessions. Here-in-after, we refer to the final method as the "Capital Cost Reimbursement" method.

Discussion:

The Coal Creek Utility District (District) will use the Capital Cost Reimbursement (CCR) method described in this memorandum to charge the City of Bellevue (COB) for use of District owned Water Joint Serving Facilities (WJSF) to obtain water supply that the COB purchases from a regional water supplier such as the Cascade Water Alliance or the Seattle Public Utilities. The CCR will consist of two capital elements:

- Return "Of" Element – the annual return of investment in Rate Base, defined here-in-after as "depreciation expense" only for the City of Bellevue's capacity share of the WJSF replaced, upgraded or otherwise improved by the District after the assumption; and
- Return "On" Element – the annual return on investment in Utility Plant Rate Base, defined here-in-after as the rate of return (ROR).

The CCR as provided for in the IA will be an entirely separate cost reimbursement mechanism from the WJSF wheeling charge (the charge to recover District O&M and G&A costs). Therefore the annual depreciation expense included the CCR is not a cost to be included in the agreed upon method of calculating the wheeling charge.

The term WJSF Utility Plant Rate Base is defined in the IA as the original cost or fully capitalized costs of the replacement or improvement for a WJSF less accumulated depreciation less total contributions-in-aid of construction (CIAC). There is agreement in the IA that the District will be fully compensated for all existing WJSF at the time of the assumption (12-31-03). This will be accomplished by COB payment of its prorata share of all outstanding revenue bonds, and 28.3% of Public Works Trust Fund loans as of the date



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of the assumption Settlement Agreement (SA). The remainder of the City's interest in the District's existing book value in the joint serving facilities will have been or be recovered by the District from all ratepayers, GFC's, LFC's and perhaps donated facilities. Thus this option assumes that both parties agree that the beginning Utility Plant Rate Base value is zero. In other words, the COB share in the initial and current value of the WJSF as of the execution date of the Interlocal Agreement is considered as totally contributed to the District and therefore will be classified as CIAC. If the District finances the replacement, improvement or upgrade of any of the WJSF between the date of the Interlocal Agreement and December 31, 2003, then the full capital costs of the project(s) will be added to the WJSF Utility Plant Rate Base.

Therefore, the value of the WJSF Utility Plant Rate Base used to calculate the CCR will be dependent on the District fully financing, constructing, and owning the replacement, improvement or upgrades to the facilities listed in Table 1.

To illustrate, assume that the District invests a total of \$1,300,000 in the replacement of WJSF 6-inch and 8-inch AC mains. Then the additions to the WJSF Utility Plant Rate Base for calculating the annual CCR would begin at \$1,300,000. For this illustration, assume that for the two new projects, the City of Bellevue's share would be 39.93%, or \$519,090. The actual COB share of each project shall be determined from Table 1, and will differ. For example, there is a 12" Asbestos Cement pipe joint serving facility with the Bellevue share set at 50%. The WJSF Utility Plant Rate Base starting at \$1,300,000 would then be reduced each year thereafter by the accumulated increments of annual depreciation expense applied to COB's cumulative share of WJSF that make up the total Utility Plant Rate Base.

The CCR method does not contemplate the COB paying up front a share of any capital expenditure for joint serving facilities during the 25 to 30 year timeframe of the agreement. However there is the mutually agreed upon exception as provided for in the Interlocal Agreement that the City will pay its cost share up front for major maintenance, emergency maintenance and emergency repair activities. Since COB has agreed to pay such costs, then those costs will not be added into the WJSF Utility Plant Rate Base. If the costs are for any reason (such as accounting procedure) added to the original Utility Plant cost, they will also be treated as CIAC and deducted to arrive at the WJSF Utility Plant Rate Base.

The CCR contemplates that the District will recover the annual depreciation expense calculated for the total COB share of assets recorded in the WJSF Utility Plant Rate Base. The District will also charge a Rate of Return on the COB share of the WJSF Utility Plant Rate Base (total COB cost share less accumulated depreciation and if applicable any money paid up front by COB toward replacement).

The annual depreciation expense will be based on the agreed upon useful life for each class of newly replace or improved WJSF as defined in the Interlocal Agreement. The total WJSF accumulated depreciation will be an aggregation that reflects the current and historical depreciation expense for each facility that the District makes a capital investment after the assumption. For example, if the useful life of the new mains example is 75 years



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per Table 1, then the total annual depreciation expense for those two projects would equal 1.333% of \$1,300,000, or about \$17,333. The COB payment of its pro rata 39.93% share would be 1.333% times \$519,090, or \$6,919. COB will have no reversionary rights to any such payments to the District. The District will have no restrictions as to use of the income earned from the CCR.

The "Return Of Element", when combined with a "Risk Premium" (and hereinafter referred to as the rate of return (ROR) on the WJSF Utility Plant Rate Base), will reflect the weighted average cost of capital of the District. The weighted average cost of capital method shall reflect the District's actual practice of funding WJSF projects with cash reserves, revenue bonds, PWTF loans, and/or CIAC sources. In this illustration the CIAC source of funding is not included (CIAC has an explicit zero cost of capital to the District) because it will likely never apply to the WJSF projects. In addition, a "Risk Premium" will be added to the weighted average cost of capital as a hedge for the District. The resultant ROR will only change when a new WJSF project is constructed with a funding source or set of funding sources that cause a change in the weighted average cost of capital.

The following is an illustration of the calculation of the ROR after 12/31/03 which is presumed to be zero at that time (assuming COB pays its share of any applicable WJSF cost incurred during the interim period). The illustrated calculation will be updated each time an additional replacement or investment in WJSF projects is made. *Note: There are two main replacement projects assumed to be constructed for this illustration and that each project assumes the same COB capacity interest. However, a different combination of projects could have different COB capacity interests that would need to be calculated before proceeding with the update.*

Illustration:

- Assume WJSF Project 1 is \$500,000, with 50% funded with a combined 1% PWTF loan and 10% cash match, and the remainder 50% funded with a Parity Revenue bond at 5% interest.
- Assume WJSF Project 2 is \$800,000, with 80% funded with a combined 1% PWTF loan and 10% cash, and the remainder funded with a Parity Revenue bond at 5.5% interest.
- Assume that the fund earnings rate for District invested cash and cash equivalents at the time of the WJSF projects is 4% based on the most recent fiscal year-end King Count Investment Pool earnings performance.

Then the District's weighted average cost of capital for these WJSF capital projects would be calculated as shown on the following page.



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| WJSF Capital Elements | Amount Invested | Average Interest % (A) | Times % Weight (B) | Weighted Ave. Cost of Capital | Notes and Comments |
|-----------------------|--------------------|------------------------|--------------------|-------------------------------|--|
| Cash/Equivalents | \$ 89,000 | 4.00% | 6.85% | .274% | Investment Earnings Average |
| Revenue Bonds | \$410,000 | 5.20% | 31.54% | 1.640% | \$250K @5% and \$160K at 5.5% assumed for illustration |
| PWTF | \$801,000 | 1.00% | 61.61% | .616% | Two loans; same interest rates |
| CIAC | \$0 | 0.00% | 0.00% | 0.000% | |
| Total | \$1,300,000 | | 100.00% | 2.530% | |

Therefore, with this scenario, the weighted average cost of capital would be 2.53% for the capitalization of the two WJSF projects. Add the agreed upon Risk Premium of 75 basis points, or 0.75% and the ROR for this illustration is 3.28%. This ROR reflects the District's average cost of financing the facilities including the opportunity cost of using invested cash reserves as a match for the two PWTF loans, plus the Risk Premium.

Taking this illustration if the two WJSF projects were financed with just revenue bond financing, then the weighted average cost of capital would shift to the higher cost of capital that normally goes with such bonds. However, if some of the replacement cost were to be funded by a developer due to an oversizing requirement, then a portion of the cost might go into the CIAC category at zero interest, thus reducing the overall ROR. Given the ROR of 3.28%, plus COB's share of the annual depreciation expense (assume 39.93% per Table 1) payable to the District for say five years following the investment, the CCR would calculate as follows:

| CCR Calculation Example | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| Investment | \$1,300,000 | \$1,300,000 | \$1,300,000 | \$1,300,000 | \$1,300,000 |
| COB's Share of WJSF Capital Projects at 39.93% | \$519,090 | \$519,090 | \$519,090 | \$519,090 | \$519,090 |
| Accumulated Depreciation | \$6,919 | \$13,838 | \$20,757 | \$27,676 | \$34,595 |
| Est. Utility Plant Rate Base | \$512,171 | \$505,252 | \$498,333 | \$491,414 | \$484,495 |
| ROR Payable @ 3.28% | \$16,799 | \$16,572 | \$16,345 | \$16,118 | \$15,891 |
| Depreciation Payable (75 year life, or 1.333%) | \$6,919 | \$6,919 | \$6,919 | \$6,919 | \$6,919 |
| Total Cost of Capital - COB | \$23,718 | \$23,491 | \$23,264 | \$23,037 | \$22,810 |

Summary:

The District's WJSF Capital Cost Reimbursement will include the two main cost recovery elements, depreciation expense and ROR on WJSF Utility Plant Rate Base. The actual numbers for each cost component can only be determined once the District makes a new investment in joint serving facilities after the effective date of the Interlocal Agreement for



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the December 31, 2003 assumption. Key elements of this option are summarized as follows:

- Unless otherwise mutually agreed or provided for below, all joint serving assets existing at 12-31-03 will be classified as CIAC (donated or COB as fully paid for its share), thus reducing the net book value to zero as a starting point.
- If there is a WJSF capital replacement project or two constructed between the date of the Interlocal Agreement and prior to 12-31-03 (the Interim period), the project costs will be an allowed addition to the beginning WJSF Utility Plant Rate Base. Such capital project cost additions will only be approved if the COB share of that construction cost is not included in the COB payments for retirement or defeasance of debt at the time of the assumption.
- The COB will begin paying its CCR as of the end of the first month after the assumption date, December 31, 2003.
- If the District does not replace any WJSF during the Interim period or after the date of the Assumption, then there will be no CCR for Bellevue to pay to the District.
- The District must fully finance each WJSF capital replacement, improvement or upgrade project before the City of Bellevue's cost share can be added to be WJSF Utility Plant Rate Base. Any payments made by developers, grants received or upfront payments made by Bellevue will be recorded as CIAC – Water Joint Serving Facilities, and the City of Bellevue's share of such CIAC sources of funding will be deducted from the WJSF Utility Plant Rate Base recorded value.
- All engineering design, planning and administration related costs of WJSF capital projects shall be capitalized and included in the total cost of the projects. Then the City of Bellevue's share would be included in WJSF Utility Plant Rate Base.
- The annual depreciation expense will be calculated for each project based on the full cost and the assigned useful life per the Interlocal Agreement; no salvage value need be calculated. The annual depreciation percentage accrual rate will be multiplied times the COB share of each project included in the schedule of WJSF Utility Plant Rate Base projects. For example, a 75-year life is a 1.333% depreciation rate (1/75); a 50-year life is a 2.000% depreciation rate.
- The ROR will be updated each time a WJSF is replaced or upgraded, thus requiring a capital expense. No update will occur if the capital project is a Major Maintenance, Emergency Maintenance or Emergency Repair. If and when an ROR is recalculated, the update shall reflect the cumulative affect of actual financing for each project. The average cost of capital components, e.g., cash reserves, varied forms of debt and CIAC, will be combined with the existing line item capital sources of capital for WJSF to calculate a revised weighted average cost of capital for the entire WJSF Utility Plant Rate Base. A Risk Premium of 75 basis points, or



Technical Memorandum

City of Bellevue – Matter 229.4

February 5, 2002

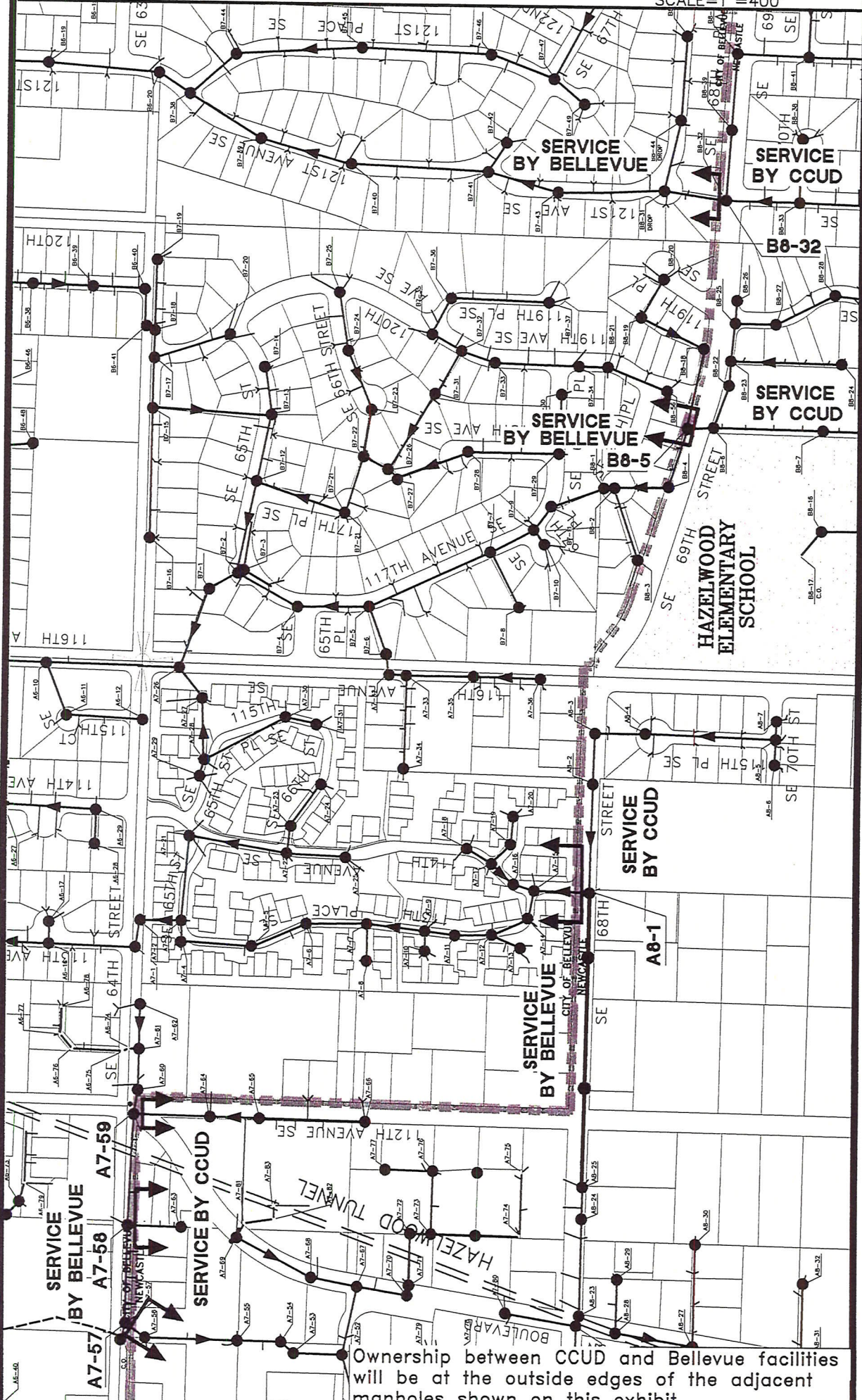
Page - 6

0.75% will be added to the weighted average cost of capital to establish the applicable ROR for the City's share of the WJSF Utility Plant Rate Base.

- The Risk Premium to be included in the total ROR on WJSF Utility Plant Rate Base shall be fixed at 0.75% for the duration of the IA.
- The District will have no restrictions on how it uses CCR revenues paid by the COB in addition to the separate annual wheeling charge.
- The COB will have no right to a refund of any unused CCR payments, or interest thereon over the 25 to 30 years Bellevue is expected to remain dependent on the District's WJSF.

MATCH LINE SEE SHT 2 OF 2

SCALE 1" = 400'



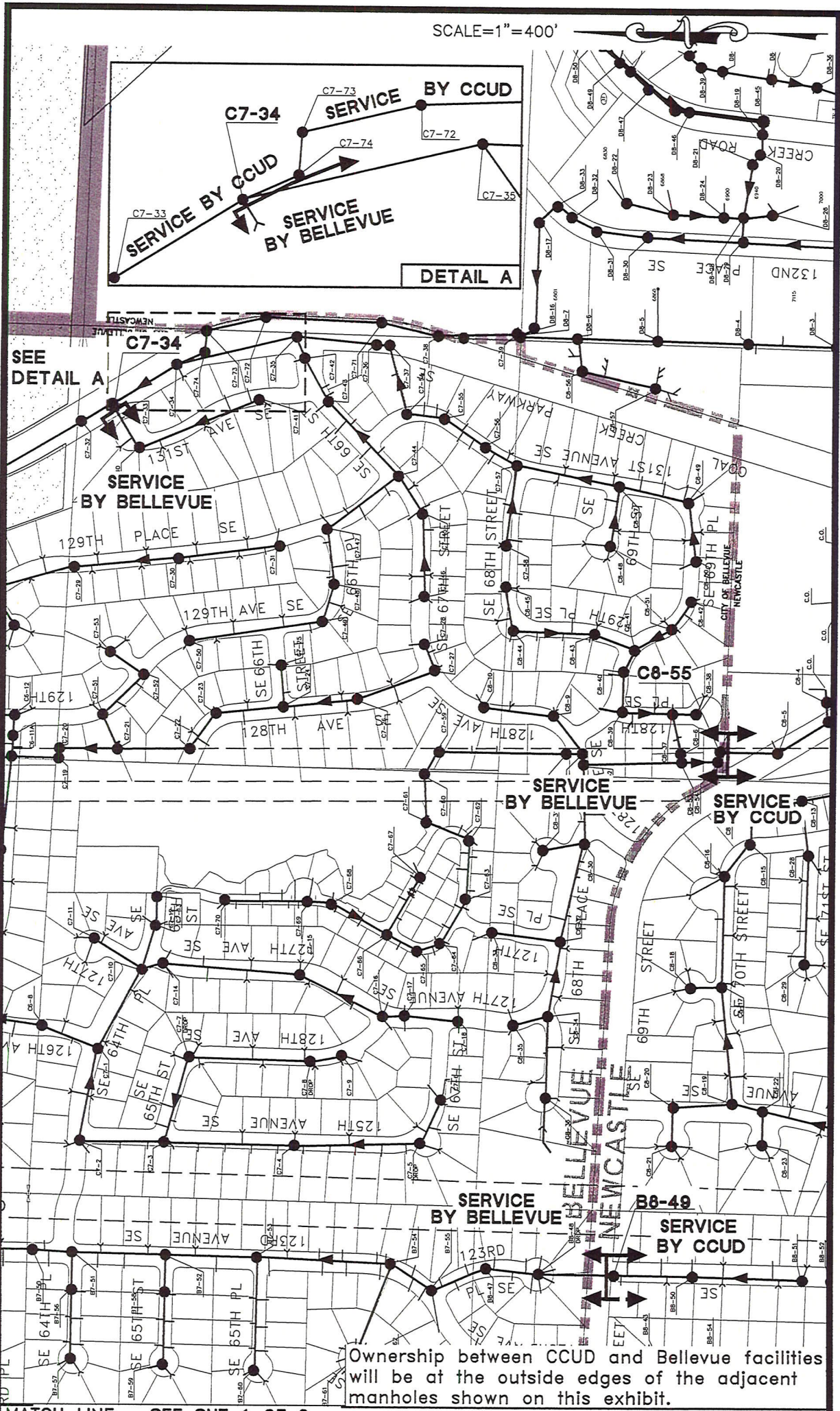
Ownership between CCUD and Bellevue facilities will be at the outside edges of the adjacent manholes shown on this exhibit.



COAL CREEK UTILITY DISTRICT
 & CITY OF BELLEVUE
 DESIGNATION OF
 SEWER OWNERSHIP
 EXHIBIT J

Handwritten initials 'TD' in blue ink.

SCALE=1"=400'



Ownership between CCUD and Bellevue facilities will be at the outside edges of the adjacent manholes shown on this exhibit.

MATCH LINE SEE SHT 1 OF 2



COAL CREEK UTILITY DISTRICT
 & CITY OF BELLEVUE
**DESIGNATION OF
 SEWER OWNERSHIP**
EXHIBIT J

2 OF 2

(100-17930)

FILED NO. 17930
CITY OF BELLEVUE
DATE 6/23/92
Sham Mott
Res. 5522

CITY OF BELLEVUE
EASTGATE SEWER DISTRICT
INTERLOCAL AGREEMENT
SANITARY SEWER SERVICE
SOUTHEAST SEWER SERVICE AREA

This Agreement made and entered into this day by and between the City of Bellevue, a municipal corporation of the State of Washington, hereinafter referred to as "Bellevue" and the Eastgate Sewer District, a municipal corporation of the State of Washington, hereinafter referred to as "Eastgate",

W I T N E S S E T H:

WHEREAS, Bellevue and Eastgate are authorized by Chapter 39.34 R.C.W. the Interlocal Agreement Act, to enter into cooperative agreements; and

WHEREAS, a portion of the Bellevue southeast sanitary sewer service area described and designated on Exhibit "A" (attached hereto and by this reference incorporated herein) is not presently capable of serving to the Bellevue sanitary sewer system because the Bellevue sanitary sewer system is not directly available for connections in the subject area; and

WHEREAS, the corporate boundaries of Eastgate and it's sanitary sewer system lie adjacent to the subject area of the Bellevue southeast sanitary sewer service area and the Bellevue Southeast sanitary sewer service area can be conveniently connected into the Eastgate sanitary sewer facilities at locations designated on Exhibit "A", and

EXHIBIT A

COPY ORIGINAL

WHEREAS, both parties are desirous whenever possible and convenient to mutually assist one another,

Now, therefore, in consideration of the mutual covenants contained herein, it is hereby agreed as follows:

1. Purpose. The purpose of this Agreement is to provide sanitary sewer service to the properties as described in Exhibit "A" within the Bellevue sewer service area subject to the conditions stated herein. Connection points shall be as shown on Exhibit "A" where Eastgate sanitary sewer facilities are presently available or will be available in the future, which may be added to this Interlocal Agreement by an Amendment upon approval of both entities.

2. Connections. Eastgate agrees to allow the necessary connections as established and administered by Bellevue through Developer Extension Agreements or the Bellevue Capital Improvement Program to supply sewer service. All sanitary sewer facilities to be constructed within the subject area described and designated on Exhibit "A", as attached hereto and by this reference incorporated herein, shall upon construction and acceptance, become for all purposes, including customer service charges and maintenance, part of the Bellevue Sewer Utility, but may, nevertheless, be connected to the Eastgate Sewer Utility. All connections to Eastgate's sanitary sewer facilities shall be made in accordance with Eastgate's standards and specifications with appropriate supervision and inspection by Eastgate personnel or representatives.

3. Acceptance of Sewage. Eastgate agrees to accept all sewage entering into its system through said connection points, as designated on Exhibit "A", which meets all applicable METRO, D.O.E. or other regulations, and to convey same through its system to its connection with the Municipality of Metropolitan Seattle system.

4. Construction, Maintenance and Repair Cost. No part of the cost of construction of the sanitary sewer facilities, nor any part of the future maintenance or repair of the sanitary sewer facilities laying within Bellevue, as designated on Exhibit "A", shall be borne by the Eastgate Sewer Utility.

It is anticipated that should Bellevue connect properties within Exhibit "A" to the Eastgate facilities, that certain oversizing of lines may be required at two separate sites. It is understood and agreed that Bellevue will be responsible for its fair share cost of oversizing said lines, including construction and engineering costs, as shown on the on-from-to exhibits attached hereto and by this reference incorporated herein as Exhibits "B" and "C". Said work shall be in accordance with Eastgate's standards and specifications.

5. Customer Billing. It is understood and agreed that all properties within the subject area which are within the Bellevue Sewer Utility boundaries shall be billed by Bellevue in accordance with its standard practices and rates.

It is further understood and agreed that all properties within the subject area which are within the Eastgate Sewer

District boundaries shall be billed by Eastgate in accordance with its standard practices and rates.

6. Assignment and Termination. Each party shall have the right to assign this agreement and/or its rights and/or obligations hereunder, in whole or part, to any entity without prior written consent of the other party, and neither shall have the right to terminate it's obligations hereunder by dissolution or otherwise. This Agreement is binding upon the heirs, successors and assigns of the parties hereto.

7. Sewer System Property. Neither party shall by virtue of this Agreement, acquire any proprietary or governmental interest in the sewer system or sewer line of the other party. Each party shall be solely responsible for the operations and maintenance of it's own system of sewage collection, as designated by Exhibits "A", and shall save the other party harmless from any claim for damage, real or imaginary, made by a third party, and alleging negligence or misfeasance in the operation or maintenance of the other parties system, or in the acts or omissions of it's own officers or employees.

8. Effective Date and Duration. This interlocal Agreement shall become effective upon authorized signature of both parties and shall remain in effect in perpetuity or until terminated or amended pursuant to the terms of this interlocal Agreement.

9. Joint Board. Pursuant to RCW 39.34.030(4)(a), a joint board comprised of the Eastgate Sewer Utility Manager,

or a designee, and the City of Bellevue Public Works Director, or a designee, shall be responsible for administering this Agreement.

10. Filing. A copy of this interlocal Agreement shall be filed with the Bellevue City Clerk, the Eastgate Sewer District and County Auditor.

11. Entirety. This writing embodies the entire Agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein. This Agreement may be amended only by written instrument signed by both parties.

IN WITNESS WHEREOF, the parties have hereunto set their hand and seals.

Date: 6/29/92

CITY OF BELLEVUE

By: Pam Besionne

Approve as to Form:

Scott M. Kee, ass't
City Attorney for
CITY OF BELLEVUE

Date: _____

EASTGATE SEWER DISTRICT

By: Robert J. Bragerton

By: Robert J. Bragerton

By: Robert J. Michel

Approved as to Form:

Joel E. Bradshaw
Joel E. Bradshaw, WSBA #02440
Bradshaw & Richards, P.S.
Attorneys for EASTGATE SEWER
DISTRICT

BELLEVUE-EASTGATE SERVICE DESCRIPTION

That portion of Section 13, Township 24 North, Range 5 East, W. M., in King County, Washington, described as follows:

Commencing at the Northwest corner of the Northwest quarter of said Section 13; thence Southerly along the West line thereof to the Southerly margin of S.R. 90, as per Richards Road to Lake Sammamish Right of Way Plans (June 12, 1969) and the True Point of Beginning; thence continuing Southerly along said West line to the Northwest corner of the Southwest quarter of said Section 13; thence Southerly along the West line thereof to the intersection of the center line of 164th Avenue S.E.; thence Southerly along said center line to the West line of said subdivision; thence Southerly along said West line to the center line of S.E. 45th Way; thence Easterly along said center line to the center line of 165th Avenue S.E.; thence Northerly and Northeasterly along said center line to the center line of S.E. 45th Street; thence Easterly along said center line to the intersection of the Southerly extension of the East line of Block 5, Eastmont Home Tracts, as recorded in Volume 57 of Plats, Pages 91 and 91, in King County, Washington; thence Northerly along said Southerly extension and the East line of said Block 5 to the Northerly line of said Block 5; thence Northwesterly along said Northerly line to the West line of the Northeast quarter of the Southwest quarter of said Section 13; thence Northerly along said West line to the Northwest corner of said subdivision; thence Easterly along the North line thereof to the Southwest corner of the Northeast quarter of said Section 13; thence Easterly along the South line thereof to the East line of King County Short Plat No. 475087, as filed under Recording No. 7507010538, in King County, Washington; thence Northerly along said East line to the Southerly margin of said S.R. 90; thence Westerly and Northerly along said Southerly margin to the prohibited access line and the Southerly margin of said S.R. 90; thence Westerly along said prohibited access line and Southerly margin to the True Point of Beginning.

91170.DES/095
MN/10-7-91

**EASTGATE SEWER DISTRICT
TRAILERS INN OVERSIZING
ON-FROM-TO**

ON

An Easement

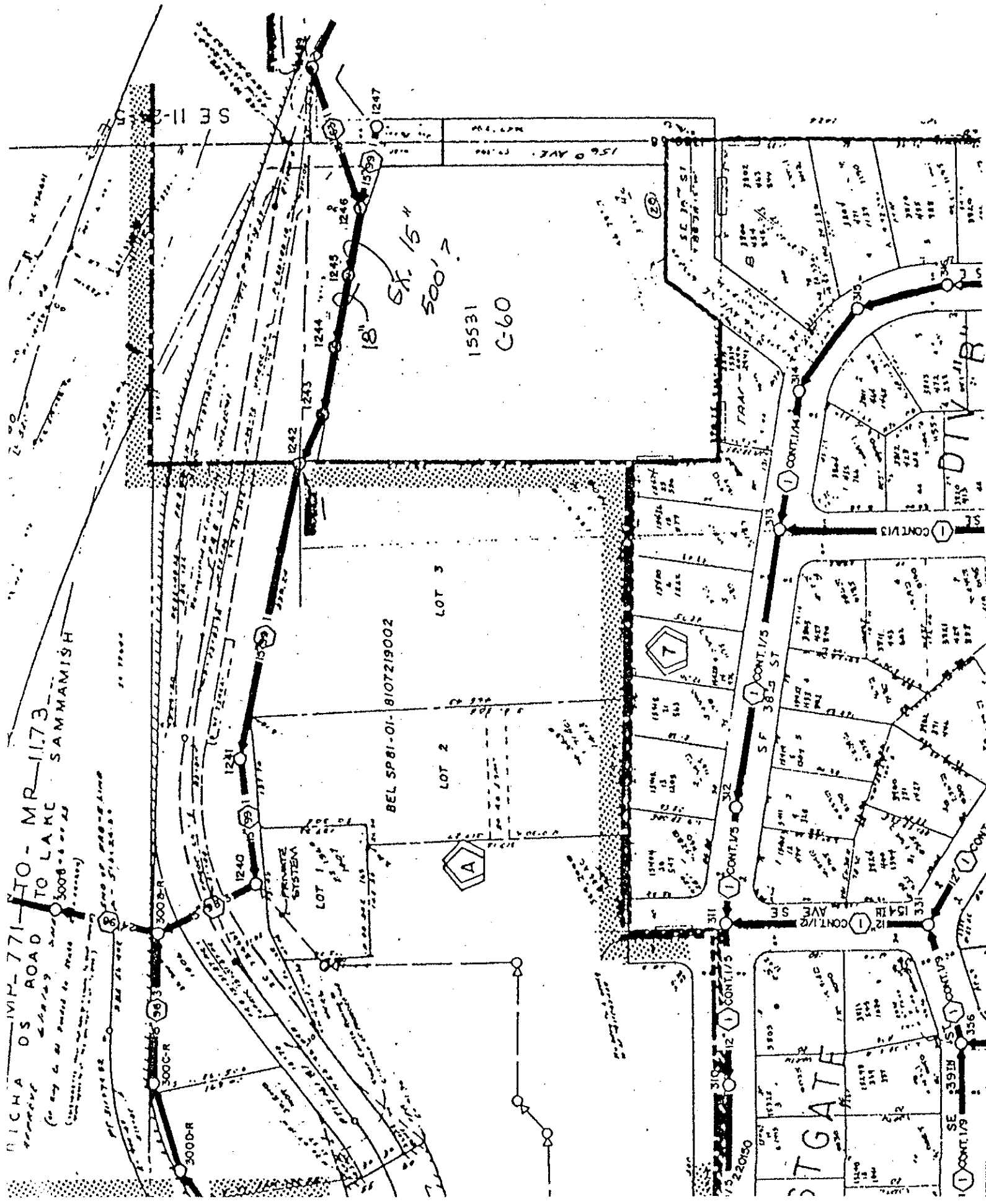
FROM

A point approximately 450 feet North and 95 feet East of the intersection of 156th Ave. S.E. and S.E. 38th Street.

TO

500 feet West to a point approximately 605 feet North and 105 feet East of the intersection of 155th Ave. S.E. and S.E. 38th Street.

EXHIBIT B



RICHARDSON 771 - HO - MR - 11.73 -
ROAD TO LAKE SAMMAMISH
(See map for details to street)

LOT 2
LOT 3
BEL SP 81-01-8107219002
15531
C-60
St. 15'4
500'7

PRIVATE SYSTEM

ST GATE

SE 112 ST

1560 AVE.

SE 37th ST

CONT 1/5 ST

CONT 1/5 ST

CONT 1/5 ST

CONT 1/5 ST

CONT 1/5 ST

CONT 1/5 ST

CONT 1/5 ST

SE 39th ST

**EASTGATE SEWER DISTRICT
S.E. 40TH STREET OVERSIZING
ON-FROM-TO**

ON

S.E. 40th Street

FROM

The intersecstion of S.E. 40th Street
and 164th Avenue S.E.

TO

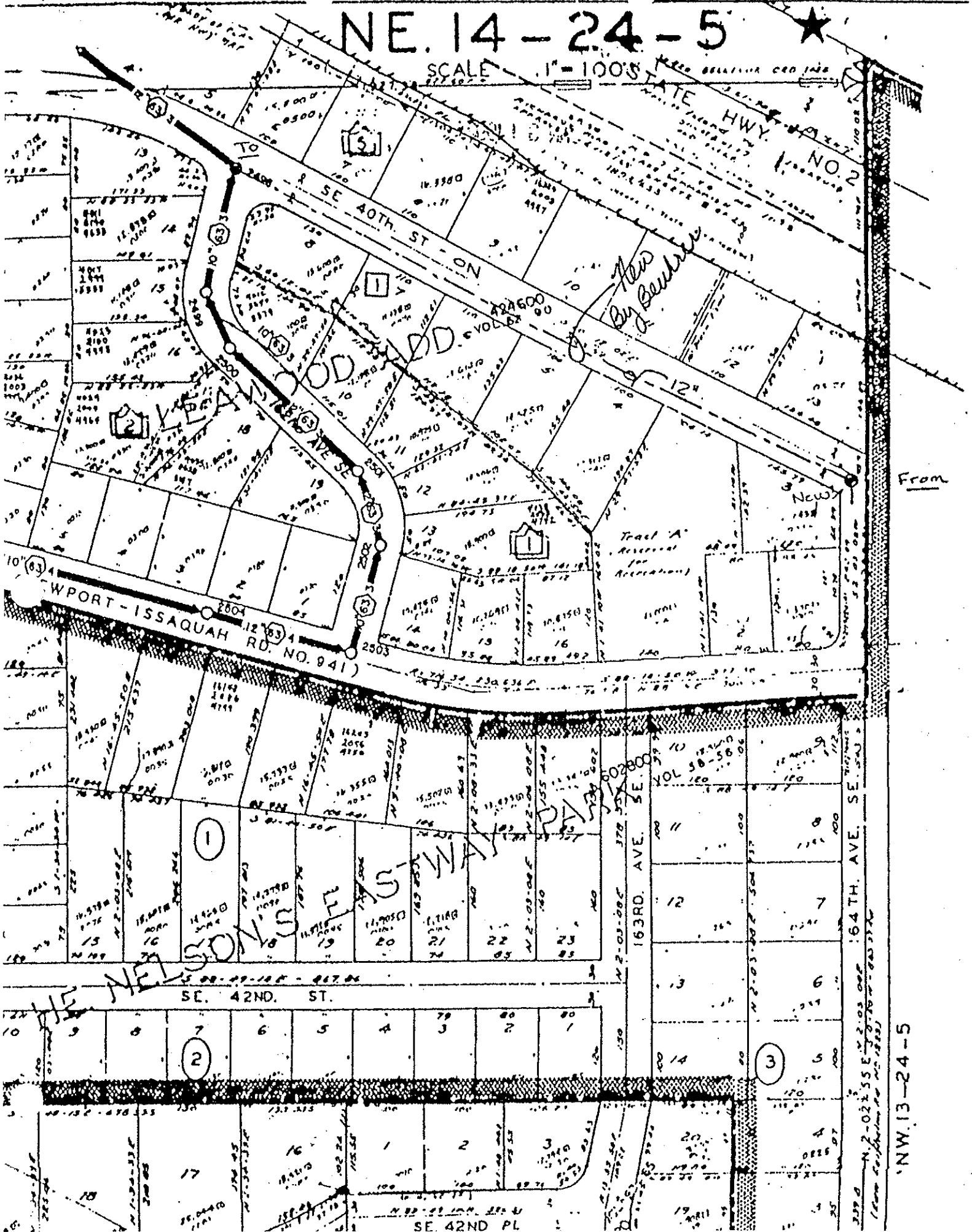
900 feet west to the
intersection S.E. 40th
Street and 162nd Ave. S.E.

EXHIBIT C

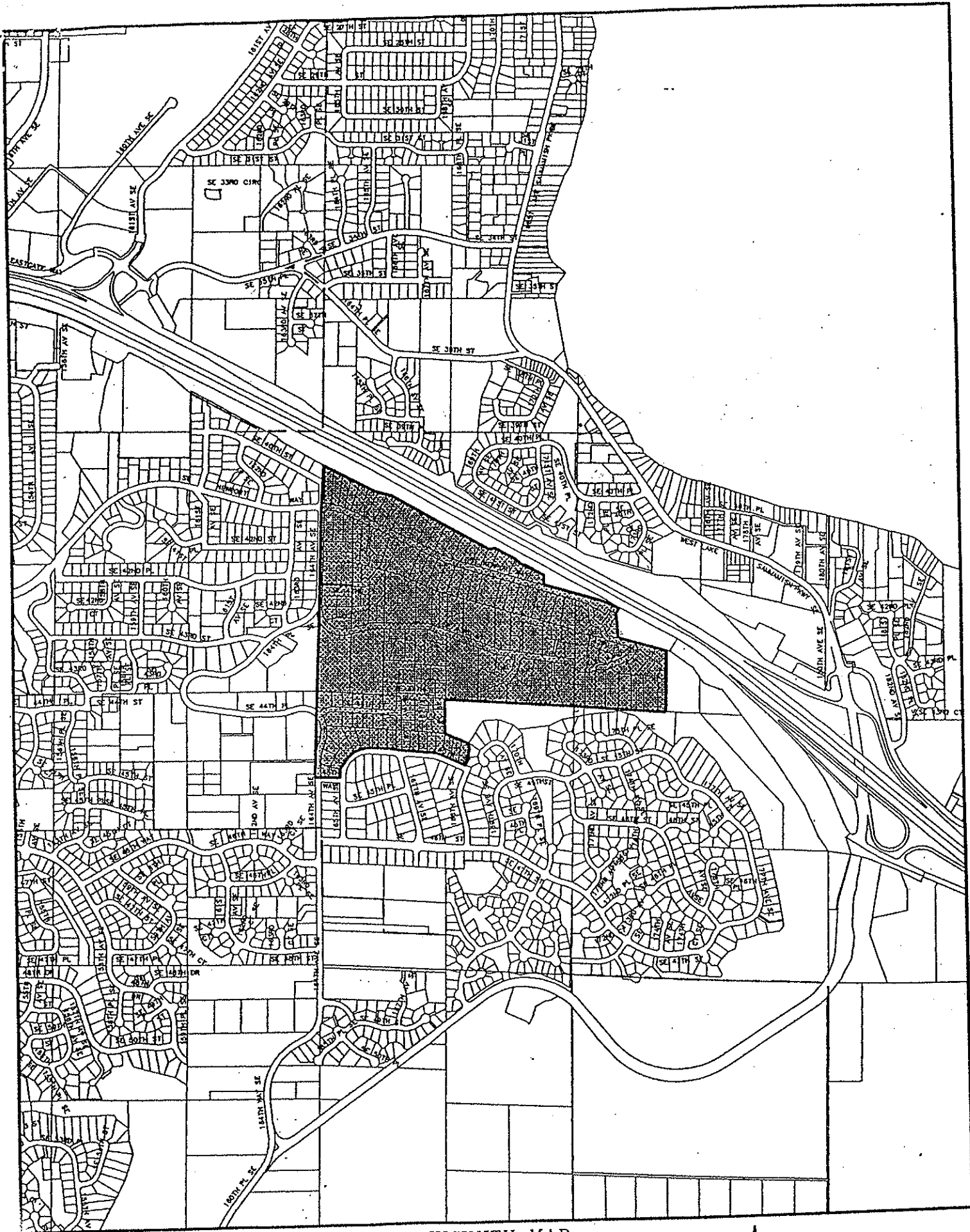
NE. 14-24-5



SCALE 1" = 100'



NW. 13-24-5



VICINITY MAP
EXHIBIT "A" SERVICE AREA



FILED NO. 14578
CITY OF BELLEVUE
DATE 6/30/89
CITY CLERK Maui O. Connell

^{PN}
ORIGINAL

Res. 51
5149

**AGREEMENT FOR DESIGN AND CONSTRUCTION OF
JOINT-USE SEWER TRUNK ALONG WEST LAKE SAMMAMISH BLVD.
FROM S.E. 12TH PLACE TO APPROXIMATELY S.E. 25TH-STREET**

This Agreement is made and entered into pursuant to the provisions of the Interlocal Cooperation Act Chapter 39.34 RCW, by and between the City of Bellevue (hereinafter called "Bellevue"), and the Eastgate Sewer District (hereinafter called "Eastgate").

WHEREAS, Bellevue and Eastgate desire to work cooperatively in the design and construction of a joint-use sewer trunk because of the potential for reduced construction and maintenance costs and reduced adverse environmental impacts as compared to the construction of separate sewer trunks, now, therefore,

In consideration of the mutual covenants contained herein, the parties agree to participate in design and construction of a joint-use sewer trunk along West Lake Sammamish Blvd. pursuant to the following terms and conditions:

1. Purpose.

This Agreement is intended to set forth the terms and conditions upon which Bellevue and Eastgate agree to cooperate for the purpose of designing, constructing and maintaining a joint-use sewer trunk along West Lake Sammamish Blvd. from S.E. 12th Place to an existing sewer manhole located at approximately S.E. 25th Street.

2. Administration of Agreement.

Eastgate shall be the lead agency charged with responsibility for administration of this Agreement. The specific responsibilities of the parties are set forth hereinafter.

3. Design and Construction.

Eastgate shall take all necessary steps to provide for the design and construction, including construction administration and inspection, of the sewer trunk. The estimated cost of the sewer trunk is \$405,200.00.

Eastgate shall furnish Bellevue with 4 copies of the plans and specifications of the sewer trunk for review and approval by Bellevue when the design is at the eighty percent (80%) and one hundred percent (100%) stages.

Eastgate shall be the contracting "owner" with its contractor and shall be responsible for all phases of the construction and completion of the sewer trunk in accordance with the approved plans. Eastgate shall coordinate and keep Bellevue informed of the contractor's progress during construction. Upon completion of the work in accordance with the approved plans, Eastgate shall notify Bellevue of the date and time of final construction inspection. Bellevue personnel may accompany Eastgate's personnel and inspector on final inspection for purposes of creating a final checklist (punchlist). Upon satisfactory completion by the contractor of the final checklist, Bellevue shall furnish its written approval of the construction to Eastgate. Eastgate's acceptance of the work shall be by resolution passed by the Board of Commissioners. A copy of the resolution shall be furnished to Bellevue.

Eastgate shall furnish Bellevue with a copy of the advertisements for bids and shall make available bids received for review by Bellevue. Eastgate shall recommend award of a contract to the bidder regarded by Eastgate as the lowest responsible bidder. Eastgate shall provide Bellevue with a copy of the contract and notice to proceed. Change order additions which constitute extras and increase the contract price by more than five percent (5%) shall be approved or disapproved by Bellevue before the work is performed. Bellevue shall either approve or disapprove such change order in writing within ten working days (10) of receipt of the proposed change order. Failure of Bellevue to respond within ten working days (10) of receipt of same shall be deemed approval of the change order by Bellevue.

4. Sharing of Costs.

Eastgate shall be responsible for paying all costs of design and construction of the sewer trunk for which it shall receive reimbursement from Bellevue in line with Exhibit "A" attached hereto and by this reference incorporated herein. The estimated cost for the trunk line is \$405,200.00, a copy of the current cost estimate dated May 15, 1989 is attached for reference. Costs incurred by Eastgate or Bellevue employees for the design or construction of the trunk will be borne by each respective party and will not be included as project costs eligible for cost sharing.

5. Method of Payment.

Eastgate will prepare and forward a monthly invoice to Bellevue for its share of costs for design and construction of the sewer trunk, together with a copy of the bills/invoices received by Eastgate from its consultants, contractors, and other third parties for cost of design and construction for the project. Bellevue shall pay such costs within thirty (30) days of receipt of the invoice from Eastgate.

6. Ownership, Operation and Maintenance.

Eastgate shall maintain ownership of the sewer trunk upon completion of the project. In consideration of Bellevue's payment of fifty percent (50%) of the cost of the sewer trunk, Bellevue shall have rights to fifty percent (50%) of the trunks flow capacity.

Eastgate shall be responsible for operating and providing routine maintenance of the sewer trunk. Any major repair or replacement which costs more than five hundred (\$500) shall be shared by both parties equally.

7. Indemnity.

Eastgate agrees to defend, save harmless, and indemnify Bellevue from and against any and all claims and demands for injury or death to persons and/or damage to property arising out of the construction, operation and maintenance of the sewer trunk by Eastgate except as may be caused by the acts and negligence of Bellevue, its agents, servants, or employees, or through acts of nature. Bellevue shall in turn agree to defend, save harmless, and indemnify Eastgate from and against any and all claims and demands for injury, death or damage arising out of Bellevue's specific involvement in the construction operation and maintenance of the sewer trunk line in question.

Eastgate's design consultant shall be required to maintain professional liability insurance with limits of not less than \$1,000,000.00.

8. Connection Charges.

Upon completion of the project and prior to allowing any properties to connect to the trunk, Eastgate shall identify the developable areas served directly by the trunk

and shall determine connection charges which allocate the project costs equitably over those properties. The actual allocation method shall be determined by Eastgate, but must be based to recoup all project costs from the developable areas as they connect to the trunk.

As properties connect to the trunk Eastgate shall collect the appropriate connection charge from each property. The connection charges collected by Eastgate shall be divided between Eastgate and Bellevue in line with Exhibit "A" attached hereto and by this reference incorporated herein, so as to reimburse Bellevue for its share of the cost of construction of the sewer trunk. Bellevue's reimbursement shall not include its share of cost of that portion of the line lying south of the existing Eastgate Sewer District boundary (see Exhibit "A").

9. Amendments to Agreement.

Either party may request in writing the other party to consider an amendment to this Agreement. If the amendment is mutually acceptable to both parties said Agreement shall be made in writing, signed by both parties and attached to this Agreement.

10. Disputes-Fees.

This Agreement is binding on the heirs, successors and assigns of both Bellevue and Eastgate and in the event that either Bellevue or Eastgate is required to enforce the terms of the subject Agreement then, in that event, jurisdiction shall lie in King County and the prevailing party in such litigation shall be entitled to its costs and reasonable attorney's fees.

DATED this 1ST day of AUGUST, 1989.

CITY OF BELLEVUE

EASTGATE SEWER DISTRICT

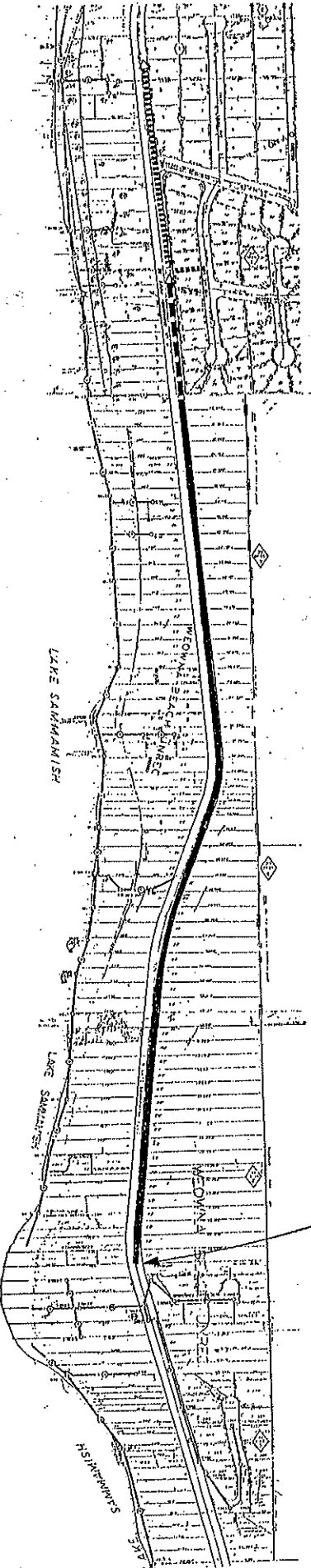
By: *Phillip Kushlan*
Phillip Kushlan,
City Manager

By: *Robert A. Michel*

Mike Barbich
Robert A. Michel

APPROVED AS TO FORM:

By: *Richard Kirkby*
Richard Kirkby,
Assistant City Attorney



FUTURE CONNECTION
OF BELLEVUE'S
PUMP STATION NO. 5

SCALE 1" = 400'

- SEWER LINES PAID FOR 50% EASTGATE / 50% BELLEVUE
- - - - - SEWER LINES PAID FOR 50% EASTGATE / 50% BELLEVUE
- EXISTING EASTGATE SEWERS
- - - - - EXISTING BELLEVUE SEWERS

EXHIBIT 'A'

ORIGINAL

FILED NO. 15780
CITY OF BELLEVUE
DATE 2/6/90
CITY CLERK *[Signature]*
O. Council
Res. 5230

AGREEMENT FOR WHOLESALE SANITARY SEWER AND WATER SERVICE

FROM
CITY OF BELLEVUE

TO
CITY OF ISSAQUAH SERVICE AREA

LAKEMONT TRIANGLE

WHEREAS: A sphere of influence agreement has been reached between the City of Bellevue (Bellevue) and the City of Issaquah (Issaquah) that outlines the limits of a future boundary between the Cities, and

WHEREAS: It is desirable that the Cities' future sanitary sewer and water service boundaries correspond with the Cities' future corporate limits, and

WHEREAS: Bellevue sewer and water facilities now exist and may be logically extended to provide adequate service to certain areas within Issaquah's service area (shown on Exhibit C and labeled as Lakemont Triangle), and

WHEREAS: Issaquah sanitary sewer and water facilities are currently a greater distance from the Lakemont Triangle service area, and

WHEREAS: An analysis of sanitary sewer and water service options for Issaquah to serve the Lakemont Triangle service area, concluded that the least cost alternative for sanitary sewer and water service would be through an agreement for joint use of sanitary sewer facilities and a wholesale water service agreement between Bellevue and Issaquah, and

WHEREAS: It is desirable to provide sanitary sewer and water service to the public in the least costly manner, consistent with jurisdictional boundaries, and

WHEREAS: It is recognized that water service to the Lakemont Triangle service area will not solve Issaquah's long term water needs and that other solutions will be needed to serve future growth demands.

AGREEMENT FOR WHOLESALE SANITARY SEWER & WATER SERVICE
FROM CITY OF BELLEVUE TO CITY OF ISSAQUAH - LAKEMONT TRIANGLE

NOW, THEREFORE be it agreed by the Cities of Bellevue and Issaquah that:

1. This Agreement addresses the provision of wholesale sanitary sewer and water service to a limited area of Issaquah's service area. It is not the intent of this Agreement to address facilities that would be capable of serving any additional portion of Issaquah's service area. Such facilities would require a separate agreement.

2. Bellevue agrees to provide wholesale sanitary sewer and water service to Issaquah for the Lakemont Triangle service area only for sanitary sewer conveyance and for retail water distribution and sale in accordance with the terms of this Agreement.

3. The number of Multi-Family Units to be served within the area shall not exceed 600 unless it is mutually agreed that additional units may be served.

4. Bellevue shall supply water from a 12" diameter main on Newport Way at 17300 block. This 12" main will be new construction by the City of Issaquah, and shall be extended from an existing 12" main located at approximately SE 42nd Place and SE Newport Way, west of the Lakemont Triangle. The estimated total length of new main will be 6350 feet. Issaquah shall be responsible for obtaining all necessary permits associated with the new 12" main. By executing this interlocal agreement, Bellevue agrees to endorse Issaquah's efforts to obtain the permits.

Ownership of the new water line from the point of connection to the existing Bellevue 12" main, shall be Issaquah's including that portion of the new main which will be within Bellevue jurisdictional boundaries. Bellevue shall not tap into Issaquah's 12" main without Issaquah's written approval. Such approval shall not be unreasonably withheld.

5. Bellevue shall provide a maximum fire flow of 2000 GPM measured at the intersection of Newport Way and 180th Ave. It is understood that the actual rate of flow at the point of use is dependent upon the hydraulic behavior of the distribution system between the connection point and the point of use and Bellevue therefore makes no representation with regard thereto.

6. Bellevue agrees that the wholesale water service it provides to Issaquah will meet the same standards of reliability, rate of flow and quality, that it provides to its retail service customers.

7. The Water Purveyor Contract between the City of Seattle and the City of Bellevue, Section II.B. Resale to Other Parties, requires written consent from Seattle prior to the execution of this Agreement.

AGREEMENT FOR WHOLESALE SANITARY SEWER & WATER SERVICE
FROM CITY OF BELLEVUE TO CITY OF ISSAQUAH - LAKEMONT TRIANGLE

Issaquah agrees, for the Lakemont Triangle service area, to abide by the standard terms and conditions that are imposed by the Seattle Water Department as well as those imposed by Bellevue, including but not limited to cross-connection controls, water quality testing, water conservation and other applicable standards and those terms and conditions are hereby incorporated by reference herein as if set forth in full. This Agreement does not convey purveyor status or water supply rights from the City of Seattle to Issaquah.

8. The basis for determining Issaquah's fair share of the water capital cost of facilities shall be mutually accepted engineering standards and cost estimates related to sizing of storage, pumping, distribution and transmission facilities as listed on Exhibit B.

9. All water supplied to the Lakemont Triangle service area by Bellevue shall be metered by individual service meters to all water users. The metering device(s) shall be owned by Issaquah and be periodically calibrated in accordance with manufacturer's specifications to guarantee accuracy. If, due to water quality, Issaquah needs to periodically flush its main, Issaquah shall install a metered flushing station to record consumptions.

10. Issaquah shall read the individual meters on a bi-monthly schedule. Issaquah shall submit a payment to Bellevue for water consumption. The water shall be charged at Bellevue's standard residential water rate.

11. Bellevue agrees to allow Issaquah to connect the Issaquah sewer main serving the Lakemont Triangle area, into an existing Bellevue sewer facility in the vicinity of SE Newport Way and Lakemont Blvd. (future). (See Exhibit C.)

12. Issaquah agrees to pay Bellevue for their fair share of the sewer facilities on West Lake Sammamish which must be upgraded to serve both the Lakemont Triangle area and proposed Bellevue needs. The basis for determining the fair share computations shall be mutually accepted engineering standards related to sizing of the sewage facilities. (See Exhibit A) Upgrading of existing sewer facilities will include approximately 6000 L.F. of sewer trunk at an estimated cost of \$1,500,000.00 (1989 dollars).

Upgrading by Bellevue of the sewer facilities to meet additional capacity demands resulting from proposed Lakemont Triangle Development, and payment by Issaquah for its associated costs are conditional upon a signed commitment from the Developers to Issaquah. A signed commitment from the Developer will be required by Issaquah prior to building permit approval, which will include the portion for which the Developer must contribute toward the sanitary sewer upgrade. Failure by Developers to provide a signed

AGREEMENT FOR WHOLESALE SANITARY SEWER & WATER SERVICE
FROM CITY OF BELLEVUE TO CITY OF ISSAQUAH - LAKEMONT TRIANGLE

commitment in a timely manner prior to finalization of plans to upgrade the Bellevue sewer, will result in the reduction of the sewer upgrade by Bellevue, shall release Issaquah from all monetary responsibility for that portion of the upgrade costs and Issaquah would not be able to connect to Bellevue's sewer facilities.

13. Bellevue shall construct, own and maintain all sanitary sewer facilities within its service area that are jointly used by Bellevue and Issaquah.

14. Bellevue agrees to bill and Issaquah agrees to pay a monthly user fee of \$.87 per Multi-Family Unit per month for sewage conveyance capacity, after construction. This rate includes charges for maintenance and operation of the jointly used facilities in perpetuity and will not be subject to additional charges for maintenance and operation.

15. Bellevue and Issaquah agree that the sanitary sewer and water system improvements needed to serve the area are to be provided in response to development activity, hence the construction of the facilities is dependent upon Developer contributions and construction. Issaquah's fair share of the capital cost of facilities to serve the area shall be provided from Developer cash contributions and/or Developer facility construction.

16. Issaquah shall construct, own and maintain all sanitary sewer and water facilities that are solely used for service to Issaquah, regardless of the location of the facilities.

17. Issaquah agrees to pay Bellevue's applicable general facilities fees for each Multi-Family Unit that is served. These fees will be collected by Issaquah on a unit by unit basis at the time that service is granted under Building Permit approval. An annual payment will be made to Bellevue representing the connection fees that were collected during the preceding twelve month period. The annual payment shall be made on or near December 31st of each year that new connections are added. A letter report shall accompany the payment, which include an accounting of the connections added during the year.

18. Bellevue agrees to obtain all necessary approvals and permits for serving and constructing the jointly used facilities.

AGREEMENT FOR WHOLESALE SANITARY SEWER & WATER SERVICE
FROM CITY OF BELLEVUE TO CITY OF ISSAQUAH - LAKEMONT TRIANGLE

19. Issaquah agrees to obtain all necessary approvals and permits for construction of the facilities that will solely serve Issaquah.

20. Dispute Resolution. Each City shall designate representatives for the purposes of administering this Agreement and resolving disputes arising from this Agreement. Each city shall notify the other in writing of its designated representatives. Each City may change its designated representatives on notice to the other.

Disputes that cannot be resolved by the representatives designated herein shall be referred to the Chief Executive Officer of each City for mediation and/or settlement. If not resolved by them within sixty (60) days, either City, or both of them, may file a demand for arbitration, in which event the issue shall be submitted to an arbitrator acceptable to both parties and the matter shall be arbitrated pursuant to the rules and procedures of the American Arbitration Association. The decision of the arbitrator shall be final and binding on both Cities.

21. Liability/Hold Harmless. Bellevue shall indemnify, defend, and hold harmless the City of Issaquah, its officers, agents and employees, from and against any and all claims, losses, or liability, including attorneys fees, arising from injury or death to persons or damage to property occasioned by any act, omission or failure of Bellevue, its officers, agents and employees, in the performance of this Agreement. With respect to the performance of this Agreement and as to claims against Issaquah, its officers, agents and employees, Bellevue expressly waives its immunity under Title 51 of the Revised Code of Washington, the Industrial Insurance Act, for injuries to its employees and agrees that the obligation to indemnify, defend and hold harmless provided for in this paragraph extends to any claim brought by or on behalf of any employee of Bellevue. This paragraph shall not apply to any damage resulting from the negligence of Issaquah, its agents and employees. To the extent any of the damages referenced by this paragraph were caused by or resulted from the concurrent negligence of Issaquah, its agents or employees, this obligation to indemnify, defend and hold harmless is valid and enforceable only to the extent of the negligence of Bellevue, its officers, agents and employees.

Issaquah shall indemnify, defend and hold harmless the City of Bellevue, its officers, agents and employees, from and against any and all claims, losses, or liability, including attorneys fees, arising from injury or death to persons or damage to property occasioned by any act, omission or failure of Issaquah, its officers, agents and employees, in the performance of this Agreement. With respect to the performance of this Agreement and as to claims against Bellevue, its officers, agents and employees, Issaquah expressly waives its immunity under Title 51 of the

AGREEMENT FOR WHOLESALE SANITARY SEWER & WATER SERVICE
FROM CITY OF BELLEVUE TO CITY OF ISSAQUAH - LAKEMONT TRIANGLE

Revised Code of Washington, the Industrial Insurance Act, for injuries to its employees and agrees that the obligation to indemnify, defend and hold harmless provided for in this paragraph extends to any claim brought by or on behalf of any employee of Issaquah. This paragraph shall not apply to any damage resulting from the negligence of Bellevue, its agents and employees. To the extent any of the damages referenced by this paragraph were caused by or resulted from the concurrent negligence of Bellevue, its agents or employees, this obligation to indemnify, defend and hold harmless is valid and enforceable only to the extent of the negligence of Issaquah, its officers, agents and employees.

HEREBY AGREED TO AND ACCEPTED BY this the 19th day of

April, 1990.

CITY OF BELLEVUE

Pam Bassinuth

CITY OF ISSAQUAH

Howard C. Hinde

Mayor

Approved as to form:

[Signature]
Assistant City Attorney

Wayne Devada 3/14/90
City Attorney

52:50.

EXHIBIT A

COST ALLOCATION FOR
SOUTH VASA PARK SEWER TRUNK

Issaquah will serve 600 Multi-Family Units (360 Equiv. Single Family Units) via a sewer pump station. Normally peak flow from 600 MF Units would be approximately 200 gpm, it is anticipated that the pump station will be sized for around 275 gpm, which is equivalent to 825 MF or 495 SF Units. For flow demand and determining Issaquah's share of the trunk costs, 495 Equiv. SF Units is being used for Issaquah. The total number of projected equivalent single family units in the South Vasa Trunk is 2009, including Issaquah.

1) Cost for constructing new trunk.

The estimated project cost is \$1,567,000. Therefore, the cost per Equiv. SF Unit is $\$1,567,000/2009 = \780 . **

2) Replacement and M&O costs.

Replacement cost = \$1,560,000
Anticipated life of trunk = 75 years
Replacement cost per year = $\$1,560,000/75 = \$20,800$
Assume annual M&O cost = \$1000

Total annual cost = \$21,800

Issaquah's share = $495/2009 = 25\%$

Issaquah's cost per year = $.25(\$21,800) = \$5,450$

Cost per MF unit per month = $\$5,450/600 \text{ SF units}/12 \text{ months}$
= \$0.75 per month

3) Additional cost for admin., insurance, liability, etc.
+15% = \$0.12

TOTAL MONTHLY CHARGE PER MF UNIT PER MONTH = \$0.87

** This is in 1989 dollars, interest will be added to the cost for connection made in future years.

EXHIBIT B

COST OF
SOUTH 520 ZONE REGIONAL FACILITIES

1) Estimated ultimate equivalent single family units

Ultimate Max. day demand (MDD) = 4.9 MGD
(1985 Water Comp. Plan, pg. 3-12)

Avg. Day Demand per capita = 80 gpcd

3.1 persons per SF unit

ADD per equiv. SF unit = 80 gpcd X 3.1 = 248 gpd

MDD = ADD X 2.4

MDD for equiv. SF = 248 gpd X 2.4 = 769 gpd

(All from 1986 Water Comp. Plan Amend., pg. 11 & 12)

Estimated ultimate SF units in South 520 Zone =
4,900,000 MGD / 769 gpd = 6372

2) Estimated replacement cost of existing regional facilities:

| | |
|--------------------------|----------------------------------|
| 2MG Steel Reservoir | = \$ 800,000 |
| 3MG Concrete Reservoir | = \$1,300,000 |
| *2 Supply Inlet Stations | = \$1,350,000 (60% = \$810,000) |
| *8500 lf - 24" Pipe | = \$1,490,000 (60% = \$894,000) |
| *9400 lf - 16" Pipe | = \$1,175,000 (60% = \$705,000) |
| *17200 lf - 12" Pipe | = \$1,720,000 (60% = \$1032,000) |

TOTAL = \$5,541,000

* These facilities provide service to other areas, therefore, only 60% will be allocated to the South 520 Zone.

Estimated depreciation of the facilities:

Reservoirs

age 13 years - expected useful life 100yrs

depreciation = 13/100 = 13%

Inlets - new no depreciation

Pipe

avg age 16 years - expected life 75yrs

depreciation = 16/75 = 21%

Depreciation value

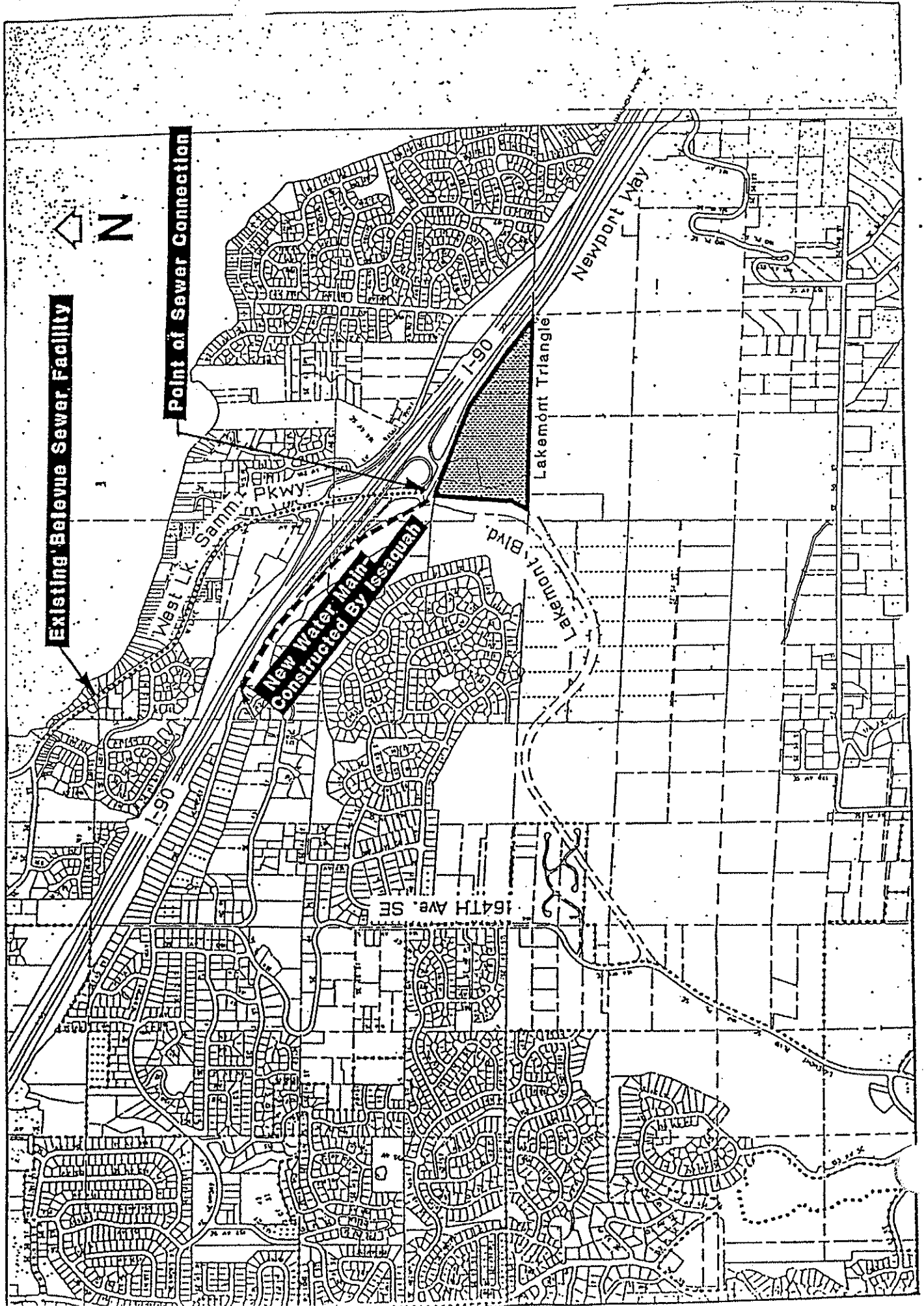
Reservoirs = \$2,100,000 X .13 = \$273,000

Pipes = \$3,441,000 X .21 = \$722,000

TOTAL FACILITIES REPLACEMENT COSTS MINUS DEPRECIATION

\$5,541,000 - \$995,000 = \$4,546,000

ESTIMATED COST PER EQUIVALENT SF UNIT = \$4,546,000 / 6372
= \$715



ORIGINAL

2641-RES
4/12/2012

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 8388

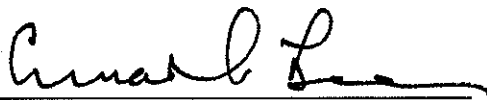
A RESOLUTION authorizing the execution of an amendment to the interagency agreement with King County for the design and construction of a joint sewer trunk project in the SE 3rd Street and 102nd Avenue SE to combine with the County's project to increase the capacity of the West CBD Trunk (CIP Plan No. S-54).

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The City Manager or his designee is hereby authorized to execute an amendment to the interagency agreement with King County for the design and construction of a joint sewer trunk project in the SE 3rd Street and 102nd Avenue SE to combine with the County's project to increase the capacity of the West CBD Trunk (CIP Plan No. S-54), a copy of which amendment has been given Clerk's Receiving No. 48942.

Passed by the City Council this 16th day of April, 2012, and signed in authentication of its passage this 16th day of April, 2012.

(SEAL)


Conrad Lee, Mayor
Mayor

Attest:


Myrna L. Basich, City Clerk

ORIGINAL

#48942 DATE 7-5-12 LOC INTRLOC-001 GR #1050094-001
As 8388

FIRST AMENDMENT TO INTERAGENCY AGREEMENT BETWEEN KING COUNTY (WASTEWATER TREATMENT DIVISION) AND CITY OF BELLEVUE FOR UTILITY PIPELINE WORK IN CONJUNCTION WITH THE BELLEVUE INFLUENT TRUNK IMPROVEMENTS PROJECT AND THE WEST CENTRAL BUSINESS DISTRICT TRUNK IMPROVEMENT PROJECT

This First Amendment to the Interagency Agreement for Utility Pipeline Work in Conjunction with the Bellevue Influent Trunk Improvements Project and the West Central Business District Trunk Improvement Project is made by and between the City of Bellevue (the "City") and King County, by and through the Department of Natural Resources and Parks, Wastewater Treatment Division (the "County"). The City and the County may also be referred to herein individually as a "Party" and collectively as the "Parties."

RECITALS

- A. On or about March 29, 2010 the City and the County entered into an Interagency Agreement for Utility Pipeline Work in Conjunction with the Bellevue Influent Trunk Improvements Project and the West Central Business District Trunk Improvement Project (the "Agreement"), as more particularly described therein.
- B. In accordance with the terms of the Agreement, the City and the County desire to amend the Agreement upon the terms and conditions set forth herein.

AGREEMENT

Now therefore, in consideration of the Parties' mutual assent, the Parties agree as follows:

1. Amendment

1.1. A new Section 3.13 shall be added to the Agreement, as follows:

"3.13. Inserta-tees. The County shall assume full and complete ownership and responsibility for Inserta-tees installed by the Contractor on the County's Bellevue Influent Trunk as connection tees to the newly installed service laterals. Inserta-tees shall not be installed on the City's West CBD Trunk. The service laterals, up to the point of connection with the Inserta-tees, shall be owned and maintained by the City. The County shall provide the City with a copy of the as-built record drawings of the Bellevue Influent Trunk identifying the location of the new service laterals and any locations of Inserta-tees installed by the Contractor."

1.2. A new Section 4.9 shall be added to the Agreement, as follows:

“4.9. Pavement Overlay. The City shall assume responsibility for the implementation and management of the full width pavement grind and overlay required for the project under Right-of-Way Street Use Permit No. 09 129294 TK during the City’s regular overlay schedule in the spring of 2012. The extent of the pavement overlay areas are the portion of SE 6th Street directly south of the Bellevue Pump Station impacted by construction staging; the intersection of SE 6th Street and 102nd Ave. SE; 102nd Ave. SE between SE 6th Street and SE 3rd Street; and SE 3rd Street between 101st Ave. SE and Bellevue Way; and any overlay work required in Bellevue Way, or as required under the City’s right of way permit. Upon execution of this Amendment, the City shall release the County from responsibility for the pavement grind and overlay as currently required in the permit No. 09 129294 TK listed above, and shall issue a revised permit omitting this requirement. The County shall reimburse the City for its proportionate share of the costs for the overlay per Paragraph 5.4 of this Agreement.”

1.3. A new Section 5.4 shall be added to the Agreement, as follows:

“5.4. Reimbursement for Pavement Overlay and Invoicing. Pursuant to the same cost-share split percentages applied to the rest of the construction activity covered by this Agreement, the County shall reimburse the City for fifty-six (56) percent of the pavement overlay costs related to the Bellevue Influent Trunk construction (SE 6th Street, 102nd Ave. SE between SE 6th St. and SE 3rd St., and the portion of SE 3rd St. between 101st Ave. SE and 102nd Ave SE.). The City shall be responsible for one hundred (100) percent of the pavement overlay costs related to the West CBD Trunk construction (the portion of SE 3rd between Bellevue Way and 102nd Ave. SE, up to the manhole to which the West CBD Trunk will be connected in the intersection of SE 3rd St. and 102nd Ave. SE; and any overlay work required in Bellevue Way.) The City shall provide the County with one invoice for the County’s share of costs, in accordance with this paragraph 5.4, within 30 days of the completion of the pavement overlay work. A properly documented invoice shall be paid by the County to the City within thirty (30) days of receipt.”

2. **No Other Changes.** Except as set forth herein, all other terms, conditions and paragraphs of the Agreement remain unchanged and in full force and effect.
3. **Authority.** Each individual signing this First Amendment to the Agreement warrants that he or she has the legal authority to agree to this First Amendment and to bind the Party for which that individual signs.
4. **Counterparts.** This First Amendment may be executed in counterparts, and each set of duly delivered counterparts that includes all signatories shall be deemed to be one original document. In addition, the Parties may sign this First Amendment by facsimile and the exchange of facsimile signatures on this First Amendment shall be binding on the Parties.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment, effective on the latest date shown below. The signatories below represent and warrant that they possess the authority to execute this Amendment and bind their respective entities.

CITY OF BELLEVUE

KING COUNTY

By: [Signature]
Name Wesley [unclear]
Title Assistant Director

By: [Signature]
Name Pam Elardo, PE, Director
Title King County Wastewater Treatment Division

Dated: 4/17/12

Dated: 16 MAY 2012

Approved as to form only:

Approved as to form only:

By: [Signature] 4/11/2012
CITY Attorney Date

By: [Signature] 5/15/12
Sr. Dep. Prosecuting Attorney Date



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

King Street Center, KSC-NR-0501
201 S Jackson Street
Seattle, WA 98104-3855
206-684-1260 Fax 206-684-1959
TTY Relay: 711

GR #1050094-001

RECEIVED

FEB 27 2012

CITY COUNCIL

February 27, 2012

Bellevue Mayor Don Davidson
Bellevue City Councilmembers
P.O. Box 90012
Bellevue, WA 98009-9012

Dear Mayor Davidson and Councilmembers:

The attached First Amendment to the Interagency Agreement between the King County Wastewater Treatment Division and the City of Bellevue sets forth amended responsibilities and obligations of the City and County relating to the County's Bellevue Influent Trunk Project and the City's West Central Business District (West CBD) Trunk Project. This amendment provides for transfer of responsibility for final pavement restoration from King County under its Right of Way Street Use Permit, to the City of Bellevue, to be implemented under the City's annual road overlay contract in 2012. Per terms outlined in this amendment, the County will reimburse the City for its share of the road overlay work. The amendment also stipulates that the use of "Inserta-tee" lateral connections on the County's Bellevue Influent Trunk will be owned and operated by King County, and that these devices shall not be installed on the City's West CBD Trunk sewer as they are not the City's preferred sewer lateral connection device.

This amendment to the original Interagency Agreement has been prepared by city and county staff members, and reviewed by the King County Prosecuting Attorney's Office. I am prepared to sign an identical document following approval by the Bellevue City Council. I am requesting two executed originals for our files. Please send those to the attention of Sharman Herrin, Government Relations Administrator, at 201 South Jackson Street, Mailstop KSC-NR-0501, Seattle, Washington 98104.

Thank you for your consideration of this First Amendment to the Interagency Agreement.

Sincerely,

Pam Elardo, P.E.
Division Director

Enclosure

CITY COUNCIL AGENDA MEMORANDUM

SUBJECT

Resolution No. 8388, authorizing the City Manager to execute the first amendment to the interagency agreement with King County for the design and construction of a joint sewer trunk project in SE 3rd Street and 102nd Avenue SE. This joint project combines the County's project to upsize their Bellevue Influent Trunk with the City's project to increase the capacity of the West CBD Trunk (CIP Plan No. S-54).

FISCAL IMPACT

This amendment does not have a fiscal impact on the City. The purpose of this amendment is to transfer the lead agency role for the SE 3rd Street and 102nd Avenue SE sewer upgrade projects from King County to the City of Bellevue. The original agreement stipulated that King County would be the lead agency for the design and construction phase of the project and the City would take the lead at time of the overlay to incorporate it into existing overlay programs to reduce overall project costs. Executing this first amendment to the interagency agreement with King County does not revise the cost-split obligation of the original agreement, for which the City's portion is 44%.

The City's share of the project cost is funded from the Utilities CIP Plan No. S-54, West CBD Trunk Capacity Improvement Project, as previously approved by the City Council. All of the City's project costs will eventually be recovered via connection charges that are being collected from all properties that will benefit from the increase in available sewer trunk capacity.

Working cooperatively with King County and incorporating the City's existing overlay program will have an estimated cost savings to the City of approximately \$740,000. This work was included in the 2011-2017 Utility CIP with a budget of \$4,093,000 for the City's project.

STAFF CONTACT

Michael Jackman, Interim Deputy Director, 452-6012
Wes Jorgenson, Assistant Director, 452-4887
Utilities Department

POLICY CONSIDERATION

This amendment to the interagency agreement supports regional cooperation, ensuring that construction of the County's project and the City's West CBD Trunk Capacity Improvement Project are completed in the most cost effective and least disruptive manner.

Comprehensive Wastewater Plan policy states that sewer service extensions or capacity upgrades are the responsibility of the benefiting properties. However, the City may construct the infrastructure to

facilitate timely completion of projects as long as the City's costs are reimbursed by benefitting property owners. As noted above, there is a connection charge to benefitting properties that will reimburse the City's costs, including interest.

CIP Plan Project S-54, West CBD Sewer Trunk Capacity Improvement, was created to allow the City to construct this sewer capacity upgrade to accommodate future growth in downtown Bellevue. The project is consistent with City Comprehensive Plan Policy UT-4, which indicates utility system capacity should not determine land use. The current wastewater system's capacity would limit downtown development.

BACKGROUND

The West CBD Sewer Trunk Capacity Improvement Project is identified in Bellevue's Comprehensive Wastewater Plan as necessary to provide sufficient sewer capacity to allow planned development in downtown Bellevue. Based on development projections in the west portion of the CBD, this capacity will be needed by approximately 2014. Sufficient sewer capacity will reduce the likelihood and occurrence of sewer overflows which pollute surface waters and create potential health and safety hazards.

In early 2008, County and City staff initially met to discuss each agency's plans to increase the capacity of their sewer trunks in SE 3rd Street and 102nd Avenue SE, and to discuss how best to coordinate the projects. Both the County and City projects would be constructing new sewer trunks in 102nd Avenue SE between SE 3rd and SE 6th Streets. In addition, the County's project would be constructing a new sewer trunk in SE 3rd Street west of 102nd (to 101st Avenue SE), and the City's project would be constructing a new sewer trunk in SE 3rd Street east of 102nd (to Bellevue Way). Both the County and City projects are needed to provide sufficient sewer capacity to serve anticipated growth in the western portion of downtown Bellevue (a.k.a. Bellevue's Central Business District or the CBD).

In December 2009, the County and the City signed a memorandum of understanding that provided the basis for exploring the possibility of pursuing a joint project. After evaluating project alternatives, the County and the City concluded that a joint project would be mutually beneficial. A joint project would provide for the most efficient use of the limited right-of-way space available in 102nd Avenue SE, would result in project cost savings for both agencies, and would minimize disruption to properties adjacent to the project.

In March 2010, the County and City executed the interagency agreement to design and construct the joint project. As provided in the agreement, the County served as the lead agency responsible for managing the design and construction of the joint pipeline project. **Pipeline construction has been ongoing since spring of 2011 and is scheduled for completion in spring of this year.** This proposed amendment to the interagency agreement will transfer lead agency status to the City for design and construction of the final asphalt pavement restoration for the joint project, and will add clarification to the limits of pipeline ownership and responsibility.

Grinding and overlaying the streets affected by pipeline construction is a requirement of the right-of-way use permit for the joint sewer project. The amendment will transfer lead agency status from the County to the City so that the paving work can be added to the City's 2012 street overlay contract.

Since the City's contract includes a much larger volume of work beyond this project site, the cost to perform the paving work on 102nd Avenue SE and SE 3rd Street will be significantly lower due to economies of scale and greater bidder competition expected for the larger overlay project. Since the City will be the lead agency for final pavement restoration, the County will reimburse the City for costs incurred to perform this work. The same cost-share split percentages applied to the pipeline project will be applied to the paving work. This amendment will not increase project costs to either the County or the City. In fact, total project costs will be reduced by including paving work within the City's overlay contract.

In addition to the provision for paving, the amendment will clarify ownership and maintenance responsibilities for the County and City. After completion of the joint project, the County will be the owner of the new trunk in 102nd Avenue SE and the new trunk in SE 3rd Street west of 102nd. While the County will own and maintain the trunk line, sewer service lateral pipes that connect properties to the trunk line will be owned and maintained by the City. The City typically owns and maintains sewer service laterals from the sewer main lines up to the edge of public right-of-way. The amendment clarifies that the City's ownership and responsibility for maintenance of the sewer laterals will end at the point of connection to the tee-fittings on the County's trunk line. The County will own and maintain the tees as well as the trunk line. As provided in the original interagency agreement, the City will own and maintain the new trunk in SE 3rd Street east of 102nd Avenue SE, including service laterals within the public right of way.

Staff proposes that Bellevue execute this amendment to the interagency agreement with the County to take advantage of this opportunity to complete the County and City projects in the most cost effective and least disruptive manner.

EFFECTIVE DATE

If adopted, this Resolution will become effective immediately.

OPTIONS

1. Adopt Resolution No. 8388 authorizing the City Manager to execute the first amendment to the interagency agreement with King County for the design and construction of a joint sewer trunk project in SE 3rd Street and 102nd Avenue SE. This joint project combines the County's project to upsize their Bellevue Influent Trunk with the City's project to increase the capacity of the West CBD Trunk (CIP Plan No. S-54).
2. Do not adopt the Resolution and provide alternative direction to staff.

RECOMMENDATION

Adopt Resolution No. 8388, authorizing the City Manager to execute the first amendment to the interagency agreement with King County for the design and construction of a joint sewer trunk project in SE 3rd Street and 102nd Avenue SE. This joint project combines the County's project to upsize their Bellevue Influent Trunk with the City's project to increase the capacity of the West CBD Trunk (CIP Plan No. S-54).

MOTION

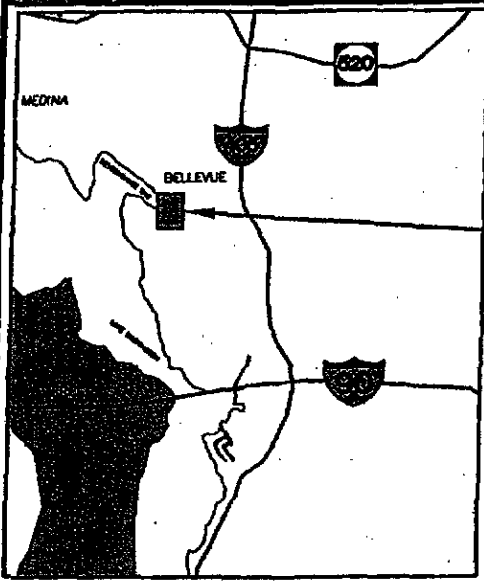
Move to adopt Resolution No. ~~8388~~, authorizing the City Manager to execute the first amendment to the interagency agreement with King County for the design and construction of a joint sewer trunk project in SE 3rd Street and 102nd Avenue SE. This joint project combines the County's project to upsize their Bellevue Influent Trunk with the City's project to increase the capacity of the West CBD Trunk (CIP Plan No. S-54).

ATTACHMENTS

Project Area Map
CIP Project Description
Proposed Resolution No. ~~8388~~

AVAILABLE IN COUNCIL OFFICE

First Amendment to the Interagency Agreement
Interagency Agreement
Memorandum of Understanding



PROJECT AREA

WILDWOOD PARK

NEW BELLEVUE CONNECTION

SE 3RD ST

BELLEVUE WEST CBD TRUNK IMPROVEMENT
COST SHARE:
BELLEVUE 100%

KING COUNTY'S BELLEVUE INFLUENT TRUNK IMPROVEMENT
COST SHARE:
KING COUNTY 56%
BELLEVUE 44%

Meyersbush Creek

KING COUNTY'S BELLEVUE PUMP STATION

SE 6TH ST

100TH AVE SE

101ST AVE SE

102ND AVE SE

104TH AVE SE

BELLEVUE WAY SE

PROJECT AREA MAP

File: C:\data\Draws\Draw\Projects\Map\Drawings\Proj\AreaMap.dwg Date: 11-Feb-10 08:51:03am

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 7779

A RESOLUTION authorizing the City Manager or his designee to execute an Interagency Agreement between the City of Bellevue and King County Wastewater Division, in an amount not to exceed \$26,000, for roadway repairs on SE 6th Street.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The City Manager or his designee is hereby authorized to execute an Interagency Agreement between the City of Bellevue and King County Wastewater Division, in an amount not to exceed \$26,000, for roadway repairs on SE 6th Street, a copy of which Interagency Agreement has been given Clerk's Receiving No. 43157.

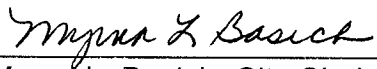
Passed by the City Council this 4th day of August, 2008, and signed in authentication of its passage this 4th day of August, 2008.

(SEAL)



Grant S. Degginger, Mayor

Attest:



Myrna L. Basich, City Clerk

CR# 43157 DATE 8/14/08 LOC 22-606

**INTERAGENCY AGREEMENT FOR WORK TO BE PERFORMED BY
KING COUNTY WASTEWATER TREATMENT DIVISION**

THIS AGREEMENT is made and entered into by and between King County ("the County") and the City of Bellevue, ("the City").

RECITALS

- A. The City is desirous of contracting with the County for the performance of certain work.
- B. The County is agreeable to performing the work on the terms and conditions hereinafter set forth and in consideration of the mutual covenants and agreements herein contained.
- C. The parties can achieve cost savings and benefits in the public's interest by having the County perform the work for the City at the City's expense.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

- 1. Work
 - 1.1 Scope of Work. The County Wastewater Treatment Division or its designee shall perform the work described on the attached Exhibit 1, Scope of Work.
 - 1.2 Modification of Work. If the City desires to modify the work requested, it shall notify the County of that desire. If the County agrees, the parties shall prepare an amended Scope of Work, which will be attached hereto as Exhibit 2. The amended Scope of Work shall bear the signature of the Wastewater Treatment Director for the County and Transportation Deputy Director for the City, authorizing the amended work.

2. County Personnel Standards

The County or its designee is acting hereunder as an independent contractor so that:

- a. County employees or its designees performing work hereunder shall be for all purposes employees of the County;
- b. Control of County personnel standards of performance, discipline, and all other aspects of employment shall be governed entirely by the County.

3. Compensation

- 3.1 Costs. The City shall pay the County for actual costs (direct labor, employee benefits, equipment rental, materials and supplies, utilities, permits, and administrative overhead costs) for the work performed by the County. Administrative overhead costs shall be charged as a percentage of direct labor costs.
- 3.2 Billing. The County will bill the City for the cost of work performed. The bill will reflect actual costs and administrative overhead, as described in Section 3.1 above. Payments are due within 30 days of the City's receipt of said invoice.

4. Permits

The City is responsible for obtaining any permits or other authorizations that may be necessary for the County or its designee to perform the work under this Agreement.

5. County Responsibilities

5.1 County Status. The County or its designee will act as a contractor only and will not purport to represent the City professionally.

5.2 County Performance. The County or its designee shall perform the work requested by the City as described in the Scope of Work. The County or its designee will furnish all necessary labor, supervision, machinery, equipment, materials, and supplies to perform the work requested by the City in the Scope of Work

5.3 Timing of Work. The County or its designee will make every effort to recognize pertinent City deadlines for completion of the requested work, and will notify the City of any hardship or other inability to perform the work requested, including postponement of work due to circumstances requiring the County to prioritize its resources toward emergency-related work.

6. Duration

This Agreement is effective upon signature by both parties, and shall remain in effect until completion of the work and payment of all sums due hereunder, provided that either party may terminate this Agreement by a written notice received by the other party at least five business days before the work commences.

7. Force Majeure

The County's or its designee's performance under this Agreement shall be excused during any period of force majeure. Force majeure is defined as any condition that is beyond the reasonable control of the County or its designee, including but not limited to, natural disaster, severe weather conditions, contract disputes, labor disputes, epidemic, pandemic,

delays in acquiring right-of-way or other necessary property or interests in property, permitting delays, or any other delay resulting from a cause beyond the reasonable control of the County or its designee.

8. Liability

Each party hereto agrees to indemnify and hold harmless the other party, and its officers, agents and employees, for all claims(including demands, suits, penalties, losses, damages, attorneys fees or costs of any kind whatsoever) to the extent such a claim arises or is caused by the indemnifying party's own negligence or that of it's officers, agents or employees in performance of this agreement.

The foregoing indemnity is specifically and expressly intended to constitute a waiver of each party's immunity under Washington's Industrial Insurance Act, RCW Title 51, as respects the other party only, and only to the extent necessary to provide the indemnified party with a full and complete indemnity of claims made by the indemnitor's employees. The party's acknowledge that these provisions were specifically negotiated and agreed upon by them.

9. Audits and Inspections

The records and documents pertaining to all matters covered by this Agreement shall be retained and be subject to inspection, review or audit by the County or the City during the term of this Agreement and for three (3) years thereafter.

10. Entire Agreement and Amendments

This Agreement contains the entire agreement of the parties hereto and supersedes any and all prior oral or written representations or understandings. This Agreement may only be amended by mutual, written agreement between the parties, provided that the Scope of Work may be amended as described in Section 1.2 above.

11. No Continuing Services

This Agreement is valid only for an individual work item, as specified in the Scope of Work. Ongoing services require an interlocal agreement pursuant to Chapter 39.34 RCW.

12. No Third Party Rights

Nothing contained herein is intended to, nor shall be construed to, create any rights in any third party, or to form the basis for any liability on the part of the parties to this Agreement, or their officials, officers, employees, agents or representatives, to any third party.

13. Waiver of Breach

Waiver of any breach of any provision of this Agreement shall not be deemed to be a waiver of any prior or subsequent breach and shall not be construed to be a modification of the terms of this Agreement.

14. Headings

The headings in this Agreement are for convenience only and do not in any way limit or amplify the provisions of this Agreement.


15. Invalid Provisions

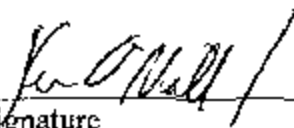
If any provision of this Agreement shall be held invalid, the remainder of the Agreement shall not be affected if such remainder would then continue to serve the purposes and objectives of the parties.

IN WITNESS WHEREOF, the parties have executed this Agreement effective as of the date last written below.

KING COUNTY

CITY OF BELLEVUE

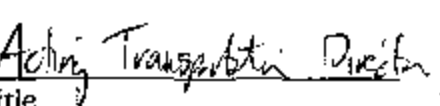

Christie True, Division Director
DNRP - Wastewater Treatment Division


Signature

Date

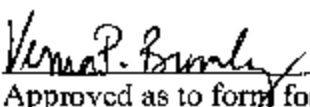
7/31/08

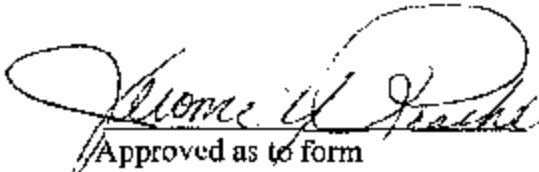
Title

 / Deputy City Manager

Date

8/4/08 / 8/08/08


Approved as to form for use in 2008
Verna Bromley
Prosecuting Attorney


Approved as to form
Jerome Roache

Assistant City Attorney

Attachment: Exhibit 1, Scope of Work

EXHIBIT 1

Scope of Work

Per the request of the City's Transportation Department the County will perform additional restoration to the roadway base and asphalt paving sections on SE 6th Street between 114th Avenue SE. and 113th Avenue SE. This will result with the entire roadway section being rebuilt and restored by King County's contractor during it's sewer force main project. The original area of restoration was documented in a Letter of Understanding between King County Waste Water Treatment Division and City of Bellevue Utilities Engineering Division.

Cost Estimate

The total cost estimate for the additional restoration area is \$25,000. This cost is based on a direct cost for materials per square yard of area restored. See attached sheet for the specific areas and cost breakdown. The total cost of this project is not to exceed \$26,000.

Schedule

The County will perform this work with their existing sewer force main contract at the same time that all other restoration is scheduled. This work occurred in March of 2008.

Quantities calculated for added base and roadway repair by King County Wastewater Division for restoration on SE 6th Street between 114th Ave SE and 116th Ave SE. See map for measurement and calculation areas of repair and division of responsibility. Unit costs are based upon current bids for like quantities on other City of Bellevue projects:

| ITEM OF WORK | QUANTITY | UNIT | UNIT COST | TOTAL COST |
|-----------------------------------|-----------------|-------------|------------------|--------------------|
| ASPHALT CONCRETE PAVEMENT REMOVAL | 750 | SY | 4.00 | 3,000.00 |
| 1/2" HMA PG 64-22, ASPHALT | 90 | TON | 70.00 | 6,300.00 |
| CLASS E ASPHALT BASE | 180 | TON | 70.00 | 12,600.00 |
| CRUSHED SURFACING BASE COURSE | 155 | TON | 20.00 | 3,100.00 |
| TOTAL OF ALL ITEMS | | | | \$25,000.00 |

EXHIBIT B

FILED NO. 14991
CITY OF BELLEVUE
DATE 12/1/89
CITY CLERK *maie*
O. Connell
Res. 5206

ORIGINAL

CITY OF BELLEVUE
MUNICIPALITY OF METROPOLITAN SEATTLE
AMENDMENT TO AGREEMENT
FOR SEWAGE DISPOSAL

THIS AMENDMENT made as of the 2nd day
of October, 1992 between the City of
Bellevue, a municipal corporation of the State of Washington
(hereinafter referred to as the "City") and the Municipality
of Metropolitan Seattle, a metropolitan municipal
corporation of the State of Washington (hereinafter referred
to as "Metro");

WITNESSETH:

WHEREAS, the parties have entered into a long term
Agreement for Sewage Disposal dated July 21, 1966, as
amended (hereinafter referred to as the "Basic Agreement");
and

WHEREAS, an advisory committee composed of elected
and appointed officials in the metropolitan area was
appointed by the Metropolitan Council to examine the
structure of Metro's charges to its participants; and

WHEREAS, said advisory committee, following
extensive research, study and deliberations, has recommended
certain changes in the structure of Metro's charges to its
participants and implementation of said changes requires
amendment of the Basic Agreement; and

WHEREAS, the parties have determined that the
recommendations are in the best public interest and
therefore desire to amend said Basic Agreement to implement
said recommendations;

NOW, THEREFORE, it is hereby agreed as follows:

Section 1. Amendment of Section 5 of the Basic Agreement. Section 5 of the Basic Agreement is hereby amended to read as follows:

"Section 5. Payment for Sewage Disposal. For the disposal of sewage hereafter collected by the City and delivered to Metro the City shall pay to Metro on or before the last day of each month during the term of this Agreement, a sewage disposal charge determined as provided in this Section 5.

1. For the quarterly periods ending March 31, June 30, September 30 and December 31 of each year every Participant shall submit a written report to Metro setting forth:

(a) the number of Residential Customers billed by such Participant for local sewerage charges as of the last day of the quarter,

(b) the total number of all customers billed for local sewerage charges by such Participant as of such day, and

(c) the total water consumption during such quarter for all customers billed for local sewerage charges by such Participant other than Residential Customers.

The quarterly water consumption report shall be taken from water meter records and may be adjusted to exclude water which does not enter the sanitary facilities of the customer. Where actual sewage flow from an individual customer is metered, the metered sewage flows shall be reported in lieu of adjusted water consumption. The total quarterly water consumption report in cubic feet shall be divided by 2,250 to determine the number of Residential Customer equivalents represented by each Participant's customers other than single family residences.

Metro shall maintain a permanent record of the quarterly customer reports from each Participant.

The City's first quarterly report shall cover the first quarterly period following the date when sewage is first delivered to Metro and shall be submitted within thirty days following the end of the quarter. Succeeding reports shall be made for each quarterly period thereafter and shall be submitted within thirty (30) days following the end of the quarter.

2. (a) To form a basis for determining the monthly sewage disposal charge to be paid by each Participant during any particular quarterly period, Metro shall ascertain the number of Residential Customers and Residential Customer equivalents of each Participant. This determination shall be made by taking the sum of the actual number of Residential customers reported as of the last day of the next to the last preceding quarter and the average number of Residential Customer Equivalents per quarter reported for the four quarters ending with said next to the last preceding quarter, adjusted for each Participant to eliminate any Residential Customers or Residential Customer equivalents whose sewage is delivered to a governmental agency other than Metro or other than a Participant for disposal outside of the Metropolitan Area.

(b) For the initial period until the City shall have submitted six consecutive quarterly reports, the reported number of Residential Customers and Residential Customer equivalents of the City shall be determined as provided in this subparagraph (b). On or before the tenth day of each month beginning with the month prior to the month in which sewage from the City is first delivered to Metro, the City shall submit a written statement of the number of Residential Customers and Residential Customer equivalents estimated to be billed by the City during the

next succeeding month. For the purpose of determining the basic reported number of Residential Customers and Residential Customer equivalents of the City for such next succeeding month, Metro may at its discretion adopt either such estimate or the actual number of Residential Customers and Residential Customer equivalents reported by the City as of the last day of the next to the last preceding reported quarter. After the City shall have furnished six consecutive quarterly reports the reported number of Residential Customers and Residential Customer equivalents of the City shall be determined as provided in the immediately preceding subparagraph (a).

(c) If the City shall fail to submit the required monthly and/or quarterly reports when due, Metro may make its own estimate of the number of Residential Customers and Residential Customer equivalents of the City and such estimate shall constitute the reported number for the purpose of determining sewage disposal charges.

3. The monthly sewage disposal charge payable to Metro shall be determined as follows:

(a) Prior to July 1st of each year Metro shall determine its total monetary requirements for the disposal of sewage during the next succeeding calendar year. Such requirements shall include the cost of administration, operation, maintenance, repair and replacement of the Metropolitan Sewerage System, establishment and maintenance of necessary working capital and reserves, the requirements of any resolution providing for the issuance of revenue bonds of Metro to finance the acquisition, construction or use of sewerage facilities, plus not to exceed 1% of the foregoing requirements for general administrative overhead costs.

(b) To determine the monthly rate per Residential Customer or Residential Customer equivalent to be used

during said next succeeding calendar year, the total monetary requirements for disposal of sewage as determined in subparagraph 3(a) of this section shall be divided by twelve and the resulting quotient shall be divided by the total number of Residential Customers and Residential Customer equivalents of all Participants for the October-December quarter preceding said July 1st; provided, however, that the monthly rate shall not be less than Two Dollars (\$2.00) per month per Residential Customer or Residential Customer equivalent at any time during the period ending July 31, 1972.

(c) The monthly sewage disposal charge paid by each Participant to Metro shall be obtained by multiplying the monthly rate by the number of Residential Customers and Residential Customer equivalents of the Participant. An additional charge may be made for sewage or wastes of unusual quality or composition requiring special treatment, or Metro may require pretreatment of such sewage or wastes.

4. The parties acknowledge that, by resolution of the Metropolitan Council, Metro may impose a charge or charges directly on the future customers of a Participant for purposes of paying for capacity in Metropolitan Sewage Facilities and that such charges shall not constitute a breach of this agreement or any part thereof. The proceeds of said charge or charges, if imposed, shall be used only for capital expenditures or defeasance of outstanding revenue bonds prior to maturity.

In the event such a charge or charges are imposed, the City shall, at Metro's request, provide such information regarding new residential customers and residential customer equivalents as may be reasonable and appropriate for purposes of implementing such a charge or charges.

5. A statement of the amount of the monthly sewage disposal charge shall be submitted by Metro to each

Participant on or before the first day of each month and payment of such charge shall be due on the last day of such month. If any charge or portion thereof due to Metro shall remain unpaid for fifteen days following its due date, the Participant shall be charged with and pay to Metro interest on the amount unpaid from its due date until paid at the rate of 6% per annum, and Metro may, upon failure to pay such amount, enforce payment by any remedy available at law or equity.

6. The City irrevocably obligates and binds itself to pay its sewage disposal charge out of the gross revenues of the sewer system of the City. The City further binds itself to establish, maintain and collect charges for sewer service which will at all times be sufficient to pay all costs of maintenance and operation of the sewer system of the City, including the sewage disposal charge payable to Metro hereunder and sufficient to pay the principal of and interest on any revenue bonds of the City which shall constitute a charge upon such gross revenues. It is recognized by Metro and the City that the sewage disposal charge paid by the City to Metro shall constitute an expense of the maintenance and operation of the sewer system of the City. The City shall provide in the issuance of future sewer revenue bonds of the City that expenses of maintenance and operations of the sewer system of the City shall be paid before payment of principal and interest of such bonds. The City shall have the right to fix its own schedule of rates and charges for sewer service provided that same shall produce revenue sufficient to meet the covenants contained in this Agreement.

Section 2. Amendment of Section 6 of the Basic Agreement. Section 6 of the Basic Agreement is hereby amended to read as follows:

"Section 6. Responsibility of the City. The City shall be responsible for the delivery to the Metropolitan Sewerage System of sewage collected by the City, for construction, maintenance and operation of Local Sewerage Facilities, and for the payment of all costs incident to the collection of such sewage and its delivery to the Metropolitan Sewerage System.

In addition, the City will undertake continual rehabilitation and replacement of its local sewage facilities for purposes of preventing, reducing and eliminating the entry of extraneous water into such facilities and will expend annually, averaged over five (5) years, an amount equal to two (2) cents per inch of diameter per foot of its local sewage facilities, excluding combined sewers and force mains, for said rehabilitation and replacement. The amount of this expenditure requirement may be increased from time to time by the Metropolitan Council to reflect general inflation. Rehabilitation and replacement projects undertaken pursuant to this section shall be constructed in accordance with criteria adopted by the Metropolitan Council and included in Metro's Rules and Regulations. In the event the City fails to comply with the rehabilitation and replacement expenditure requirements described in this section, the City shall pay such charge as may be determined by Metro for quantities of storm or ground water entering its Local Sewerage Facilities in excess of the minimum standard established by the general Rules and Regulations of Metro.

Section 3. Amendment of Basic Agreement to Add a New Section. A new Section 17 shall be added to the Basic Agreement to read as follows:

" Section 17. Future Amendments. The City agrees to amend and hereby concurs in any amendment to this agreement which incorporates any changes in the terms for

sewage disposal and/or payment therefore as may be proposed by Metro and agreed to by those Participants that shall represent, in total, not less than 90% of the Residential Customers and Residential Customer Equivalents then served by the Metropolitan Sewerage System."

Section 4. Effective Date of Amendment. This amendment shall take effect at the beginning of the first quarter following the date first written above with quarters beginning January 1, April 1, July 1, and October 1.

Section 5. Basic Agreement Unchanged. Except as otherwise provided in this amendment, all provisions of the basic agreement shall remain in full force and effect as written therein.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

CITY OF BELLEVUE

Pam Bissinette

ATTEST:

Shawn Martin, Deputy City Clerk

Approved as to form

[Signature]
Assistant City Att.

MUNICIPALITY OF
METROPOLITAN SEATTLE

[Signature]

Gary Zimmerman
Chair of the Council

ATTEST:

MAY 22 1992

Bonnie Mattson

4

CITY OF BELLEVUE
MUNICIPALITY OF METROPOLITAN SEATTLE
EXTENSION OF AGREEMENT FOR SEWAGE DISPOSAL

FILED NO. 10884
CITY OF BELLEVUE
DATE 1/04/86
CITY CLERK Jessie
O. Conwell
Res. 4675

WHEREAS, the City of Bellevue (the "City") and the Municipality of Metropolitan Seattle (the "Municipality") are parties to a certain Agreement for Sewage Disposal (the "Agreement") dated July 21, 1966, as amended, pursuant to which the City delivers to the Municipality for treatment and disposal all the sewage and industrial wastes it collects from its service area; and

WHEREAS, the Agreement expires by its terms on July 1, 2016; and

WHEREAS, it is in the best interests of the City and the Municipality that the expiration date of the Agreement be extended in order to allow the Municipality to sell and issue its sewer revenue bonds with maturities extending beyond 2016;

NOW, THEREFORE, in consideration of the mutual covenants contained herein and in the Agreement, it is hereby agreed as follows:

The Agreement for Sewage Disposal between the City of Bellevue and the Municipality of Metropolitan Seattle dated July 21, 1966, as amended, is hereby extended for a period of twenty years and shall continue in full force and effect until July 1, 2036.

It is further agreed that all other provisions of said Agreement shall remain unchanged, and the Agreement dated July 21, 1966, as

Extension of Agreement for Sewage Disposal
Page two.

amended, as extended herein shall constitute the entire Agreement for
Sewage Disposal between the parties.

DATED: This 28th day of June, 1987.

CITY OF BELLEVUE

By Phil Kushlan
Phil Kushlan
City Manager

ATTEST:

Marie H. O'Connell
City Clerk

MUNICIPALITY OF METROPOLITAN
SEATTLE

By Gary Zimmerman
Gary Zimmerman
Chairman of the Council

ATTEST:

Bonnie Mattson
Bonnie Mattson
Clerk of the Council

FILED NO. 2625
CITY OF BELLEVUE
DATE 1-7-74
CITY CLERK P. Weber

Executed in 4 counterparts of
which this is counterpart No. 1

C-77-5

MUNICIPALITY OF METROPOLITAN SEATTLE - CITY OF BELLEVUE

SECOND AMENDMENT TO AGREEMENT FOR SEWAGE DISPOSAL

JAN. 10, 1974

This agreement, made and executed this 21st day of ~~December~~ ^{February} 197~~3~~⁴, between the City of Bellevue, a municipal corporation of the State of Washington, hereinafter called the "City" on behalf of itself and as successor in interest to the Bellevue Sewer District, hereinafter called the "District"; the Lake Hills Sewer District, hereinafter called "Lake Hills"; and the Municipality of Metropolitan Seattle, a municipal corporation of the State of Washington, hereinafter called "Metro":

W I T N E S S E T H:

WHEREAS, the City is engaged in providing local sanitary sewer service to areas proximately located within and adjacent to City, including those areas formerly served by Lake Hills and the District, and Metro is engaged in the development and operation of a system of interceptor sewers and treatment facilities for the metropolitan area including areas served by City; and

WHEREAS, the City, Lake Hills and the District have previously entered into long-term agreements with Metro for the disposal of sewage collected by the City, Lake Hills and the District, which agreements bind successors and assigns thereof; and

WHEREAS, the City has entered into agreements with both the District and Lake Hills by which the assets of and operating control over the same have been transferred to the City, and whereby the City has assumed all obligations of Lake Hills and the District; and

WHEREAS, it is necessary to amend section 2 of the agreement for sewage disposal between the City and Metro dated July 21, 1966, as amended March 2, 1967, hereinafter referred to as the "basic agreement", to remove a service area limitation and to provide for the delivery to Metro for disposal all sewage collected by the City;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, it is hereby agreed as follows:

1. Section 2 of the basic agreement is hereby amended to read as follows:

"Section 2. Delivery and acceptance of sewage. The City shall deliver to Metro all of the sewage and industrial waste collected by the City within areas where the City has authority to provide local sewage service, whether or not such areas are within the municipal boundaries of the City, and Metro shall accept sewage and waste delivered for treatment and disposal as hereinafter provided subject to such reasonable rules and regulations as may be adopted from time to time by the Metropolitan Council.

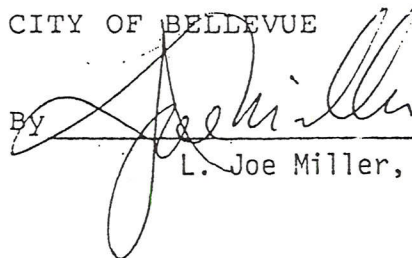
2. The City hereby assumes, adopts and agrees to perform all obligations and responsibilities of the District under its sewage disposal agreement with Metro dated July 26, 1960, as amended, and of Lake Hills under its sewage disposal agreement with Metro dated September 14, 1961, as amended, including the obligations to deliver all sewage collected within the prior boundaries of the District and Lake Hills for disposal and to pay Metro for such disposal services as provided in the above-referenced agreements.

3. Except as otherwise provided in this agreement, all provisions of the basic agreement shall remain in full force and effect as written therein.

IN WITNESS WHEREOF, the parties have executed this agreement as of the day and year first above written.

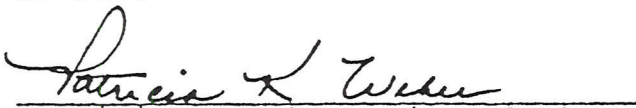
CITY OF BELLEVUE

BY

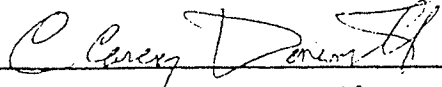


L. Joe Miller, City Manager

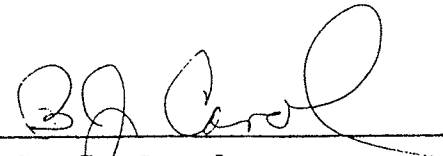
ATTEST:


Patricia K. Weber, City Clerk

MUNICIPALITY OF METROPOLITAN SEATTLE

By 
C. Carey Donworth
Chairman of the Council

ATTEST:


B. J. Carol
Clerk of the Council

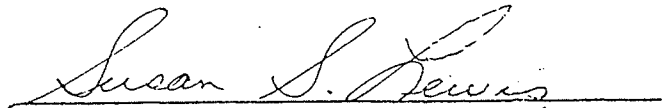
STATE OF WASHINGTON)

SS

COUNTY OF KING)

On this 5th day of February, 1974, before me personally appeared L. Joe Miller and PATRICIA K. WEBER, to me known to be the City Manager, City Clerk, respectively, of the City of Bellevue, a municipal corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.


Notary Public in and for the State
of Washington, residing at Bellevue

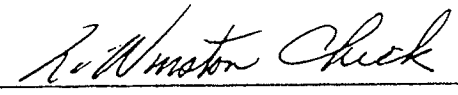
STATE OF WASHINGTON)

SS

COUNTY OF KING)

On this 11th day of February, 1974, before me personally appeared C. CAREY DONWORTH and B. J. CAROL, to me known to be the Chairman of the Council and Clerk of the Council, respectively, of the Municipality of Metropolitan Seattle, a municipal corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.


Notary Public in and for the State
of Washington, residing at Seattle

CITY OF BELLEVUE - METRO
FIRST AMENDMENT TO AGREEMENT FOR
SEWAGE DISPOSAL

As of this 2nd day of March, 1967, the
CITY OF BELLEVUE, a municipal corporation of the State of
Washington, hereinafter referred to as the "City" and the
MUNICIPALITY OF METROPOLITAN SEATTLE, a municipal corporation
of the State of Washington, hereinafter referred to as "Metro"
do hereby agree:

1. That Section 2 of the Agreement for Sewage Disposal
between the City and Metro dated as of July 21, 1966, hereinafter
called the "Agreement", be amended to read as follows:

"Section 2. Delivery and Acceptance of Sewage.

The City shall deliver to Metro all of the sewage and
industrial waste collected from those portions of the
City located within the areas described on Exhibit A
attached hereto and by this reference made a part hereof,
together with such other areas as may be the subject of
future agreements between Metro and the City, and Metro
shall accept the sewage and waste delivered for treatment
and disposal as hereinafter provided subject to such
reasonable rules and regulations as may be adopted from
time to time by the Metropolitan Council."

2. That Section 11 of the Agreement be amended to read as
follows:

"Section 11. Effective Date and Term of Contract.

This Agreement shall be in full force and effect and binding
upon the parties hereto upon the execution of the Agreement
and shall continue in full force and effect until
July 1, 2016.

3. That the Agreement as amended by Paragraphs 1 and 2 of this First Amendment shall constitute the entire contract for sewage disposal between the City and Metro.

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the day and year first above written.

CITY OF BELLEVUE

By *Clarence F. Hill*
Mayor

ATTEST:

Patricia A. Fisher
Deputy
City Clerk

MUNICIPALITY OF METROPOLITAN SEATTLE

By *C. Carey Donworth*
C. Carey Donworth
Chairman of the Council

ATTEST:

Maralyn Sullivan
Maralyn Sullivan
Clerk of the Council

EXHIBIT A

AREA 1. All property located within the boundaries of L.I.D. No. 65-S-87 of the City.

AREA 2. A portion of the City located within Sections 9 and 10, Township 24 North, Range 5 East, W.M., described as follows:

Beginning at the intersection of the centerline of S.E. 26th Street and a line 180 feet easterly of and parallel with the centerline of Henry Richards Road;

Thence southerly along said parallel line to the east west centerline of Tract 27, Mercer Slough Garden Tracts;

Thence easterly along said east west centerline and along the east west centerline of Tracts 28 to 32, inclusive, to the east line of said Plat of Mercer Slough Garden Tracts;

Thence northerly along said east line and its northerly extension to the centerline of S.E. 26th Street;

Thence westerly along said centerline to the point of beginning.

AREA 3. A portion of the City located within Sections 21, 27, and 28, Township 25 North, Range 5 East, W.M., described as follows:

Beginning at the intersection of the centerline of the Bellevue-Redmond Road and the east Section line of Section 27;

Thence north along said east section line to the north line of said Section 27;

Thence westerly along said north line to the east line of Section 21;

Thence northerly along said east line to the north line of Section 21;

Thence westerly along said north line to the west line of the East 1/2 of the Northwest 1/4 of Section 21;

Thence southerly along said west line to the north line of the Plat of Engle's Acres;

Thence westerly, southerly and easterly along the north, west and south lines respectively of said Plat to the west line of the East 1/2 of the Southwest 1/4 of Section 21;

Thence southerly along said west line to the north line of the Plat of Burke & Farxar's Kirkland Addition to Seattle Division 23;

Thence easterly along said north line to the northerly extension of the centerline of 120th Avenue N.E. (Platted as Wilbur Street);

Thence southerly along said centerline to the centerline of Northrup Way;

Thence westerly along the centerline of Northrup Way to the East margin of the Northern Pacific Railway right-of-way;

Thence southerly along said east margin to the north line of the South 2/3 of the Northwest 1/4 of Section 28;

Thence easterly along said north line to a line 1,274.13 feet east of the west line of Section 28;

Thence southerly along said line 1,274.13 feet east of the west line of Section 28 to a point that bears North $83^{\circ} 20' 55''$ west from another point on the east line of the Northwest 1/4 of said Section which is 761.50 feet northerly of the Southeast corner of said Northwest 1/4;

Thence easterly to said point 761.50 feet northerly of said SE corner;

Thence southerly to said SE corner;

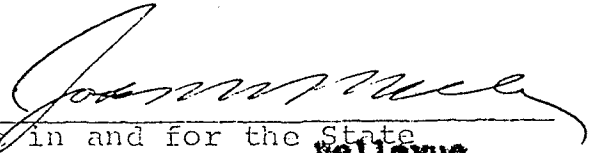
Thence continuing southerly along the centerline of 124th Avenue NE to the centerline of the Bellevue-Redmond Road;

Thence northeasterly to the point of beginning.

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 17th day of February, 1967, before me personally appeared CLARENCE E. WILDE and JENNIFER SCHUBERT, **PATRICIA K. WEBER**, Deputy to me known to be the Mayor and City Clerk respectively, of the City of Bellevue, Washington, a municipal corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

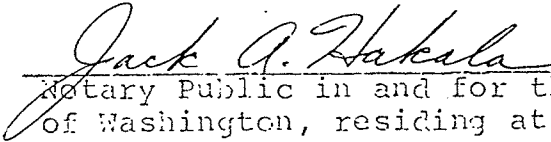
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.


Notary Public in and for the State of Washington, residing at Bellevue

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 2nd day of MARCH, 1967, before me personally appeared C. CAREY DONWORTH and MARALYN SULLIVAN, to me known to be the Chairman of the Council and Clerk of the Council, respectively, of the Municipality of Metropolitan Seattle, a municipal corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.


Notary Public in and for the State of Washington, residing at Seattle

AGREEMENT FOR SEWAGE DISPOSAL

THIS AGREEMENT made as of this 21st day of JULY,
1966, between the CITY OF BELLEVUE, a municipal corporation of the
State of Washington, hereinafter referred to as the "City", and the
MUNICIPALITY OF METROPOLITAN SEATTLE, a municipal corporation of the
State of Washington, hereinafter referred to as "Metro",

W I T N E S S E T H:

WHEREAS, the public health, welfare and safety of the
residents of the City and the residents of Metro require the
development of adequate systems of sewage collection and disposal,
the elimination of water pollution and the preservation of the
fresh and salt water resources of the area; and

WHEREAS, Metro is engaged in developing and operating a
Metropolitan Sewage Disposal System and the City is engaged in
developing a sewage collection system for the City; and

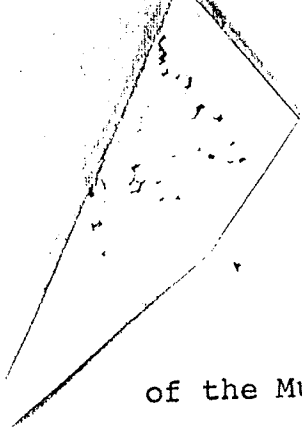
WHEREAS, the City desires to deliver sewage collected by
the City to Metro for disposal; and

WHEREAS, to provide for the disposal by Metro of sewage
collected by the City it is necessary that a contract be now
entered into establishing certain rights and duties of the parties
incident thereto;

NOW, THEREFORE, in consideration of the mutual covenants
contained herein, it is hereby agreed as follows:

Section 1. Definition of Terms. The following words
and phrases used in this contract shall have the meanings herein-
after set forth in this section:

a) The words "Comprehensive Plan" shall mean the
Comprehensive Sewage Disposal Plan adopted in Resolution No. 23



of the Municipality of Metropolitan Seattle and all amendments thereof heretofore or hereafter adopted.

b) The words "Metropolitan Sewerage System" shall mean all of the facilities to be constructed, acquired or used by Metro as a part of the Comprehensive Plan. The Metropolitan Sewerage System shall generally include sewage disposal facilities with capacity to receive sewage from natural drainage areas of approximately one thousand acres or more. The Metropolitan Sewerage System shall thus include trunk or interceptor sewer facilities extending to a point within each tributary and natural drainage area, where not more than one thousand acres remain to be served beyond the upper terminus of such trunk or interceptor sewer.

c) The word "Participant" shall mean each city, town, county, sewer district, municipal corporation, person, firm or private corporation which shall dispose of any portion of its sanitary sewage into the Metropolitan Sewerage System and shall have entered into a contract with Metro providing for such disposal.

d) The words "Local Sewerage Facilities" shall mean all facilities owned or operated by a Participant for the local collection of sewage to be delivered to the Metropolitan Sewerage System.

e) The words "Metropolitan Area" shall mean the area contained within the boundaries of the Municipality of Metropolitan Seattle as now or hereafter constituted.

f) The words "Residential Customer" shall mean a single family residence billed by a Participant for sewerage charges.

Section 2. Delivery and Acceptance of Sewage. The City shall deliver to Metro all of the sewage and industrial waste

collected from that portion of the City located within the boundaries of LID #65-S-87, together with such other areas as may be the subject of future agreements between Metro and the City, and Metro shall accept the sewage and waste delivered for treatment and disposal as hereinafter provided subject to such reasonable rules and regulations as may be adopted from time to time by the Metropolitan Council.

Section 3. Construction of Metro Facilities. Metro shall construct, acquire or otherwise secure the right to use all facilities required for the disposal of sewage delivered to Metro pursuant to this Agreement and shall perform all services required for the maintenance, operation, repair, replacement or improvement of the Metropolitan Sewerage System, including any additions and betterments thereto. Metro shall in its sole discretion determine the nature, location and time of construction of facilities of the Metropolitan Sewerage System.

Section 4. Connection of Local Sewerage Facilities to the Metropolitan Sewerage System. Local Sewerage Facilities of the City shall be connected to the Metropolitan Sewerage System at such time as any of the permanent facilities of such Metropolitan Sewerage System shall be available to receive sewage collected by such local facilities. Such connection shall be accomplished at the expense of the City and in accordance with the rules and regulations of Metro at such point or points of connection as shall be determined by Metro. The City shall secure and pay for the

right to use all Local Sewerage Facilities of another Participant which may be required to deliver the City's sewage to the Metropolitan Sewerage System.

Section 5. Payment for Sewage Disposal. For the disposal of sewage hereafter collected by the City and delivered to Metro the City shall pay to Metro on or before the last day of each month during the term of this agreement, a sewage disposal charge determined as provided in this Section 5.

1. For the quarterly periods ending March 31, June 30, September 30 and December 31 of each year every Participant shall submit a written report to Metro setting forth (a) the number of Residential Customers billed by such Participant for local sewerage charges as of the last day of the quarter, (b) the total number of all customers billed by such Participant as of such day and (c) the total water consumption during such quarter for all customers billed by such Participant other than Residential Customers. The quarterly water consumption report shall be taken from water meter records and may be adjusted to exclude water which does not enter the sanitary facilities of a customer. Where actual sewage flow from an individual customer is metered, the metered sewage flows shall be reported in lieu of adjusted water consumption. The total quarterly water consumption report in cubic feet shall be divided by 2,700 to determine the number of Residential Customer equivalents represented by each Participant's customers other than single family residences. Metro shall maintain a permanent record of the quarterly customer reports from each Participant.

The City's first quarterly report shall cover the first quarterly period following the date when sewage is first delivered to Metro and shall be submitted within thirty days following the end

of the quarter. Succeeding reports shall be made for each quarterly period thereafter and shall be submitted within thirty (30) days following the end of the quarter.

2. a) To form a basis for determining the monthly sewage disposal charge to be paid by each Participant during any particular quarterly period, Metro shall ascertain the number of Residential Customers and Residential Customer equivalents of each Participant. This determination shall be made by taking the sum of the actual number of Residential Customers reported as of the last day of the next to the last preceding quarter and the average number of Residential Customer equivalents per quarter reported for the four quarters ending with said next to the last preceding quarter, adjusted for each participant to eliminate any Residential Customers or Residential Customer equivalents whose sewage is delivered to a governmental agency other than Metro or other than a Participant for disposal outside of the Metropolitan Area.

b) For the initial period until the City shall have submitted six consecutive quarterly reports, the reported number of Residential Customers and Residential Customer equivalents of the City shall be determined as provided in this subparagraph (b). On or before the tenth day of each month beginning with the month prior to the month in which sewage from the City is first delivered to Metro, the City shall submit a written statement of the number of Residential Customers and Residential Customer equivalents estimated to be billed by the City during the next succeeding month. For the purpose of determining the basic reported number of Residential Customers or Residential Customer equivalents of the City for such next succeeding month, Metro may at its discretion adopt either such estimate or the

actual number of Residential Customers and Residential Customer equivalents reported by the City as of the last day of the next to the last preceding reported quarter. After the City shall have furnished six consecutive quarterly reports the reported number of Residential Customers and Residential Customer equivalents of the City shall be determined as provided in the immediately preceding subparagraph (a).

c) If the City shall fail to submit the required monthly and/or quarterly reports when due, Metro may make its own estimate of the number of Residential Customers and Residential Customer equivalents of the City and such estimate shall constitute the reported number for the purpose of determining sewage disposal charges.

3. The monthly sewage disposal charge payable to Metro shall be determined as follows:

a) Prior to July 1st of each year Metro shall determine its total monetary requirements for the disposal of sewage during the next succeeding calendar year. Such requirements shall include the cost of administration, operation, maintenance, repair and replacement of the Metropolitan Sewerage System, establishment and maintenance of necessary working capital and reserves, the requirements of any resolution providing for the issuance of revenue bonds of Metro to finance the acquisition, construction or use of sewerage facilities, plus not to exceed 1% of the foregoing requirements for general administrative overhead costs.

b) To determine the monthly rate per Residential Customer or Residential Customer equivalent to be used during said next succeeding calendar year, the total monetary requirements for disposal of sewage as determined in subparagraph 3(a) of this

section shall be divided by twelve and the resulting quotient shall be divided by the total number of Residential Customers and Residential Customer equivalents of all Participants for the October-December quarter preceding said July 1st; provided, however, that the monthly rate shall not be less than Two Dollars (\$2.00) per month per Residential Customer or Residential Customer equivalent at any time during the period ending July 31, 1972.

c) The monthly sewage disposal charge paid by each Participant to Metro shall be obtained by multiplying the monthly rate by the number of Residential Customers and Residential Customer equivalents of the Participant. An additional charge may be made for sewage or wastes of unusual quality or composition requiring special treatment, or Metro may require pretreatment of such sewage or wastes. An additional charge may be made for quantities of storm or ground waters entering those Local Sewerage Facilities which are constructed after January 1, 1961, in excess of the minimum standard established by the general rules and regulations of Metro.

4. A statement of the amount of the monthly sewage disposal charge shall be submitted by Metro to each Participant on or before the first day of each month and payment of such charge shall be due on the last day of such month. If any charge or portion thereof due to Metro shall remain unpaid for fifteen days following its due date, the Participant shall be charged with and pay to Metro interest on the amount unpaid from its due date until paid at the rate of 6% per annum, and Metro may, upon failure to pay such amount, enforce payment by any remedy available at law or equity.

5. The City irrevocably obligates and binds itself to pay its sewage disposal charge out of the gross revenues of the sewer

system of the City. The City further binds itself to establish, maintain and collect charges for sewer service which will at all times be sufficient to pay all costs of maintenance and operation of the sewer system of the City, including the sewage disposal charge payable to Metro hereunder and sufficient to pay the principal of and interest on any revenue bonds of the City which shall constitute a charge upon such gross revenues. It is recognized by Metro and the City that the sewage disposal charge paid by the City to Metro shall constitute an expense of maintenance and operation of the sewer system of the City. The City shall provide in the issuance of future sewer revenue bonds of the City that expenses of maintenance and operation of the sewer system of the City shall be paid before payment of principal and interest of such bonds. The City shall have the right to fix its own schedule of rates and charges for sewer service provided that same shall produce revenue sufficient to meet the covenants contained in this Agreement.

Section 6. Responsibility of City. The City shall be responsible for the delivery to the Metropolitan Sewerage System of sewage collected by the City, for the construction, maintenance and operation of Local Sewerage Facilities, and for the payment of all costs incident to the collection of such sewage and its delivery to the Metropolitan Sewerage System.

Section 7. Records. Permanent books and records shall be kept by Metro and the City of the respective rates established, the volumes of sewage delivered and discharged into the Metropolitan Sewerage System wherever such volumes are measured and the number of Residential Customers and Residential Customer equivalents reported. In addition Metro shall keep complete books of account showing

all costs incurred in connection with the Metropolitan Sewerage System and the City shall keep complete records showing the amount billed to each of its customers for sewer service and the basis used for such billing including sewage flow and water consumption for each customer where applicable. The records required by this paragraph shall be available for examination by either party at any reasonable time.

Section 8. Development of Metropolitan Sewerage System.

It is contemplated that the Metropolitan Sewerage System will be developed in stages and the nature of facilities to be constructed, acquired or used and the time of such construction, acquisition or use shall be determined by Metro, it being contemplated that Metro shall ultimately provide sewage disposal service for the entire Metropolitan Area and such adjacent areas as may feasibly be served into the Metropolitan Sewerage System.

Section 9. Insurance and Liability for Damages. The

City shall secure and maintain with responsible insurers all such insurance as is customarily maintained with respect to sewage systems of like character against loss of or damage to the sewerage facilities of the City and against public and other liability to the extent that such insurance can be secured and maintained at reasonable cost. Any liability incurred by Metro as a result of the operation of the Metropolitan Sewerage System shall be the sole liability of Metro and any liability incurred by the City as a result of the operation of the Local Sewerage Facilities of the City shall be the sole liability of the City.

Section 10. Assignment. The City shall not have the right to assign this Agreement or any of its rights and obligations hereunder

either by operation of law or by voluntary agreement without the written consent of Metro and neither party may terminate its obligations hereunder by dissolution or otherwise without first securing the written consent of the other party and this Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto. In the event that the City should be dissolved or should no longer be authorized to operate sewer facilities, the local sewer facilities owned and operated by the City within the Metropolitan Area shall be assigned and transferred to Metro subject to any outstanding debts of the City which had been incurred for the specific purpose of constructing or acquiring such facilities and subject to the acceptance by Metro of the obligation to continue to provide sewer service to the residents served by such local facilities upon payment by such residents of sewage disposal charges determined as herein provided and the reasonable costs of local sewer service.

Section 11. Effective Date and Term of Contract. This Agreement shall be in full force and effect and binding upon the parties hereto upon the execution of the Agreement and shall continue in full force and effect for a period of fifty years.

Section 12. Notice. Whenever in this Agreement notice is required to be given, the same shall be given by Registered Mail addressed to the respective parties at the following addresses:

Municipality of Metropolitan Seattle
410 West Harrison Street
Seattle, Washington 98119

The City of Bellevue
Bellevue, Washington

unless a different address shall be hereafter designated in writing by either of the parties.

The date of giving such notice shall be deemed to be the date of mailing thereof. Billings for and payments of sewage disposal costs may be made by regular mail.

Section 13. Execution of Documents. This Agreement shall be executed in six counterparts, any of which shall be regarded for all purposes as one original. Each party agrees that it will execute any and all deeds, leases, instruments, documents and resolutions or ordinances necessary to give effect to the terms of this Agreement.

Section 14. Waiver. No waiver by either party of any term or condition of this Agreement shall be deemed or construed as a waiver of any other term or condition, nor shall a waiver of any breach be deemed to constitute a waiver of any subsequent breach whether of the same or a different provision of this Agreement.

Section 15. Remedies. In addition to the remedies provided by law, this Agreement shall be specifically enforceable by either party.

Section 16. Entirety. This Agreement merges and supersedes all prior negotiations, representations and agreements between the parties hereto relating to the subject matter hereof and constitutes the entire contract between the parties.

IN WITNESS WHEREOF, the parties hereto have executed this

Agreement as of the day and year first above written.

CITY OF BELLEVUE

By Donald C. Lee
Mayor Pro Tem

ATTEST:

Jan P. Ables
City Clerk

MUNICIPALITY OF METROPOLITAN SEATTLE

By C. Carey Donworth
C. Carey Donworth
Chairman of the Council

ATTEST:

Maralyn Sullivan
Maralyn Sullivan
Clerk of the Council

STATE OF WASHINGTON)
)
COUNTY OF KING) ss.

On this 19th day of July, 1966, before me personally appeared DONALD C. LEE and JEAN S. SCHOLER, to me known to be the Mayor Pro Tem and City Clerk respectively, of the City of Bellevue, Washington, a municipal corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Shirley Bausher
Notary Public in and for the State
of Washington, residing at Bellevue

STATE OF WASHINGTON)
)
COUNTY OF KING) ss.

On this 21st day of July, 1966, before me personally appeared C. CAREY DONWORTH AND MARALYN SULLIVAN, to me known to be the Chairman of the Council and Clerk of the Council, respectively, of the Municipality of Metropolitan Seattle, a municipal corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Jack A. Hakala
Notary Public in and for the State
of Washington, residing at Seattle

**INTERGOVERNMENTAL COOPERATION AGREEMENT BETWEEN THE CITY OF
BELLEVUE AND THE CITY OF KIRKLAND**

FOR

**PROVIDING SANITARY SEWER SERVICE TO SOUTH KIRKLAND PARK AND
RIDE GARAGE**

This Intergovernmental Cooperation Agreement (“Agreement”) effective this 6th day of SEPT., 2012, is entered into between the CITY OF BELLEVUE, a Washington municipal corporation (“Bellevue”) and the CITY OF KIRKLAND, a Washington municipal corporation (“Kirkland”), regarding the provision of sanitary sewer services to the South Kirkland Park and Ride project.

RECITALS

WHEREAS, Bellevue is a non-charter optional municipal code city incorporated under the laws of the State of Washington, with authority to enact laws and enter into agreements to promote the health, safety, and welfare of its citizens and for other lawful purposes; and

WHEREAS, Kirkland is a non-charter optional municipal code city incorporated under the laws of the State of Washington, with authority to enact laws and enter into agreements to promote the health, safety, and welfare of its citizens and for other lawful purposes; and

WHEREAS, King County Metro Transit (“KCMT”) owns a parcel of land measuring approximately 3.8 acres at the NE corner of 108th Avenue and NE 38th Place (the “Property”), which parcel is split by the jurisdictional boundary between Bellevue and Kirkland; and

WHEREAS, KCMT has operated the South Kirkland Park and Ride (“SKPR”) on the Property since 1978; and

WHEREAS, KCMT has applied to construct improvements on the SKPR facility, including construction of multifamily housing, affordable housing, a 3.25 story parking garage and related improvements; and

WHEREAS, the proposed multifamily and affordable housing will be on the west side of the Property on the Kirkland Portion of the Property; and

WHEREAS, the proposed parking garage will be located on the southeast corner of the Property and oriented in an east-west direction along 108th Avenue NE on the Bellevue portion of the Property. The east and south boundaries of the SKPR within Bellevue’s jurisdiction contain ascending steep slopes (over 40 percent slopes), which are deemed critical areas under Bellevue’s Land Use Code, Part 20.25H; and

WHEREAS, Bellevue's Utilities Department provides sanitary sewer services to residents and ratepayers within the City of Bellevue corporate limits and Kirkland's Public Works Department provides sanitary sewer service to residents and ratepayers within the City of Kirkland corporate limits; and

WHEREAS, the nearest sanitary sewer to the SKPR in Bellevue is a Metro trunk line located above the steep slope critical area to the east of the SKPR. Providing sanitary sewer to the proposed parking garage would require constructing a line to connect the proposed parking garage to the Metro trunk line. This construction would require disturbing the steep slope critical area, and the corresponding elevation of the new sanitary sewer line would require installation of pumping facilities to pump effluent uphill to the Metro trunk line; and

WHEREAS, Kirkland provides sanitary sewer to the SKPR and has connections available on **NE 38th Street** that could provide sanitary sewer service to that portion of the proposed parking garage located within Bellevue's jurisdiction; and

WHEREAS, based on the potential construction impacts to the steep slope critical area and the requirement to pump effluent to address grade change challenges, it is economically and technologically inefficient for Bellevue to provide sanitary sewer service to the proposed parking garage; and

WHEREAS, the City of Bellevue and the City of Kirkland both strive to provide the most efficient means of providing sanitary sewer service to their residents and ratepayers; and

WHEREAS, in support of the multi-jurisdictional cooperative efforts for this Essential Public Facility the parties agree that Kirkland would be best able to provide sanitary sewer service for the proposed parking garage to be constructed on the property; and

WHEREAS, the Kirkland and Bellevue are authorized to enter into this Agreement pursuant to and in accordance with the State Interlocal Cooperation Act, Chapter 39.34 RCW.

NOW, THEREFORE, in consideration of mutual promises and covenants contained herein, the parties agree to the terms and conditions as follows:

1.0 Provision of Sanitary Sewer Service

1.1. Bellevue authorizes Kirkland to provide sanitary sewer service for that portion of the SKPR located within Bellevue's jurisdiction. See Attachment A to this Agreement.

1.2. Kirkland agrees to do all things necessary and/or appropriate to provide sanitary sewer services for that portion of the SKPR property that exists within Bellevue's jurisdiction.

1.3. As the designated provider of sanitary sewer services, Kirkland shall process all permits and approvals required for sanitary sewer service connection and/or operation required for redevelopment of the SKPR.

2.0 Indemnification

2.1. Kirkland shall indemnify, defend and hold harmless Bellevue, its employees, servants, and agents from any and all claims, demands, suits, actions, damages, recoveries, judgments, costs, or expenses (including without limitation, attorneys' and expert witness fees) arising or growing out of or in connection with or related to, either directly or indirectly the provision of sanitary sewer service to the SKPR, except to the extent such claims arise from the sole or partial negligence, error or omissions of Bellevue, its employees, servants, and agents. Kirkland agrees that this its obligations under this subparagraph extend to any claim, demand and/or cause of action brought by or, or on behalf of, any of its employees or agents. For this purpose, Kirkland, by mutual negotiation, hereby waives, as respects Bellevue, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW. In the event Bellevue incurs any judgment, award, and/or cost arising therefrom including attorneys' fees to enforce the provisions of this article, all such fees, expenses, and costs shall be recoverable from Kirkland.

2.2. Bellevue shall indemnify, defend and hold harmless Kirkland, its employees, servants, and agents from any and all claims, demands, suits, actions, damages, recoveries, judgments, costs, or expenses (including without limitation, attorneys' and expert witness fees) arising or growing out of or in connection with or related to, either directly or indirectly the provision of sanitary sewer service to the SKPR, except to the extent such claims arise from the sole or partial negligence, error or omissions of Kirkland, its employees, servants, and agents. Bellevue agrees that this its obligations under this subparagraph extend to any claim, demand and/or cause of action brought by or, or on behalf of, any of its employees or agents. For this purpose, Bellevue, by mutual negotiation, hereby waives, as respects Kirkland, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW. In the event Kirkland incurs any judgment, award, and/or cost arising therefrom including attorneys' fees to enforce the provisions of this article, all such fees, expenses, and costs shall be recoverable from Bellevue.

3.0 General Provisions

3.1 This Agreement shall be interpreted, construed, and enforced in accordance with the laws of the State of Washington. Venue for any action under this Agreement shall be King County, Washington.

3.2 This Agreement shall be binding upon and inure to the benefit of the successors and assigns of Bellevue and Kirkland.

3.3 This Agreement is made and entered into for the sole protection and benefit of the parties hereto and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

3.4 This Agreement has been reviewed and revised by legal counsel for all parties and no presumption or rule that ambiguity shall be construed against the party drafting the document shall apply to the interpretation or enforcement of this Agreement. These parties intend this Agreement to be interpreted to the full extent authorized by applicable law.

3.5 This Agreement, including its exhibits, may be amended only by a written instrument executed by each of the parties hereto.

3.6 This Agreement constitutes the entire agreement of the parties with respect to the subject matter of this Agreement, and supersedes any and all prior negotiations (oral and written), understandings and agreements with respect hereto.

3.7 This Agreement may be executed in several counterparts, each of which shall be deemed an original, and all counterparts together shall constitute by tone and the same instrument.

3.8 This Agreement shall take effect upon execution of the Agreement after authorization by Bellevue's City Council and Kirkland's City Council. This Agreement shall remain in effect until terminated by either party by 180 days prior written notice to the other party.

3.9 A copy of this Agreement shall be filed with the Bellevue and Kirkland City Clerks and the County Auditor.

4. Notices. All notices required under this Agreement shall be deemed sufficient if sent in writing by U.S. Mail or by electronic mail. All notices shall be delivered to the following addresses or to any other or additional addresses as may be specified from time to time by notice to either party. Notices shall be deemed received on the day sent electronically or 3 business days after the notice is placed in the U.S. Mail

Bellevue: Utilities Director
City of Bellevue
P.O. Box 90012
Bellevue, WA 98009-9012

With a copy to: City Attorney
City of Bellevue
P.O. Box 90012
Bellevue, WA 98009-9012

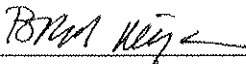
Kirkland: Public Works Director
City of Kirkland
123 5th Avenue
Kirkland, WA 98033

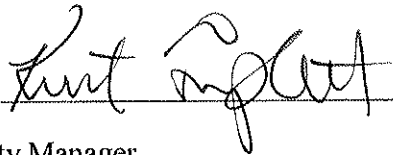
With a copy to: City Attorney
City of Kirkland
123 5th Avenue
Kirkland, WA 98033

IN WITNESS WHEREOF, each of the parties has executed this Agreement by having its authorized representative affix his/her name in the appropriate space below:

CITY OF BELLEVUE

CITY OF KIRKLAND

By: 

By: 

Title: City Manager - Deputy

Title: City Manager

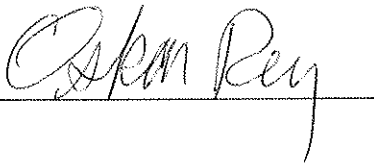
Date: 8-9-12

Date: 9/7/12

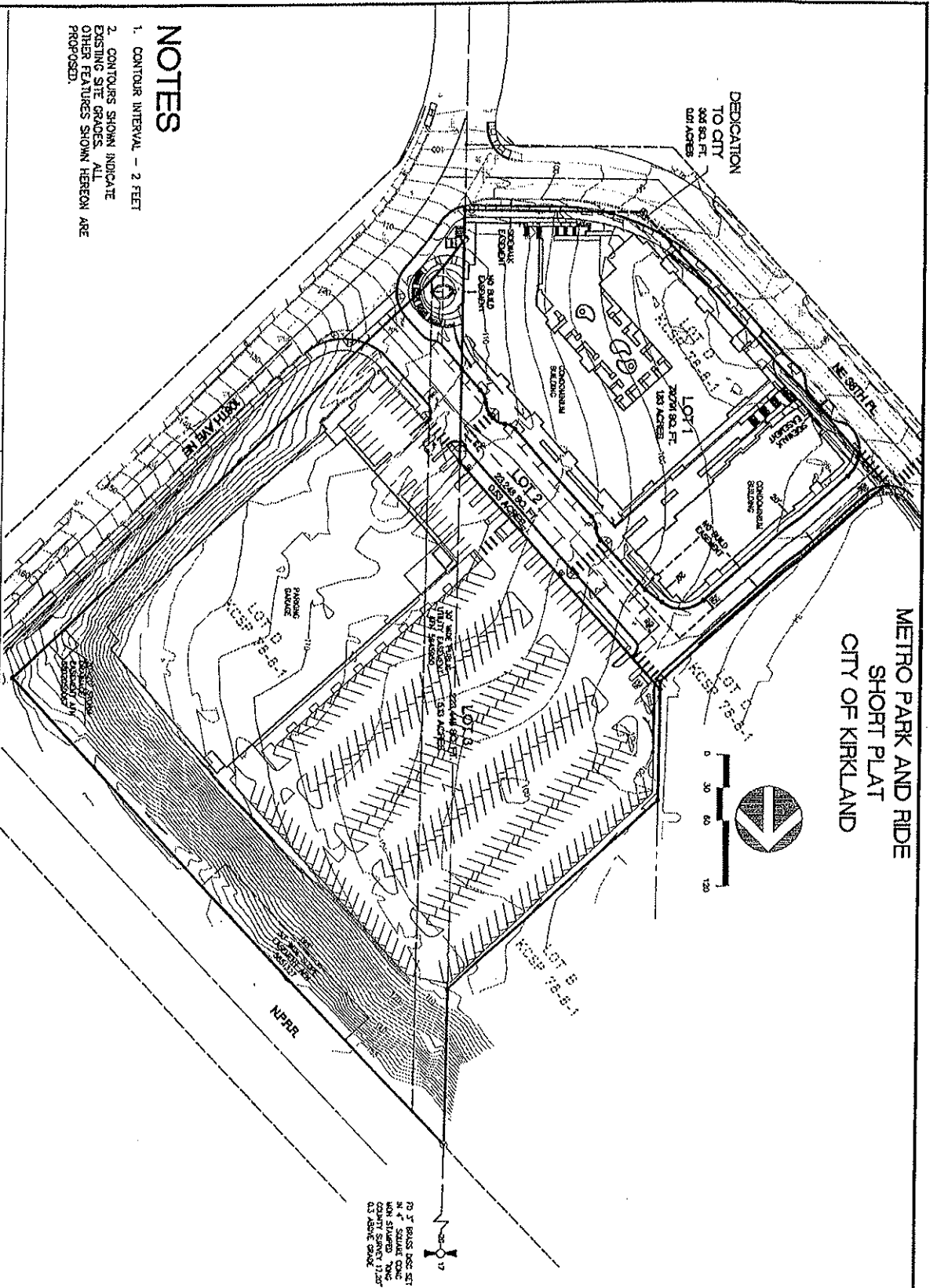
Approved as to form:

Approved as to form:





METRO PARK AND RIDE
SHORT PLAT
CITY OF KIRKLAND



NOTES

1. CONTOUR INTERVAL - 2 FEET
2. CONTOURS SHOWN INDICATE EXISTING SITE GRADES. ALL OTHER FEATURES SHOWN HEREON ARE PROPOSED.

SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION, IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF _____ ON _____ 20__

SURVEYOR _____
CERTIFICATE NO. _____

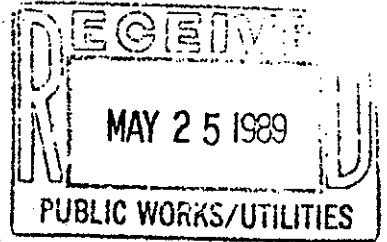


DAVID EVANS AND ASSOCIATES, INC.
415 - 118th Avenue SE
Bellevue, Washington 98005-3518
Phone: 425.519.5500

PORTION OF:
N 1/2, SEC. 20
T. 26 N. R. 5 E. W.M.

| | | |
|-------------------|-------------------|---------------------|
| DWN. BY A.M.A. | DATE 04-16-12 | JOB NO. K2000200 |
| CHD. BY DEV | SCALE 1" = 80' | SHEET 3 OF 3 |

ATTACHMENT A SITE PLAN
SOUTH KIRKLAND PARK AND RIDE



CITY OF KIRKLAND

123 FIFTH AVENUE KIRKLAND, WASHINGTON 98033-6189 (206) 828-1243

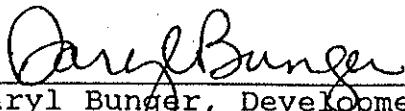
DEPARTMENT OF PUBLIC WORKS
MEMORANDUM OF UNDERSTANDING

To: Daryl Bunger, City of Bellevue
From: Fred French, City of Kirkland
Date: May 24, 1989
Subject: SANITARY SEWER MAIN IN POINTS DRIVE

It will be the understanding between the cities of Kirkland and Bellevue that the City of Kirkland will own, operate, and maintain the sanitary sewer main within the Points Drive right-of-way from the first manhole north of SR 520 and to the north. The City of Bellevue will continue to own, operate, and maintain the lines under and south of SR 520 to the first manhole on the north side. The cities will consider the lines to be within respective jurisdictions for the purposes of issuing permission to access and connect, including street cuts.

This understanding will not extend to any other land use issues and is only intended to simplify the operation of each utility by using the SR 520 right-of-way as an effective utility district boundary.


Fred French, Principal Engineer, Kirkland

 6-8-89
Daryl Bunger, Development Operations Manager, Bellevue

FILED NO. 9747
CITY OF BELLEVUE

DATE 10-2-84

CITY CLERK *(Signature)*

O'Connell

Res. 4438

AGREEMENT

This agreement made and entered into this day by and between the City of Kirkland, an optional code city, hereinafter referred to as "Kirkland" and the City of Bellevue, an optional code city, hereinafter referred to as "Bellevue",

WITNESSETH:

WHEREAS, both Kirkland and Bellevue are authorized by State law to enter into cooperative agreements; and

WHEREAS, the area described and designated on Exhibit "A" (attached hereto and by this reference incorporated herein) as subject are of the City of Kirkland sanitary sewer system; and

WHEREAS, said area is not presently connected to the Kirkland sanitary sewer system, and because of the topography of the area, may not readily be so connected; and

WHEREAS, the service area and corporate boundaries of the City of Bellevue and its sanitary sewer system lie adjacent to the subject area and the subject area can conveniently be connected into a Bellevue sewer system facility existing or under construction; and

WHEREAS, both parties are desirous where possible and convenient to mutually assist one another.

NOW, THEREFORE, in consideration of the agreements herein contained, it is agreed as follows:

Section 1. All sanitary sewer facilities to be constructed within the subject area described and designated on Exhibit "A", as attached hereto and by this reference incorporated herein, shall upon

construction and acceptance, become for all purposes, including customer service charges and maintenance, part of the Kirkland sanitary sewer system, but may, nevertheless, be connected into the Bellevue sewer system sanitary facility line lying within twenty feet and at the point so designated as "connection point" on Exhibit "A".

Section 2. Bellevue agrees to accept all sewage entering into its system through said connection point and to convey same through its system to its connection with the Municipality of Metropolitan Seattle System.

Section 3. No part of the cost of construction of the sanitary sewer facilities to be constructed within subject area, nor any of its future maintenance or repair, shall be borne by the City of Bellevue.

Section 4. City of Kirkland agrees to pay over to City of Bellevue as to each property within subject area, as it makes sewer connection, an amount equal to \$0.02 per square foot of area of each property. In addition thereto, Kirkland will pay to Bellevue a monthly service trunkage charge in an amount equal to 12¢ per month per residential customer or residential equivalent, actually connected and served by the facilities of the Kirkland sewer system within the subject area.

Section 5. Neither party shall by virtue of this agreement acquire any proprietary or governmental interest in the sewer system or sewer line of the other party. Each party shall be solely responsible for the operation and maintenance of its own system of sewage collection and shall save the other party harmless from any claim for damage, real or imaginary, made by a third party, and alleging negligence or misfeasance in the operation or maintenance of the other party's system, or in the acts or omissions of its own officers or employees.

Section 6. This writing embodies the entire agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein. This agreement may be amended only by written instrument signed by both parties.

Section 7. No waiver by either party of any term or condition of this agreement shall be deemed or construed as a waiver of any other term or condition, nor shall a waiver of any subsequent breach, whether of the same or of a different provision of this agreement.

Section 8. This agreement shall terminate upon six (6) months written notice given by either party to the other party. In the event of termination under this paragraph, all costs of disconnection shall be borne by the party requesting the termination.

THIS AGREEMENT SIGNED this 19th day of September, 1984.

CITY OF KIRKLAND

By Tom J. Anderson
Tom J. Anderson, Acting City Manager


THIS AGREEMENT SIGNED this 1st day of October, 1984.

CITY OF BELLEVUE

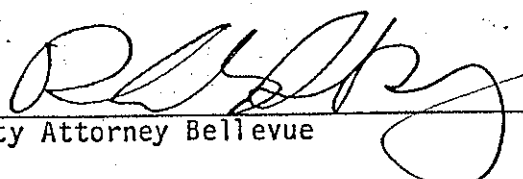
By [Signature]

Execution of this agreement approved and authorized on behalf of:
the City of Bellevue by Resolution No. 4428, adopted this 1st
day of October, 1984; and
the City of Kirkland by Resolution No. R3118, of the Kirkland City
Council, adopted this 17th day of Sept., 1984.

Approved as to form:



City Attorney Kirkland



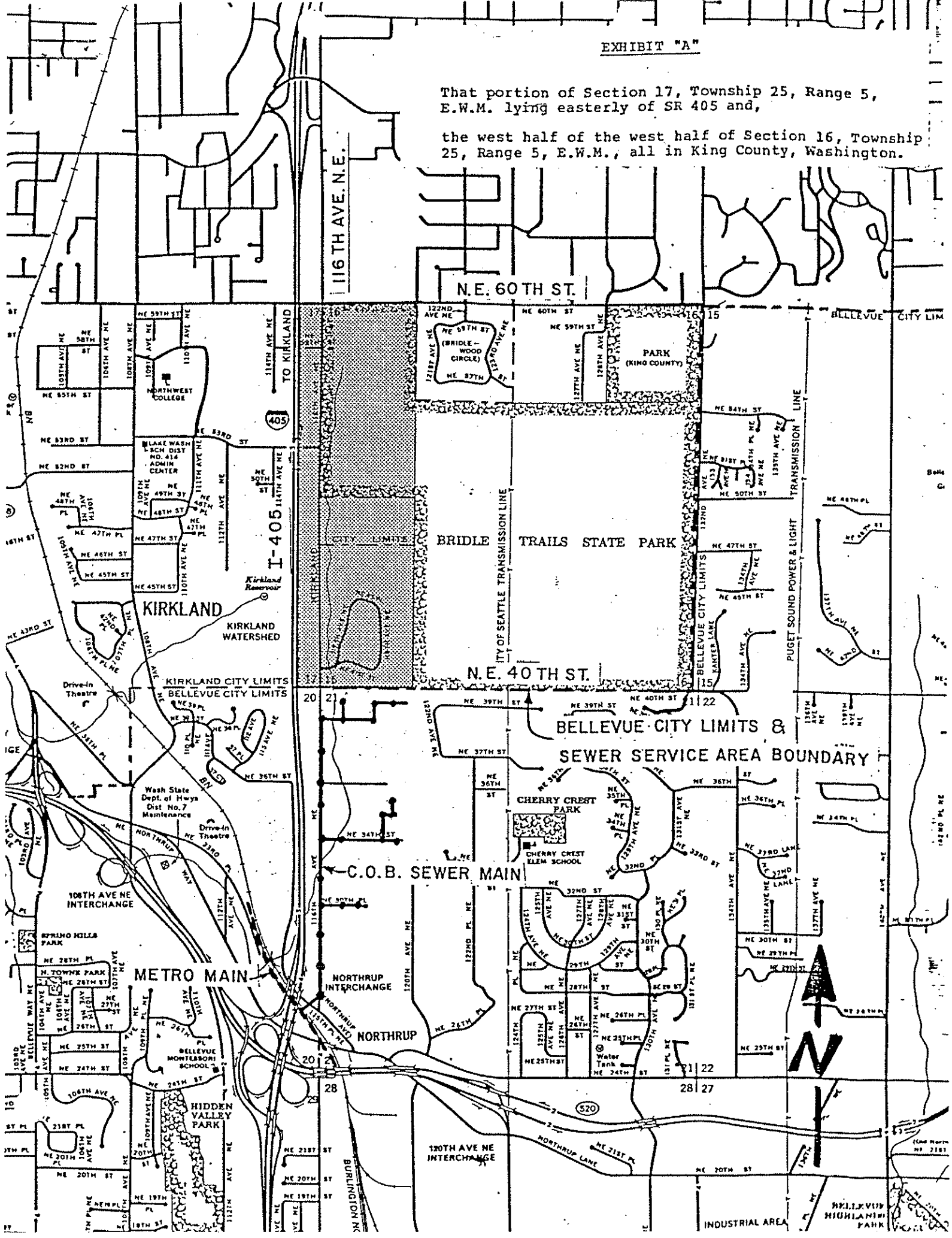
City Attorney Bellevue

4894J

EXHIBIT "A"

That portion of Section 17, Township 25, Range 5, E.W.M. lying easterly of SR 405 and,

the west half of the west half of Section 16, Township 25, Range 5, E.W.M., all in King County, Washington.



RESOLUTION R 3118

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND AUTHORIZING AND DIRECTING THE CITY MANAGER TO SIGN ON BEHALF OF THE CITY OF KIRKLAND, THAT CERTAIN INTERLOCAL GOVERNMENTAL AGREEMENT WITH THE CITY OF BELLEVUE, FOR THE PROVISION OF SANITARY SEWER SERVICE WITHIN THAT AREA OF KIRKLAND LYING WEST OF AND ADJACENT TO BRIDLE TRAILS STATE PARK.

Whereas, both Kirkland and Bellevue are authorized by state law to enter into cooperative agreements; and

Whereas, that area of the City of Kirkland within its sanitary sewer system service area, adjacent to Bridle Trails State Park as more specifically described in Exhibit A hereto, and by this reference incorporated herein, is not presently connected to the Kirkland sanitary sewer system, and because of the topography of the area may not readily be so connected; and

Whereas, the service area and corporate boundaries of the City of Bellevue and its sanitary sewer system lie adjacent to the subject area, and the subject area can conveniently be connected into a Bellevue sewer system facility existing or under construction; and

Whereas, both parties are desirous where possible and convenient to mutually assist one another, now, therefore,

Be it resolved by the City Council of the City of Kirkland as follows:

Section 1. The proposed interlocal governmental cooperative agreement between the City of Kirkland and the City of Bellevue, for the provision of sanitary sewer service to that area of Kirkland lying west of and adjacent to Bridle Trails State Park, as set forth in Exhibit A, attached to the original of this resolution and by this reference incorporated herein, is approved by the City Council. The City Manager for the City of Kirkland is authorized to sign said agreement on behalf of the City of Kirkland.

Passed by majority vote of the Kirkland City Council in regular, open meeting this 17th day of September, 1984.

AGREEMENT BETWEEN
THE CITY OF KIRKLAND, THE CITY OF BELLEVUE AND BELLEVUE INN, INC.

FILED NO. 6329
CITY OF BELLEVUE
DATE 7-28-80
CITY CLERK *P. Wash*
L # 3618

THIS AGREEMENT entered into this 28 day of July,
1980, is by and between THE CITY OF KIRKLAND, THE CITY OF BELLEVUE AND BELLEVUE
INN, INC.

WHEREAS BELLEVUE INN, INC., the owner of the hereinafter described
real property situated within the City of Kirkland, has requested sewer
connection and service for said real property; and

WHEREAS the City of Kirkland sewer system presently does not have
facilities available within the area in which said real property is located,
and to which said real property could connect and be provided with sewer
services; and

WHEREAS the City of Bellevue has a sewer system with existing
facilities within the public rights-of-way adjacent to said real property
and into which temporary connections could be made; and

WHEREAS all parties agreed that said real property may be
temporarily connected to and serviced by the City of Bellevue sewer system
until such time as the Kirkland sewer system has extended their facilities
into the area and can provide sewer service to said real property;

NOW, THEREFORE, in consideration of the terms and agreements hereinafter set forth, the parties agree as follows:

1. The City of Kirkland and the City of Bellevue agree that the owner may connect the real property, hereinafter described, into and be served by the Bellevue sewer system in accordance with the requirements and payment of costs set forth in Exhibit A attached hereto and incorporated herein; and for so long as said real property is so connected to the Bellevue sewer system, the occupants of said property shall be treated as customers of the Bellevue sewer system for all purposes including the billing and collection of service charges. Provided, however, that this arrangement shall continue pursuant to this agreement only until such time as the facilities of the City of Kirkland sewer system may be extended into the general area in which the real property is situate, and at such time as a service connection for said real property shall be disconnected from the Bellevue sewer system.

2. The owner of the hereinafter described real property agrees and covenants with the City of Kirkland that said property shall be disconnected from the Bellevue sewer system facilities and reconnected to the City of Kirkland sewer system facilities at such time, after the Kirkland sewer system facilities have been extended into the area within which said real property is located, as notice to make such connections to the Kirkland sewer system is given by the City of Kirkland.

3. At the time that said real property shall connect into the Kirkland sewer system, there shall be paid to the City of Kirkland by Bellevue Inn, Inc., their successors or assigns, all connection charges, fees and assessments, as

would be required to be paid for connecting said real property at that time to the particular City of Kirkland utility system, notwithstanding the existence of this agreement; provided, however, that the sum of said charges, fees and assessments shall be reduced by the amount, if any, paid by the owner to the City of Bellevue for the privilege of connecting to the said Bellevue sewer system at the time that the temporary connection is made pursuant to this agreement.

4. It is the intention of all of the parties hereto that the obligations imposed upon the hereinafter described real property, and agreed to and assumed by the owners thereof, shall run with the land; and a copy of this agreement shall be recorded as a public record in the office of the King County Department of records and elections.

454-5887

CITY OF KIRKLAND

BY

Allen B. [Signature]

CITY OF BELLEVUE

BY

Andrew N. [Signature]

BELLEVUE INN, INC.

Harold W. [Signature] President

842-106th NE.

Bellevue, Wash.

STATE OF WASHINGTON)
) SS
COUNTY OF KING)

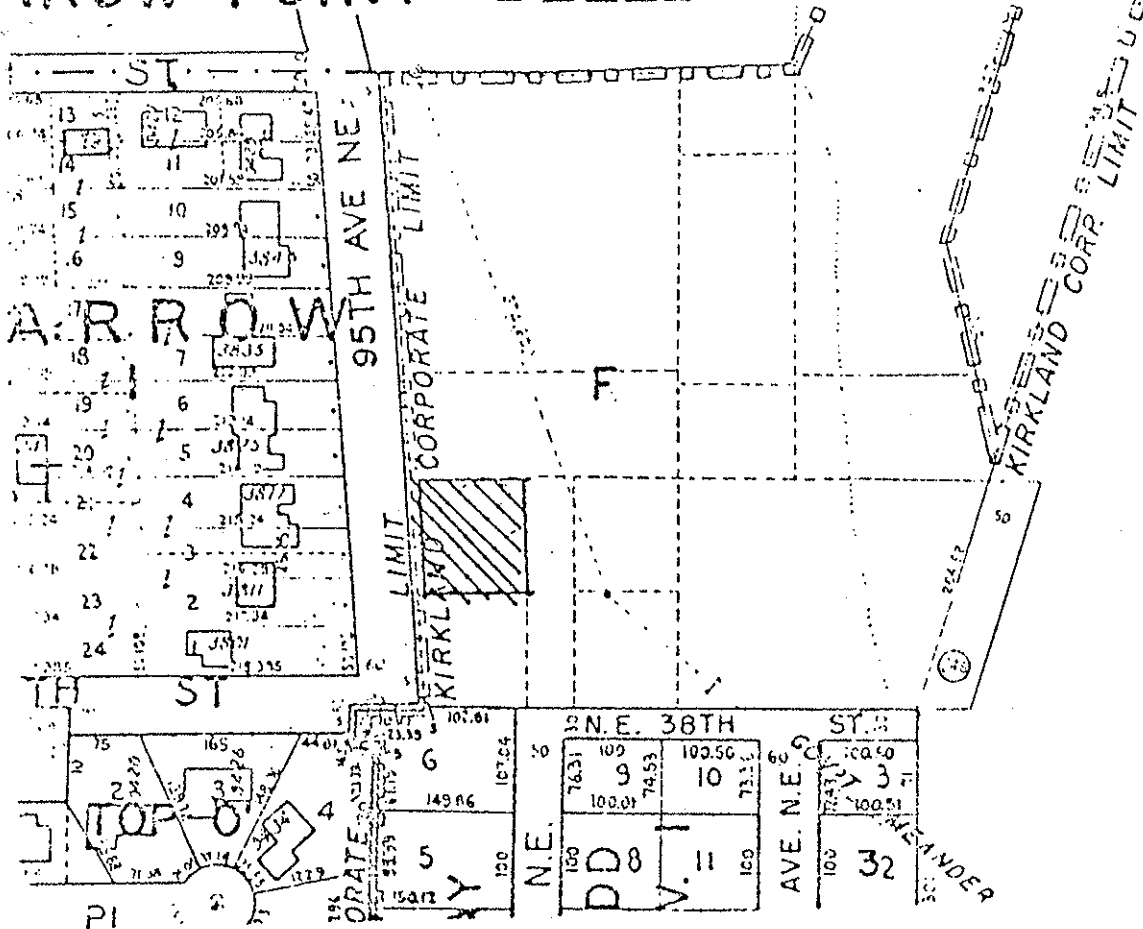
On this 8th day of July, 19 80, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared Allen B. Locke ~~and~~ _____, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged to me that he signed and sealed this said instrument as his free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal this 8th day of July, 19 80.

Dolly J. Rieck
Notary Public in and for the State
of Washington, residing at Kirkland.

YARROW POINT - BELLEVUE - CLYDE HILL

E 1/2 1



Austin
26.42 1

THAT PORTION OF TRACT "F" OF YARROW, ACCORDING TO THE PLAT RECORDED IN VOLUME 15 OF PLATS, PAGE 92, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID TRACT "F"; THENCE EASTERLY ALONG THE SOUTHERLY LINE THEREOF 107.71 FEET; THENCE NORTH 1°29'18" EAST 130 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUING NORTH 1°29'18" EAST 100 FEET; THENCE NORTH 88°30'42" WEST TO THE WEST LINE OF SAID TRACT "F"; THENCE SOUTHERLY ALONG SAID WEST LINE TO A POINT WHICH BEARS NORTH 88°30'42" WEST FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 88°30'42" EAST TO THE TRUE POINT OF BEGINNING; EXCEPT THE WESTERLY 5 FEET THEREOF.

TOGETHER WITH AN EASEMENT FOR DRIVEWAY AND UTILITIES OVER THE WESTERLY 5 FEET OF THE FOLLOWING:

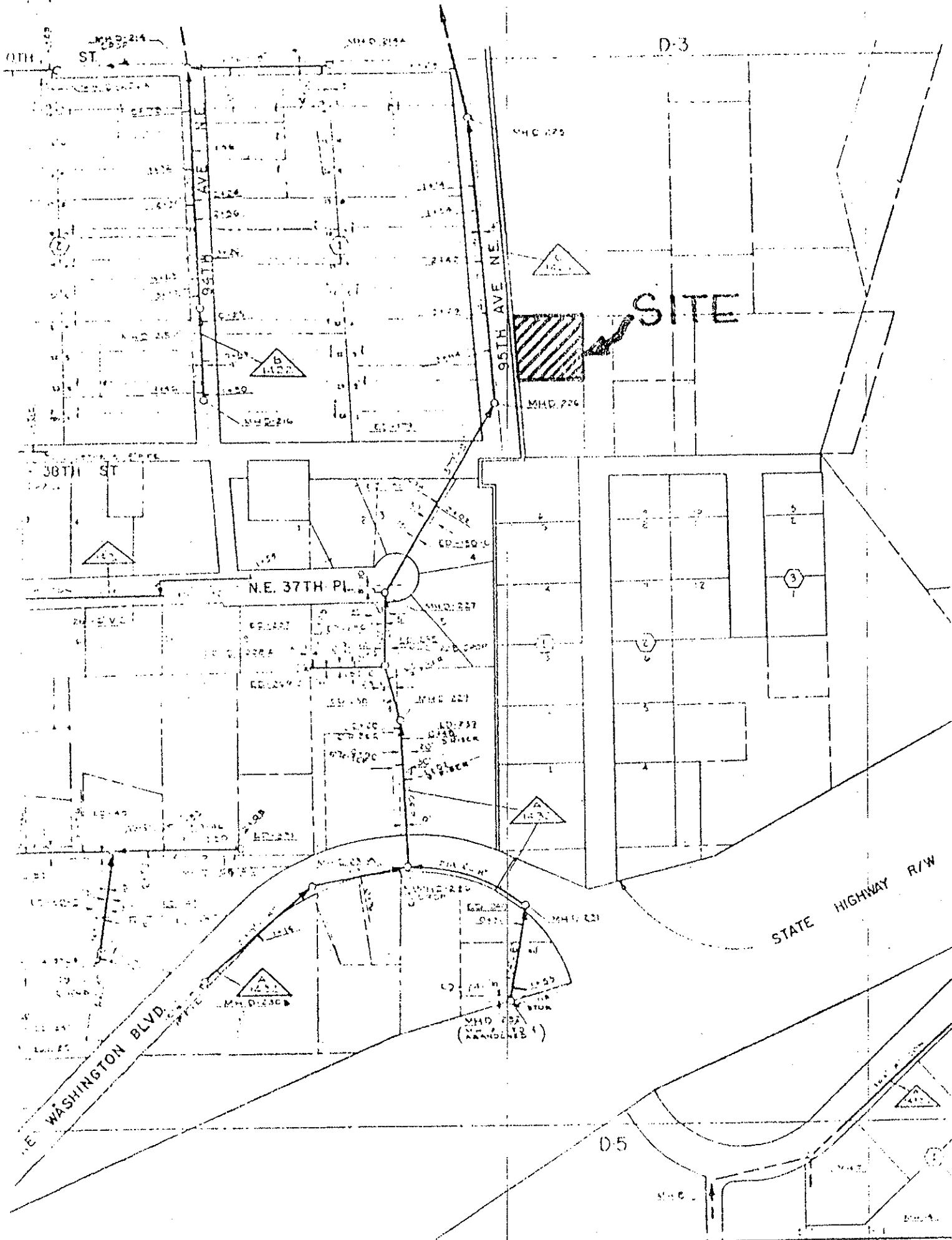
THAT PORTION OF TRACT "F" OF YARROW, ACCORDING TO THE PLAT RECORDED IN VOLUME 15 OF PLATS, PAGE 92, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID TRACT "F"; THENCE EASTERLY ALONG THE SOUTHERLY LINE THEREOF 107.71 FEET; THENCE NORTH 1°29'18" EAST 130 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUING NORTH 1°29'18" EAST 100 FEET; THENCE NORTH 88°30'42" WEST TO THE WEST LINE OF SAID TRACT "F"; THENCE SOUTHERLY ALONG SAID WEST LINE TO A POINT WHICH BEARS NORTH 88°30'42" WEST FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 88°30'42" EAST TO THE TRUE POINT OF BEGINNING.

EXHIBIT "A"

Costs

| | |
|----------------|---|
| Trunkage | 1.6¢ per square foot of area served |
| Service Charge | 12¢ per month per residential customer or residential equivalent |



ORIGINAL

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 3610

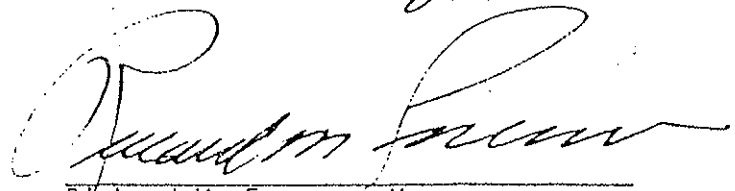
A RESOLUTION authorizing execution of an agreement between the City of Kirkland and the City of Bellevue and Bellevue Inn, Inc. to provide sanitary sewer service to an area within the City of Kirkland.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:


Section 1. The City Manager or her designee is hereby authorized and directed to execute, on behalf of the City, that certain agreement between the City of Kirkland and the City of Bellevue and Bellevue Inn, Inc., to provide sanitary sewer service to an area within the City of Kirkland, which has been given Clerk's Receiving No. 6329.

PASSED by the City Council this 28 day of July, 1980, and signed in authentication of its passage this 28 day of July, 1980.

(SEAL)


Richard M. Foreman, Mayor

Attest:


Patricia K. Weber, City Clerk

AGENDA OF THE CITY COUNCIL
CITY OF BELLEVUE

AGENDA NO: SS 2 (b)

MEETING DATE: 7/21/80

SUBJECT: Agreement with City of Kirkland to Provide Sewer Service

ISSUE: Is providing sewer service to properties within City of Kirkland that cannot at present be served by Kirkland in the public interest?

DEPARTMENT: ~~Public Works/Utilities~~

STAFF CONTACT: Walter E. Davis, Jr. ~~XX~~

TELEPHONE: 6965

OTHER DEPT. COORDINATION: Legal

AGENDA LOCATION:

PUBLIC HEARING _____

LAND USE REPORT _____

BID _____

CONSENT _____

OTHER RESOLUTIONS _____

AND ORDINANCES _____

UNFINISHED BUS. _____

NEW BUSINESS _____

STUDY SESSION X

DISCUSSION _____

INFORMATION X

EXPENDITURE REQUIRED: \$ Semi-annual billing

AMOUNT BUDGETED: \$ -0-

APPROPRIATION REQUESTED: \$ -0-

REVENUE SOURCE: -0-

FINANCIAL DEPARTMENT SIGNATURE: N/A

FISCAL IMPACT: N/A

ENFORCEMENT IMPACT: N/A

CLASS OF SUPPORTING DATA:

ORDINANCE _____

RESOLUTION X

REPORT _____

MINUTE ORDER _____

EXHIBITS:

- A. Site map
- B. Agreement
- C.

HISTORICAL BACKGROUND: None

RECOMMENDATION: Pass resolution authorizing City Manager to execute Agreement with City of Kirkland.

SUMMARY: Sanitary sewer service to the property in this proposed agreement located along 95th Avenue N.E. at approximately N.E. 38th Street will be provided by an existing City of Bellevue line running north into Yarrow Point. We will collect a trunkage charge (one time) from the Developer (Bellevue Inn, Inc.) and monthly will collect from the residents a use fee.

WED/mb

PLEASE RETAIN
THIS MATERIAL FOR REVIEW
AT MEETING OF 7/28/80

5/2/80

FILED NO. 6330
CITY OF BELLEVUE
DATE 7-28-80
CITY CLERK T. Kuhn

ORIGINAL

AGREEMENT BETWEEN
THE CITY OF KIRKLAND, THE CITY OF BELLEVUE AND YARROW POINT PARTNERS

THIS AGREEMENT entered into this 28 day of July,
1980, is by and between THE CITY OF KIRKLAND, THE CITY OF BELLEVUE
and YARROW POINT PARTNERS.

WHEREAS Yarrow Point Partners, the owner of the hereinafter
described real property situated within the City of Kirkland,
has requested sewer connection and service for said real property;
and

WHEREAS the City of Kirkland sewer system presently does
not have facilities available within the area in which said
real property is located, and to which said real property could
connect and be provided with sewer services; and

WHEREAS the City of Bellevue has a sewer system with
existing facilities within the public rights-of-way adjacent
to said real property and into which temporary connections could
be made; and

WHEREAS all parties agreed that said real property may be
temporarily connected to and serviced by the City of Bellevue
sewer system until such time as the Kirkland sewer system has
extended their facilities into the area and can provide sewer
service to said real property;

NOW, THEREFORE, in consideration of the terms and agreements hereinafter set forth, the parties agree as follows:

1. The City of Kirkland and the City of Bellevue agree that the owner may connect the real property, hereinafter described, into and be served by the Bellevue sewer system in accordance with the requirements and payment of costs set forth in Exhibit A attached hereto and incorporated herein; and for so long as said real property is so connected to the Bellevue sewer system, the occupants of said property shall be treated as customers of the Bellevue sewer system for all purposes including the billing and collection of service charges. Provided, however, that this arrangement shall continue pursuant to this agreement only until such time as the facilities of the City of Kirkland sewer system may be extended into the general area in which the real property is situate, and at such time as a service connection for said real property shall be made to the City of Kirkland sewer system and said real property shall be disconnected from the Bellevue sewer system.

2. The owner of the hereinafter described real property agrees and covenants with the City of Kirkland that said property shall be disconnected from the Bellevue sewer system facilities and reconnected to the City of Kirkland sewer system facilities at such time, after the Kirkland sewer system facilities have

been extended into the area within which said real property is located, as notice to make such connections to the Kirkland sewer system is given by the City of Kirkland.

3. At the time that said real property shall connect into the Kirkland sewer system, there shall be paid to the City of Kirkland by Yarrow Point Partners, their successors or assigns, all connection charges, fees and assessments, as would be required to be paid for connecting said real property at that time to the particular City of Kirkland utility system, notwithstanding the existence of this agreement; provided, however, that the sum of said charges, fees and assessments shall be reduced by the amount, if any, paid by the owner to the City of Bellevue for the privilege of connecting to the said Bellevue sewer system at the time that the temporary connection is made pursuant to this agreement.

4. It is the intention of all of the parties hereto that the obligations imposed upon the hereinafter described real property, and agreed to and assumed by the owners thereof, shall run with the land; and a copy of this agreement shall be recorded as a public record in the office of the King County Department of records and elections.

The real property subject to this agreement is described

as:

Beginning at the intersection of the south line of Block F of Yarrow, according to plat recorded in Vol. 15 of Plats, page 92, in King County, Washington and the west line of Govt. Lot 8 in Sect. 19, Township 25 North, Range 5 E. W.M. in King County, Washington; Thence North 88°16'08" West 190.00 feet; Thence North 1°29'18" East 335.00 feet to the true point of beginning; Thence South 88°30'42" East 150.00 feet; Thence North 1°29'18" East to the Northerly line of said Tract F; Thence westerly along said Northerly line to the Northwest corner thereof; Thence Southerly along the Westerly line of said Tract F to a point which bears North 88°30'42" West from the true point of beginning; Thence South 88°30'42" East to the true point of beginning; EXCEPT the Westerly 5 feet & the Northerly 5 feet thereof; TOGETHER WITH an easement for road & utility purposes over a strip of land 50 feet in width, lying South of above described tract & lying North of Northeast 38th Street, the West line of said 50 foot strip bearing South 1°29'18" West from the true point of beginning of above described main tract.

OWNERS, YARROW POINT PARTNERS

CITY OF KIRKLAND

BY

CITY OF BELLEVUE

BY

Douglas J. Dodds
DOUGLAS J. DODDS
Carolyn J. Dodds
CAROLYN J. DODDS
Bruce J. Dodds
BRUCE J. DODDS
Mary J. Dodds
MARY J. DODDS
Richard U. Chapin
RICHARD U. CHAPIN

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 8th day of July, 1950,
before, the undersigned, a Notary Public in and for the State
of Washington, duly commissioned and sworn personally appeared

ALLEN B. LOCKE
to me known to be the City Manager of THE CITY OF WIRKLAND
of the municipal corporation that executed the within and
foregoing instrument, acknowledge the said instrument to be
the free and voluntary act and deed of said corporation for
the uses and purposes therein mentioned, and on oath stated
that he was authorized to execute said instrument.
WITNESS my hand and official seal hereto affixed this
day and year in this certificate above written.

Dally J. Quinn
NOTARY PUBLIC in and for the State
of Washington, residing at Richmond

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this _____ day of _____, 19____,
before, the undersigned, a Notary Public in and for the
State of Washington, duly commissioned and sworn personally
appeared

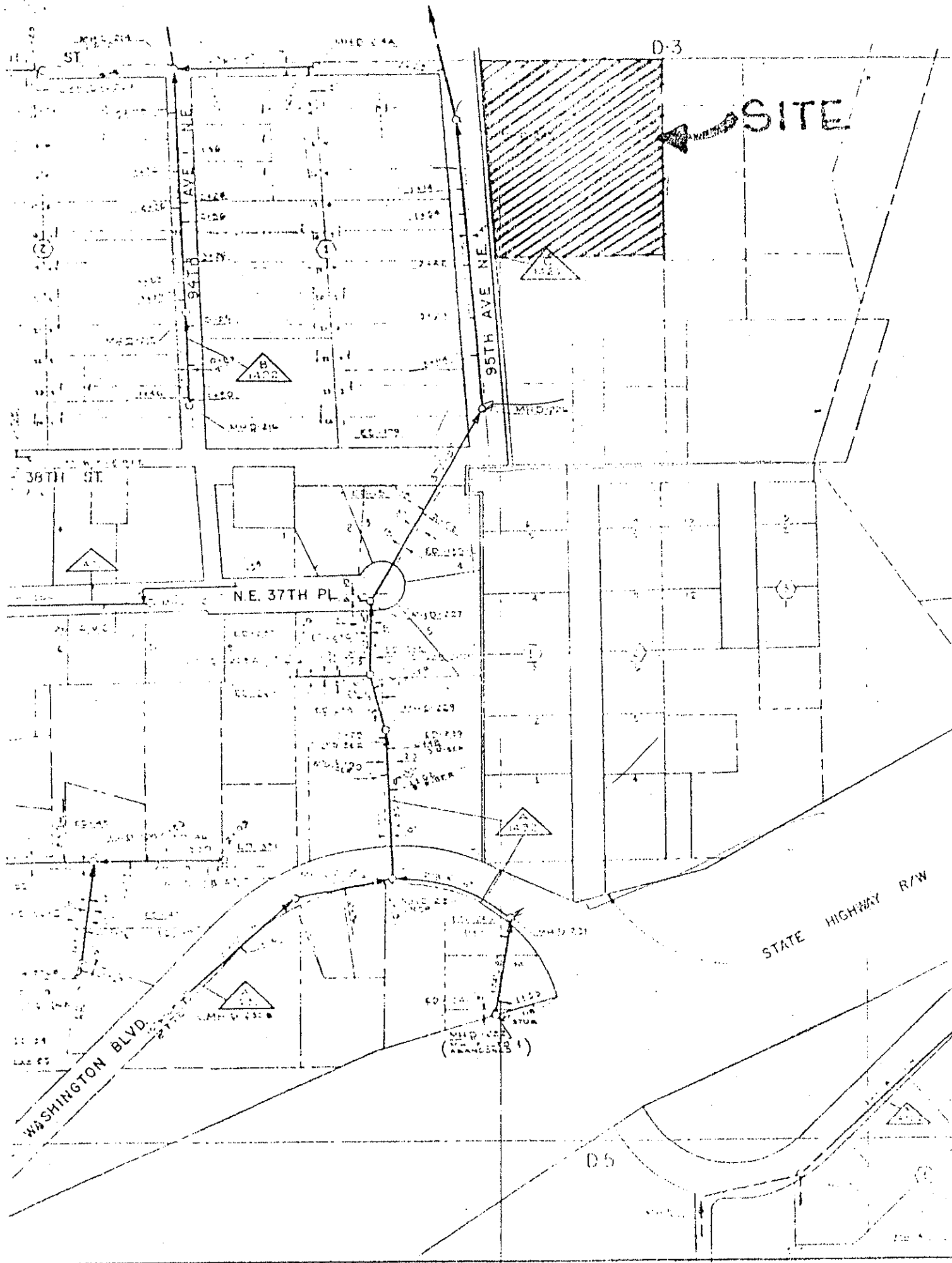
to me known to be the _____ of THE CITY OF BELLEVUE
of the coporation that executed the within and foregoing
instrument, and acknowledged the said instrument to be the
free and voluntary act and deed of said corporation for the
uses and purposes therein mentioned, and on oath stated
that he was authorized to execute said instrument.
WITNESS my hand and official seal hereto affixed this
day and year in this certificate above written.

NOTARY PUBLIC in and for the State
of Washington, residing at _____

EXHIBIT "A"

Costs

| | |
|----------------|---|
| Trunkage | 1.6¢ per square foot of area served |
| Service Charge | 12¢ per month per residential customer or residential equivalent |



CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 3609

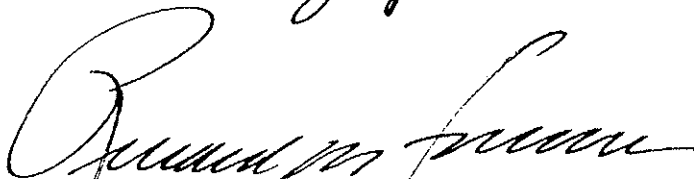
A RESOLUTION authorizing execution of an agreement between the City of Kirkland and the City of Bellevue and Yarrow Point Partners to provide sanitary sewer service to an area within the City of Kirkland.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:


Section 1. The City Manager or her designee is hereby authorized and directed to execute, on behalf of the City, that certain agreement between the City of Kirkland and the City of Bellevue and Yarrow Point Partners to provide sanitary sewer service to an area within the City of Kirkland, which has been given Clerk's Receiving No. 6330.

PASSED by the City Council this 28 day of July, 1980, and signed in authentication of its passage this 29 day of July, 1980.

(SEAL)


Richard M. Foreman, Mayor

Attest:


Patricia K. Weber, City Clerk

FILED NO. 5892
CITY OF BELLEVUE

DATE 1-25-80

CITY CLERK P. Wilson
Re # 3505

AGREEMENT

This agreement made and entered into this day by and between the City of Kirkland, an optional code city, hereinafter referred to as "Kirkland" and the City of Bellevue, an optional code city, hereinafter referred to as "Bellevue",

W I T N E S S E T H :

WHEREAS, both Kirkland and Bellevue are authorized by State law to enter into cooperative agreements; and

WHEREAS, the area described and designated on Exhibit "A" (attached hereto and by this reference incorporated herein) as subject area of the City of Kirkland sanitary sewer system; and

WHEREAS, said area is not presently connected to the Kirkland sanitary sewer system, and because of the topography of the area, may not readily be so connected; and

WHEREAS, the service area and corporate boundaries of the City of Bellevue and its sanitary sewer system lie adjacent to the subject area and the subject area can conveniently be connected into a Bellevue sewer system facility existing or under construction; and

WHEREAS, both parties are desirous where possible and convenient to mutually assist one another.

NOW, THEREFORE, in consideration of the agreements herein contained, it is agreed as follows:

Section 1. All sanitary sewer facilities to be constructed within the subject area described and designated on Exhibit "A", as attached hereto and by this reference incorporated herein, shall upon construction and acceptance, become for all purposes, including customer service charges and maintenance,

part of the Kirkland sanitary sewer system, but may, nevertheless, be connected into the Bellevue sewer system sanitary facility line lying within ten feet (10') and at the point so designated as "connection point" on Exhibit "A".

Section 2. Bellevue agrees to accept all sewage entering into its system through said connection point and to convey same through its system to its connection with the municipality of Metropolitan Seattle System.

Section 3. No part of the cost of construction of the sanitary sewer facilities to be constructed within subject area, nor any of its future maintenance or repair, shall be borne by the City of Bellevue.

Section 4. City of Kirkland agrees to pay over to City of Bellevue as to each property within subject area, as it makes sewer connection, an amount equal to 1.6¢ per square foot of area of each property. In addition thereto, Kirkland will pay to Bellevue a monthly service trunkage charge in an amount equal to 12¢ per month per residential customer or residential equivalent, actually connected and served by the facilities of the Kirkland sewer system within the subject area.

Section 5. Neither party shall by virtue of this agreement acquire any proprietary or governmental interest in the sewage system or sewer line of the other party. Each party shall be solely responsible for the operation and maintenance of its own system of sewage collection and shall save the other party harmless from any claim for damage, real or imaginary, made by a third party, and alleging negligence or misfeasance in the operation or maintenance of the other party's system, or in the acts or omissions of its own officers or employees.

Section 6. This writing embodies the entire agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein. This agreement may be amended only by written instrument signed by both parties.

Section 7. No waiver by either party of any term or condition of this agreement shall be deemed or construed as a waiver of any other term or condition, nor shall a waiver of any subsequent breach, whether of the same or of a different provision of this agreement.

Section 8. This agreement shall terminate upon six (6) months written notice given by either party to the other party. In the event of termination under this paragraph, all costs of disconnection shall be borne by the party requesting the termination.

THIS AGREEMENT SIGNED the 28 day of January, 1979.

CITY OF KIRKLAND

By Alan B. [Signature]

CITY OF BELLEVUE

By [Signature]

Execution of this agreement approved on behalf of the City of Bellevue by resolution of its City Council, adopted the 28 day of January, 1979, and authorized by the City of Kirkland by Resolution No. R-2687 of the Kirkland City Council, adopted the 17th day of December, 1979.

Approved as to form:

William C. [Signature]
Assistant City Attorney

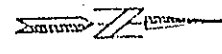
Watershed Park

KIRKLAND
BELLEVUS

108TH AVE. NE

CONNECTION POINT

SEE THIS AND ADJACENT
PAGES FOR
MAY 1976
AND 1977
FOR FIELD WORK
AND TO CHECK FOR
ADDITIONAL
CONNECTIONS
IF NEW PIPES
WAS LAYED AS
NOTED.



SCALE 1/300

SITE PLAN
SANITARY SEWER

NOTES:
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF KIRKLAND
2. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
3. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
4. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
5. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
6. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
7. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
8. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
9. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE
10. THE SANITARY SEWER SHALL BE 18" DIA. WITH A 2% SLOPE

WATERSHED PARK
KIRKLAND, WA



1-15-80

ORIGINAL!

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 3505


A RESOLUTION authorizing execution of an agreement between the City of Kirkland and the City of Bellevue to provide sanitary sewer service to an area within the City of Kirkland.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

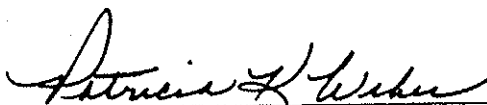
Section 1. The Acting City Manager or his designee is hereby authorized and directed to execute, on behalf of the City, that certain agreement between the City of Kirkland and the City of Bellevue to provide sanitary sewer service to an area within the City of Kirkland, which has been given Clerk's Receiving No. 5892

PASSED by the City Council this 28 day of January, 1980, and signed in authentication of its passage this 28 day of January, 1980.

(SEAL)


Richard M. Foreman, Mayor

Attest:


Patricia K. Weber, City Clerk

11/14/67 5065 47
Deeds

6324410

Executed in 2 counterparts of
which this is counterpart No. 2

City of Bellevue

AGREEMENT

THIS AGREEMENT, dated as of this 14th day of NOVEMBER, 1967, between the CITY OF BELLEVUE, a Municipal Corporation, under authority of Ordinance No. 1377, (hereinafter called the "City"), the CITY OF MEDINA, a Municipal Corporation, under authority of Ordinance No. 79, (hereinafter called "Medina"), the TOWN OF CLYDE HILL, a Municipal Corporation, under authority of Ordinance No. 10-8-67, (hereinafter called "Clyde Hill"), the TOWN OF HUNTS POINT, a Municipal Corporation, under authority of Ordinance No. 47, (hereinafter called "Hunts Point"), the TOWN OF YARROW POINT, a Municipal Corporation, under authority of Ordinance No. 77, (hereinafter called "Yarrow Point"), the TOWN OF BEAUX ARTS VILLAGE, a Municipal Corporation, under authority of Ordinance No. 9, (hereinafter called "Beaux Arts"), and BELLEVUE SEWER DISTRICT, a Municipal Corporation, under authority of Resolution No. 1207, (hereinafter called the "District");

W I T N E S S E T H:

WHEREAS, the District was formed for the special purpose of providing sanitary sewer service for areas which now cover a major portion of the City of Bellevue and all of the cities of Medina, Clyde Hill, Hunts Point, Yarrow Point and Beaux Arts in King County, Washington, and more than 60% of the territory of the District now lies within the City of Bellevue; and

WHEREAS, the District has financed and constructed a sewage collection system sufficient to serve substantially all of the developed portions of the District and planned for the

Blue print
on file in
Vault.

eventual addition of sewers to serve all presently undeveloped portions of the District and a substantial part of the unsewered areas within the City which are now outside of the District; and

WHEREAS, it is in the best interests of the residents of each of the municipalities which are parties to this agreement that the sewer system of the District be financed, developed and operated as a single integrated system and that provision be made for the permanent ownership and operation of such integrated system; and

WHEREAS, to accomplish this purpose it is necessary that an agreement be entered into fixing the rights and duties of the parties, protecting the legitimate interests of bondholders and creditors of the District, the users of the sewerage facilities of the District and the City and the residents and property owners of each of the municipalities which are parties to this agreement; and

WHEREAS, it is the desire of all parties hereto to enter into this agreement pursuant to Section 35.13.250 RCW, to provide for the maintenance and operation of the sewerage facilities of the City and the District, to provide for the allocation of costs of maintenance and operation between the City and the District, to provide for the financing and construction of new sewerage facilities to serve certain unsewered portions of the District and the City, to provide for the temporary retention by the District of certain personal and real property, funds and assets, to provide for the eventual transfer of personal and real property, funds and assets of the District to the City, to continue for the interim period the powers of the District to issue bonds, to fix rates and charges for sewer service, and to promulgate rules and

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regulations for the collection of such charges and in general to continue the powers of the District to do all things authorized to the District prior to this agreement in the same manner and by the same means as heretofore provided by law, except as otherwise specifically provided herein;

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

Section 1. Definition of Terms. Wherever the following terms shall be used in this agreement they shall have the following meaning unless otherwise specifically indicated in the context in which they appear:

1. The term "District" shall mean Bellevue Sewer District, a Municipal Corporation, located in King County, Washington, acting by and through its Board of Commissioners unless such authority shall be lawfully delegated to other officers or unless other officers are expressly indicated herein.

2. The term "City" shall mean the City of Bellevue, a Municipal Corporation, located in King County, Washington, acting by and through its City Council unless such authority shall be lawfully delegated to other officers or unless other officers are expressly indicated herein.

3. The term "Metro" shall mean the Municipality of Metropolitan Seattle, a Municipal Corporation.

4. The term "Service Charge" or "Sewer Service Charge" shall mean a monthly or other periodic charge for the use of sewer facilities.

5. The term "Side Sewer Permit Fee" shall mean a charge for the inspection of private side sewers to be connected to public sewerage facilities.

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6. The term "Connection Charge" shall mean an additional charge for the connection to public sewerage facilities of properties not previously fully assessed for special benefits conferred by such public sewers.

7. The term "Assessment" shall mean charges levied in Utility Local Improvement Districts or Local Improvement Districts for special benefits conferred by the construction of public sewerage facilities and shall include interest and any penalties thereon.

8. The term "Sewer System" shall mean all sewage collection and transmission facilities heretofore installed or acquired by the District or by the City, or hereafter installed or acquired within the District or hereafter installed or acquired by the District or by the City pursuant to this agreement within the potential service area colored in red on Exhibit A, or hereafter added to such area by agreement between the District and the City, including all appurtenances to such facilities and all future additions and extensions thereof.

9. The term "City Sewer Utility" shall mean all sanitary sewerage facilities hereafter operated by the City.

Section 2. Ownership of Properties. Consistent with the laws of the State of Washington and pursuant to this agreement, all the right, title and interest of the District in and to all real property, franchises, easements, sewers, force mains, pumping stations, lift stations, flushing stations, manholes, valves, fittings, appurtenances, all equipment and vehicles, and all personal property, cash, accounts receivable, investments and choses in action of all kinds which shall be in existence and on hand at the "Title Transfer Date" as hereinafter defined, including all additions thereto and extensions thereof hereafter acquired or construction by the District shall be conveyed, transferred and

quitclaimed by the District to the City, effective on such date, subject to all of the provisions of this agreement. The City hereby agrees that until the Title Transfer Date the District shall have the right to use the sewerage facilities of the City described on Exhibit A hereof on the terms and conditions hereinafter set forth.

The City shall pay nothing to the District in exchange for the property which the City shall acquire hereunder and the District shall pay nothing to the City for the facilities which the District is permitted to use hereunder and the covenants of this agreement to be performed by the parties shall constitute good and sufficient consideration for the conveyances contemplated by this agreement.

It is mutually agreed and recognized that the properties which the City may acquire pursuant to this agreement shall remain subject to all presently outstanding indebtedness of the District, bonded or otherwise, shall be subject to the terms of the following resolutions of the District which are incorporated herein by this reference:

Resolution No. 474 adopted June 9, 1959 (Series "D" Bonds);

Resolution No. 985 adopted May 11, 1965 (Revenue and Refunding Bonds, 1965)

and shall be subject to all rights of the holders of revenue bonds of the District issued under said resolutions. The District will furnish certified copies of said resolutions to the City.

It is further agreed and recognized that the properties which the City shall acquire pursuant to this agreement shall at all times be subject to the right of the other parties to this agreement, all persons now or hereafter residing within the District and the rights

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of all owners of property now or hereafter located within the District, whether such residents or property be inside or outside the City, to use the Sewer System. In particular, but not by way of limitation, trunk or lateral sewer lines and pumping facilities now or hereafter located within the City which are used for the transportation of sewage collected from any property located within the Sewer District shall continue to be made available for such use, provided that the users thereof shall pay reasonable nondiscriminatory fees and charges and comply with reasonable rules and regulations, all as provided in this agreement.

It is further recognized and agreed that this agreement is subject to the provisions of the outstanding agreements for sewage disposal between the District and Metro and between the City and Metro. Disposal of all sewage collected pursuant to this agreement shall continue to be made to Metro in accordance with such agreements or duly adopted amendments thereof. This agreement is further subject to any outstanding agreement between the District and the City of Houghton.

Section 3. Operation and Maintenance of Sewer Facilities.

From and after January 1, 1968, the City shall maintain, operate, repair and replace all of the facilities of the Sewer System, whether located within the City or outside of the City, including all trunks, laterals, lift stations, pumping stations, flushing stations, vehicles, electronic warning system, office equipment, billing equipment, and other facilities and equipment now or hereafter constructed, acquired or used as part of the Sewer System or the business operated in connection therewith, and including all sewers constructed or acquired by the City which the District shall use pursuant to this agreement. The City will furnish sewer service to all persons served by the Sewer System, for and on behalf of the District.

At all times from and after said date, the City will maintain

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and keep the Sewer System and all additions and improvements thereto and all equipment used in connection therewith in good repair, working order and condition and will, at all times, operate such system and the business functions connected therewith in an efficient manner and at the lowest reasonable cost.

On the tenth day of each month, beginning February 10, 1968, and continuing until the Title Transfer Date, the City shall submit to the District an itemized statement of all costs incurred by the City in the operation and maintenance of the Sewer System during the preceding month. Within sixty days from the receipt of such statement, the District shall pay to the City a sum equal to the total amount of said maintenance and operation costs. The District shall advance to the City on or before said date the sum of \$60,000 to be used as a revolving fund to meet costs incurred by the City for operation and maintenance of the Sewer System during the two months period when District payments will lag behind actual expenditures by the City. Such moneys shall ultimately be applied toward the payment of the operating and maintenance costs incurred by the City during the two months immediately preceding the Title Transfer Date.

An annual budget for each year prior to the Title Transfer Date for the operation and maintenance of the Sewer System shall be prepared by the City and submitted to the District at least thirty days prior to its adoption. No expenditure for operation and maintenance, other than emergency expenditures, shall be made unless same shall be within the budget or shall be approved by the City and the District. The City shall maintain a record of all expenditures made in the operation and maintenance of the Sewer System and shall furnish the District, not less than quarterly, regular financial reports on the operation of the System in

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sufficient detail to enable the District to relate expenditures to the budget.

Section 4. Fixing and Collecting Charges. Until the Title Transfer Date, the District shall fix Service Charges, Connection Charges, Side Sewer Permit Fees and sewer extension contract payments for the sewer system. The District shall submit any proposed change in rates to the City thirty days before such change shall become effective and the City may submit any comments or suggestions thereon. Such charges shall be sufficient to pay all costs of maintenance and operation of the Sewer System including costs for the disposal of sewage by Metro, such other costs as may be incurred by the District in the performance of its functions and such amounts as may, together with pledged assessments, be required to pay, secure the payment of, and provide covenanted coverage for, any revenue bonds of the District now or hereafter outstanding. The City shall perform the function of billing and collecting all monthly Service Charges, Side Sewer Permit Fees, Connection Charges and sewer extension contract payments. Such billing and collecting shall be performed for and on behalf of the District until the Title Transfer Date and the costs of such billing and collecting shall be deemed to be part of the cost of operation and maintenance of the Sewer System. Enforcement of collection shall continue to be the responsibility of the District until the Title Transfer Date.

Section 5. Construction of Sewer Facilities by the District Prior to the Title Transfer Date. Until the Title Transfer Date, the District shall have the right and power to continue to construct additions to or extensions of the Sewer System of the District outside the City and within those areas of the City described in

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Exhibit A and such additional areas within the City as the City may from time to time hereafter designate. For such purpose, the District shall have the right and power to carry out the provisions of its comprehensive plan, to adopt plans of additions and betterments thereto, subject to the approval of the agencies required by law to approve such plans, to annex territory, to issue and sell sewer revenue bonds, to apply to the payment thereof Service Charges, Connection Charges, Side Sewer Permit Fees and contract extension payments from persons or property served by the Sewer System, whether located within or without the City, or within or without the District, to create utility local improvement districts and to levy and collect special assessments therein, all in the manner provided by law and this agreement.

If the District shall issue any sewer revenue bonds prior to the Title Transfer Date, such bonds shall be made expressly subject to the terms of this agreement and the City agrees from and after such Title Transfer Date to perform the covenants of said bonds and to assume and pay all of such bonds in accordance with their terms solely out of the revenue of the Sewer System and assessments pledged to the payment of such bonds. Neither such obligation nor any other obligation assumed by the City pursuant to this agreement shall be general obligations of the City.

Except as otherwise specifically provided herein, the District shall, during the period prior to the Title Transfer Date, cause all work to be performed in connection with the construction of additions to or extensions of the Sewer System, both within the City and outside the City, including, but not by way of limitation, the engineering design of the sewer laterals, trunks, lift stations, pumping stations, flushing stations and appurtenances and the District shall let contracts for the work in the manner provided by law and upon completion of such work prepare as-built drawings therefor in form acceptable to the City. The City shall provide

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the following engineering services for and on behalf of the District and the District shall pay to the City the cost of such services, provided that the City may authorize the District to furnish any or all of such services:

a. All plans and specifications for sewer improvements to be constructed by the District shall be submitted to and approved by the City prior to construction.

b. The City shall inspect the work in progress to insure that same shall be accomplished in accordance with the plans and specifications and the construction contract and the City shall decide disputes with contractors involving interpretation of the plans and specifications and such decision shall be final.

c. The City shall prepare monthly and final estimates of work performed and recommend acceptance by the District of work as completed and the District shall make no final payments for work performed until acceptance of such work shall have been recommended by the City.

d. The City shall recommend change orders whenever same are deemed to be necessary during the course of construction.

As a part of the cost of construction to be borne by the District, the District agrees to restore all streets disturbed by the construction of sewer improvements in accordance with applicable existing franchise requirements.

The type of road restoration for all streets involved in a proposed improvement shall be determined in advance by a survey of the streets involved conducted jointly by a representative of the particular city or county which shall have jurisdiction over such streets and a representative of the District. The specifications shall state whether the respective city or county or the District or the contractor shall perform such restoration and resurfacing. No work shall be undertaken on any city street

by the District until a permit therefor has been obtained from the City within which such street shall be located. No such permit shall be unreasonably withheld.

The District shall acquire and pay for such easements and rights of way as may be necessary to construct the Sewer System. All easements which may be acquired subsequent to September 1, 1967, shall receive the approval of the City before execution and shall run jointly to the District and the City. The cities which are parties to this agreement shall provide the District with easements over city property, the extent and location of which are consistent with other reasonable use of such property, when such easements are required for the construction of the District's Sewer System and shall make no charge to the District for such easements.

A performance bond in the amount of not less than 100% of the contract price shall be furnished to the District and to the City by the contractor before any work is commenced. Upon completion of any particular sewer improvements constructed by the District and the approval of such work by the City, the District may make final payment therefor in the manner provided by law. The title to all sewer lines, facilities, easements and rights of way hereafter constructed or acquired by the District shall inure to the City on the Title Transfer Date, without cost, subject to the provisions of this agreement, and from and after the date of such completion, the City shall provide maintenance and operation of such sewer improvements in accordance with this agreement.

Section 6. Construction of Sewer Improvements by the City Prior to the Title Transfer Date. Prior to the Title Transfer Date, it is contemplated that the District will construct all sewer improvements within the District and within the area of the

City described in Exhibit A as now or hereafter amended. The City may, however, in the event that the District fails or refuses to proceed with the construction within six months after written request therefor by the City, create local improvement districts or authorize work by private contract within areas contemplated to be served by the District, provided that such improvements are constructed in conformity with the comprehensive plan of the District or amendments thereto and are approved by the District.

The City shall continue to collect assessments levied in local improvement districts of the City heretofore created for the purpose of constructing sewer improvements and to perform the obligations of outstanding local improvement bonds or warrants of the City. From and after January 1, 1968, and prior to the Title Transfer Date, the City shall continue to establish and collect rates and charges for sewer service from persons and properties within such City local improvement districts as may be located outside the District and within the area of Exhibit A as now or hereafter amended, but such rates and charges shall not be lower than those fixed for the same class of service from time to time thereafter by the District. The City shall also fix a schedule of Side Sewer Permit Fees for the privilege of connecting such property to the Sewer System, equal to those fixed by the District. All charges and fees collected by the City from persons and properties connected to the Sewer System shall be paid to the District. All properties heretofore assessed for sewer improvements constructed within the City local improvement districts shall have the right to connect to the improvements constructed therein upon payment of reasonable Side Sewer Permit Fees and Service Charges as provided herein. Within the area described in Exhibit A, the District shall permit connection to the Sewer System of any property which shall request such connection and which shall pay such regular connection

charges, and Side Sewer Permit Fees and Service Charges as shall be provided by general resolution of the District.

Prior to the Title Transfer Date, the City shall not connect any sewer line located outside of the area described in Exhibit A to the Sewer System without the written consent of the District.

Section 7. Side Sewer Regulations and Permits. Each city which is a party to this agreement shall establish effective January 1, 1968, rules and regulations uniform with those of the District governing connections to and discharges into the Sewer System. The said uniform rules and regulations shall govern the connection of all side sewers to the Sewer System. The District shall continue to issue Side Sewer Permits and collect Side Sewer Permit Fees until the establishment of the aforesaid rules and regulations. Thereafter and until the Title Transfer Date, the City shall collect such permit fees and issue such permits for and on behalf of the District. After the Title Transfer Date, the City shall collect such fees as a part of the revenue of the Sewer System and shall issue such permits for and on behalf of the cities which are parties to this agreement, provided only that such fees be nondiscriminatory and limited to an amount equal to the cost of side sewer inspection. Such fees shall be collected from the respective property owners or sewer users applying for side sewer permits. Side Sewer Permit Fees fixed by the City shall be the same for all portions of the Sewer System, whether inside or outside the City. The City shall maintain an as-built drawing of all such side sewer connections.

Section 8. Title Transfer Date. The City may in its sole discretion, upon thirty days written notice to all parties to

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this agreement fix a date for the transfer of the System and ~~properties of the District to the City (Title Transfer Date),~~ provided either that all of the District's revenue bonds which are outstanding on the date of this agreement shall have been paid prior to the date of such notice or that the City shall have assumed the obligation to pay such bonds then outstanding and shall have secured the written consent of the holders thereof as required by law. The provisions of Sections 9 to 11, inclusive, hereof shall apply and be effective immediately upon and after the Title Transfer Date.

Section 9. Assumption of District Obligations By The City. The City shall assume, effective on the Title Transfer Date and pay in accordance with their terms solely out of the earnings and revenue of the Sewer System and assessments pledged thereto all obligations of the District outstanding on the Title Transfer Date or thereafter incurred incident to this contract or in connection with winding up the affairs of the District, including but not limited to paying and securing payment of the principal of and interest on all of the District's then outstanding sewer revenue bonds in accordance with the terms thereof. Utility local improvement district assessments which have been levied by the District to secure the payment of such bonds shall continue to be collected by the King County Treasurer and applied to the payment of such bonds until all of such bonds shall have been paid or have been fully provided for.

Section 10. Obligation to Continue Service After Title Transfer Date. From and after the Title Transfer Date, the City shall operate and maintain the Sewer System as a City utility in the manner provided by law, subject to the following requirements of this agreement:

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a) The City shall for the useful life of those facilities of the Sewer System which serve persons and properties located within the District but outside of the City make such facilities available to serve such persons and property, upon payment of reasonable Service Charges, Connection Charges and Side Sewer Permit Fees as fixed by the City from time to time consistent with the provisions hereof.

b) The City shall provide sewer service to all portions of the District, whether inside or outside the City, equal in all respects to that provided to residents of the City and the City shall fix Service Charges in all portions of the District, whether located within the City or outside the City, no greater than the lowest rate for the same class of service levied within any portion of the City. The term "class of service" as used in this paragraph shall refer to classification based on type of sewer use, i.e., single family residence, multiple residence, commercial, etc., but shall not include classification on geographical or jurisdictional bases.

c) The parties recognize that the District has financed its sewer facilities by assessments equal to approximately 97% of the total cost thereof. The parties also recognize that other sewer districts or private systems which may hereafter be operated by the City may not have fully paid for sewers equivalent to those installed by the District and/or may not have levied assessments upon benefited property in the same proportion of costs as those heretofore levied in the District, or may have constructed facilities of a standard substantially lower than that of the Sewer System requiring replacement. Whenever such Districts or facilities are incorporated into the City Sewer Utility, the then outstanding revenue bonds of the District shall continue to have a first and prior lien upon the total net revenue of the Sewer System and, wherever equitable treatment of the District residents shall re-

quire, the City shall either establish a differential rate structure for the area served by such other district or system or assess the cost of replacement of substandard sewers against the area served thereby or take such other action as shall avoid, insofar as possible, charging the residents or customers of the District directly or indirectly for costs properly chargeable to such other district or system.

d) The City shall fix rates and charges sufficient to operate and maintain the Sewer System, pay, secure and provide coverage for revenue bonds and repair and replace the facilities of the System as required. However, the revenues of the Sewer System shall not at any time be applied by the City to the payment of the general expenses of City government not directly applicable to the construction, repair, replacement, administration, operation and maintenance of the Sewer System. The City may, however, subject to the foregoing limitation, combine its sewer and water systems into a single utility if such combination shall be deemed desirable by the City. No rate increase may be made by the City without first securing a complete rate analysis by an independent firm of engineers experienced in the development and operation of municipal public utilities. A copy of such rate analysis shall be furnished to each of the other parties to this agreement. The requirement that a rate analysis be made may be waived in writing by the parties to this agreement at anytime.

Section 11. District Funds. From and after the Title Transfer Date, the existing Bond Redemption Fund for the outstanding revenue bonds of the District shall continue to be held by the Treasurer and invested or applied to the payment of such bonds in accordance with written directions given from time to time by the City, until all of such bonds shall have been paid. The City shall make required deposits in such fund out of the earnings and

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revenue of the Sewer System. The City shall pay the County Treasurer the statutory fees provided for his services. Upon payment or provision for payment of all of such bonds, any District utility local improvement assessments thereafter collected by the King County Treasurer, shall be paid to the City quarterly and applied solely to the maintenance, operation, repair, replacement or improvement of the Sewer System. Segregations of assessments requested after the Title Transfer Date shall be approved by the City and the County Treasurer is hereby authorized to honor segregation approvals received from the City.

All cash in the Maintenance Fund or Construction Fund of the District, after payment of or provision for payment of all warrants drawn thereon prior to the Title Transfer Date, shall be immediately thereafter paid by the County Treasurer to the City and all money in such funds then on deposit in any bank or savings and loan association shall be withdrawn by the County Treasurer on the earliest practicable date after the Title Transfer Date, and together with all United States Bonds held in such funds shall on said date be delivered by him to the City Treasurer upon receipt therefor and all such money and the proceeds of such bonds shall be applied solely to the maintenance, operation, repair, replacement or improvement of the Sewer System and shall not be diverted directly or indirectly to the general fund or operations of the City.

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Section 12. District Policies and Responsibilities of Commissioners. The parties contemplate that for a reasonable time after the Title Transfer Date and insofar as possible, the City will continue existing District policies for connection to the Sewer System and for the construction of extensions of the Sewer System and for the construction of extensions of the System by private developers in order to insure equitable treatment of the District's residents. During the time that District bonds are

outstanding, the District shall continue its corporate existence and the Commissioners of the District shall continue to function, provided that following the Title Transfer Date, the Commissioners' responsibility shall be limited to the enforcement of the provisions of this contract and to serve as an advisory commission to the City in the continuance of the District's policies.

Section 13. Term of Agreement. This agreement shall be effective upon its execution by all the parties hereto and shall continue in effect for a term of ninety-nine (99) years from and after the date hereof.

Section 14. District Employees. The City shall offer employment to each person presently employed on a full-time basis by the District in a position of substantially equal or greater responsibility and compensation than that now held by such District employee and all vacation and pension rights of such employee shall be preserved. This provision shall apply to all District employees who shall qualify under uniform standards applicable to all city employees and such offer shall be made before the City shall undertake to perform operation and maintenance of the Sewer System hereunder.

Section 15. Franchise Within Other Cities. The cities other than the City of Bellevue, which are parties to this agreement, do hereby consent to the assignment of the respective franchises by which the District has used streets and other public places therein and agree to enact such legislation as is necessary to extend the life of such franchises to coincide with that of this agreement. It is recognized that the respective cities have or may adopt by general ordinance such reasonable requirements for the regulation of street use and occupancy as each deems necessary for the public health, safety and general welfare.

Section 16. Hold Harmless and Payment of Expenses.

It is contemplated that the District will continue its corporate existence for some time after the Title Transfer Date to perform such functions as may be required by law and to accomplish the winding up of its affairs. During such period, the City shall pay out of the revenues of the Sewer System all expenses of the District including, but not limited to, auditing costs, clerical, financial and legal services, commissioners' meetings and election costs and costs incident to final dissolution. Counsel for the District shall continue to press or defend any then outstanding claims by or against the District and to recommend settlement thereof to the District. Upon approval by the District Commissioners of the settlement of any such claim or entry of judgment thereon, the City shall pay any District liability thereon out of the revenues of the City Sewer Utility or shall receive any net proceeds thereof which may be due the District and deposit same to the account of the City Sewer Utility. Solely out of the revenues of the City Sewer Utility and moneys received pursuant to this agreement, the City further agrees to pay and to save the District and its commissioners harmless from the payment of any and all legal liability for which the District is not insured and which is now or hereafter incurred in connection with the performance of the functions of the District and the duties of the commissioners thereof, including any costs, expenses and attorney's fees incurred in the defense of the District or its commissioners.

Section 17. Records Made Available and Documents Executed.

The District shall make available to the City all records which it has pertaining to the construction of the Sewer System, schedules

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of Sewer Service Charges and Connection Charges and Charges in Lieu of Assessment heretofore made by the District. The District shall furnish to the City records of sewer connections which have been made by the District, sewer customers served by the District, as-built drawings of sewer mains and facilities and such other documents as the City may require to carry out this contract. All parties agree that they shall enter into and execute such instruments, deeds or other documents as may be required to give effect to this agreement.

Section 18. Liability for Damages, Repair and Replacement. The District shall be liable for all damages and claims resulting from the operation or use of the Sewer System prior to the Title Transfer Date. The District shall also be liable for all damages and claims incurred in the construction of additions or extensions to or improvements of the Sewer System prior to the Title Transfer Date. After the Title Transfer Date, the City shall be solely liable for all damages or claims in connection with or arising out of the operation, maintenance, construction, repair or replacement of the Sewer System. The City shall from and after the Title Transfer Date have the duty to make necessary repairs and replacement of the Sewer System sufficient to maintain same in good repair and working order and to provide service to all residents and properties within the District in accordance with the provisions of this agreement.

Section 19. Insurance. Prior to the Title Transfer Date the District shall maintain such insurance against casualty or loss to the System and against public liability as shall normally be maintained by private utilities under similar circumstances.

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After the Title Transfer Date, such insurance shall be maintained by the City.

IN WITNESS WHEREOF, the parties have executed this agreement as of the day and year first above written.

X CITY OF BELLEVUE

By Clarence Wilde
Mayor



[Signature]

X BELLEVUE SEWER DISTRICT

By [Signature]
Commissioner

Thomas Telfer
Commissioner

[Signature]
Commissioner

ATTEST:

Thomas Telfer
City Clerk Sec.

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X CITY OF MEDINA

By [Signature]
Mayor



[Signature]

X TOWN OF CLYDE HILL

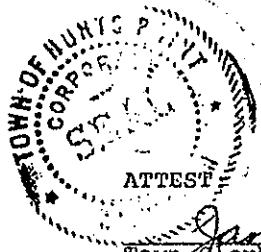
By [Signature]
Mayor

ATTEST:

[Signature]
Town Clerk



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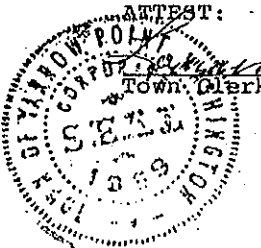


TOWN OF HUNTS POINT

By *P. J. [unclear]*
Mayor *Pro-Tem*

ATTEST:
James A. Bayard
Town Clerk

X TOWN OF YARROW POINT
By *[unclear]*
Mayor *Pro-Tem*



ATTEST:
[unclear]
Town Clerk

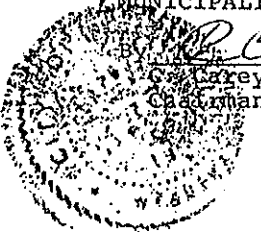
X TOWN OF BEAUX ARTS VILLAGE
By *James H. Madison*
Mayor



ATTEST:
Patricia B. [unclear]
Town Clerk

APPROVED AND ACCEPTED:
M. R. Williams
King County Treasurer

APPROVED AND ACCEPTED:
MUNICIPALITY OF METROPOLITAN SEATTLE
Clare Donworth
Clare Donworth,
Chairman of the Council



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BOUNDARY REVIEW BOARD

KING COUNTY, STATE OF WASHINGTON

KING COUNTY COURTHOUSE—SEATTLE, WASHINGTON, 98104—MA 2-5900

May 27, 1968

Bellevue Sewer District
P. O. Box 70
Bellevue, Washington 98004

Attention: Mr. Don Wilson

Re: Bellevue Sewer District Agreement
Boundary Review Board File #F-62

*Interim Operations -
Eventual Ownership
Agreement
between
Bell. Sew.
Dist. &
City of Bell.*

Gentlemen:

You were advised by letter from this office dated April 23, 1968 that the referenced matter was in form acceptable for filing and had been filed effective March 28, 1968.

As the sixty-day period subsequent to filing provided in Section 10, Chapter 189, Laws of 1967, has elapsed, and the Board has received no request for review and has not itself chosen to invoke jurisdiction, the action proposed in this Notice of Intention (Boundary Review Board File #F-62) is therefore deemed approved.

Yours very truly,

KING COUNTY BOUNDARY REVIEW BOARD

Joseph F. Lightfoot
Joseph F. Lightfoot
Chief Clerk

JFL:cms

*Note: Copies mailed to each
concerned city-town Metro
June 26, 1968. D.K.W.*

my official seal the day and year first above written.

Arthur E. Jackson
Notary Public in and for the State
of Washington, residing at *Bellevue*

STATE OF WASHINGTON)
; ss.
COUNTY OF KING)

On this 10th day of August, 1967, before me personally came and appeared *Lloyd Chapman* and *R.S. Aitken*, to me known to be the Mayor and Town Clerk, respectively, of the Town of Clyde Hill, a Municipal Corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Arthur E. Jackson
Notary Public in and for the State
of Washington, residing at *Bellevue*

STATE OF WASHINGTON)
; ss.
COUNTY OF KING)

On this 14th day of August, 1967, before me personally came and appeared *B.F. Evans* and *James A. Buzard*, to me known to be the Mayor and Town Clerk, respectively, of the Town of Hunts Point, a Municipal Corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Arthur E. Jackson
Notary Public in and for the State
of Washington, residing at *Bellevue*

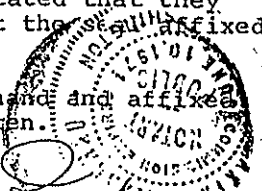
Blue-print
on file in
Vault

STATE OF WASHINGTON)
: ss.
COUNTY OF KING)

On this 15th day of August, 1967, before me personally came and appeared Sheldon Dunning and Lorraine Dede, to me known to be the Mayor and Town Clerk, respectively, of the Town of Yarrow Point, a Municipal Corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Arthur E. Jackson
Notary Public in and for the State of Washington, residing at Bellevue

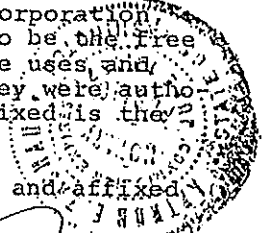


STATE OF WASHINGTON)
: ss.
COUNTY OF KING)

On this 17th day of September, 1967, before me personally came and appeared James H. Madison and Patricia B. Liston, to me known to be the Mayor and Town Clerk of the Town of Beaux Arts Village, a Municipal Corporation, and acknowledged the within and foregoing instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Arthur E. Jackson
Notary Public in and for the State of Washington, residing at Bellevue



Blueprint
on file in
Vault.

INTERLOCAL SEWER SERVICE AGREEMENT

For the
REILLY SHORT PLAT

FILED NO. 29117
CITY OF BELLEVUE
9/27/00
M. Tomrow
CITY CLERK'S OFFICE
656468

This agreement is made and entered into this day by and between the City of Redmond, a municipal corporation of the State of Washington, hereinafter referred to as "Redmond" and the City of Bellevue, a municipal corporation of the State of Washington, hereinafter referred to as "Bellevue",

WITNESSETH:

WHEREAS, Redmond and Bellevue are authorized by chapter 39.34 RCW, the Interlocal Cooperation Act, to enter into cooperative agreements; and

WHEREAS, the Reilly short plat lies within the city limits of Redmond and the sanitary sewer service for said plat, because of topography, flows into the Bellevue sanitary sewer system; and

WHEREAS, both parties desire, where possible and convenient, to mutually assist one another,

NOW, THEREFORE, the parties agree as follows:

1) Purpose

The purpose of this agreement is to provide sanitary sewer service in a reasonable manner to the Reilly short plat subject to the conditions stated herein.

2) Connections

All sanitary sewer facilities to be constructed for the Reilly short plat site, as described and designated on Exhibit A, attached hereto and by this reference incorporated herein, shall, upon construction and acceptance, become for all purposes, including customer service charges and maintenance, part of the sanitary sewer system of Redmond, within which it lies, or privately owned, but will, nevertheless, be connected to and flow into the sanitary system of

Bellevue. Construction plans for actual connections to Bellevue's system shall be submitted to Bellevue in advance for approval. Bellevue shall be notified prior to construction of any connections to their system and shall have the opportunity to inspect and approve such construction. Such approval of construction plans shall be made in writing and shall not be unreasonably withheld.

3) Acceptance of Sewage

Bellevue agrees to accept all sewage from Redmond which meets all applicable Metro, Department of Ecology or other applicable regulations, entering into its system through said connection point, and to convey same through its systems to its connection with the Metro system for disposal. Redmond shall, however, be responsible for payment to Metro for treatment of said sewage generated within its boundaries.

4) Construction Maintenance and Repair Costs

No part of the cost of the construction, maintenance or repair of the sanitary sewer facilities to be constructed within the subject area shall be borne by Bellevue.

5) Customer Billing

It is understood and agreed that all properties within the subject area shall be customers of Redmond and shall be billed by same city for sewer service in accordance with its own standard practices and rates.

6) Payments

Redmond agrees to pay to Bellevue a monthly service charge in accordance with the existing Interlocal Agreement dated February 23, 1968, between Redmond and Bellevue, as successor to Lake Hills Sewer District for each

residential customer or residential customer equivalent within the subject area, which is actually served by the connections.

7) Sewer System Property

Neither party shall, by virtue of this agreement, acquire any proprietary or governmental interest in the sewer systems of the other party.

8) Hold Harmless

Each party shall be solely responsible for the operation and maintenance of its own system of sewage collection and shall indemnify and hold the other party harmless from any claim for damage, real or imaginary, made by a third party, and alleging negligence or misfeasance in the owning party's operation or maintenance of its system, or in the acts or omissions of its officers or employees.

9) Joint Board

Pursuant to RCW 39.34.030 (4)(a), a Joint Board comprised of the Public Works Director of the City of Redmond or his/her designee and the Director of Utilities of the City of Bellevue or his/her designee, shall be responsible for administering this agreement.

10) Assignment and Termination

Neither party shall have the right to assign this agreement or its rights or obligations hereunder, in whole or in part, to any entity without the prior written consent of the other party, and neither party shall have the right to terminate its obligations hereunder by dissolution or otherwise except for cause.

11) Effective Date and Duration

This interlocal agreement shall become effective upon authorized signature of both parties and shall remain in effect in perpetuity or until terminated or amended by mutual agreement of the parties.

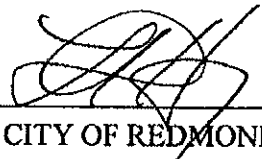
12) Filing

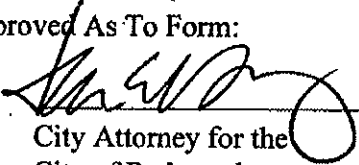
A copy of this interlocal agreement shall be filed with the City Clerk of each respective City and the County Auditor.

13) Entirety

This writing embodies the entire agreement of the parties. There are no other promises, terms, conditions, or obligations other than those contained herein. This agreement may be amended only by written instrument signed by both parties.

IN WITNESS WHEREOF the parties hereunto set their hands and seals:

By  _____ Date 8/16/00
CITY OF REDMOND

Approved As To Form:
 _____ Date 8/15/00
City Attorney for the
City of Redmond

By Linda M. Barton _____ Date _____
CITY OF BELLEVUE

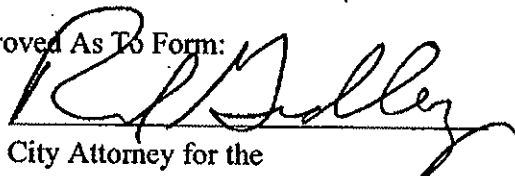
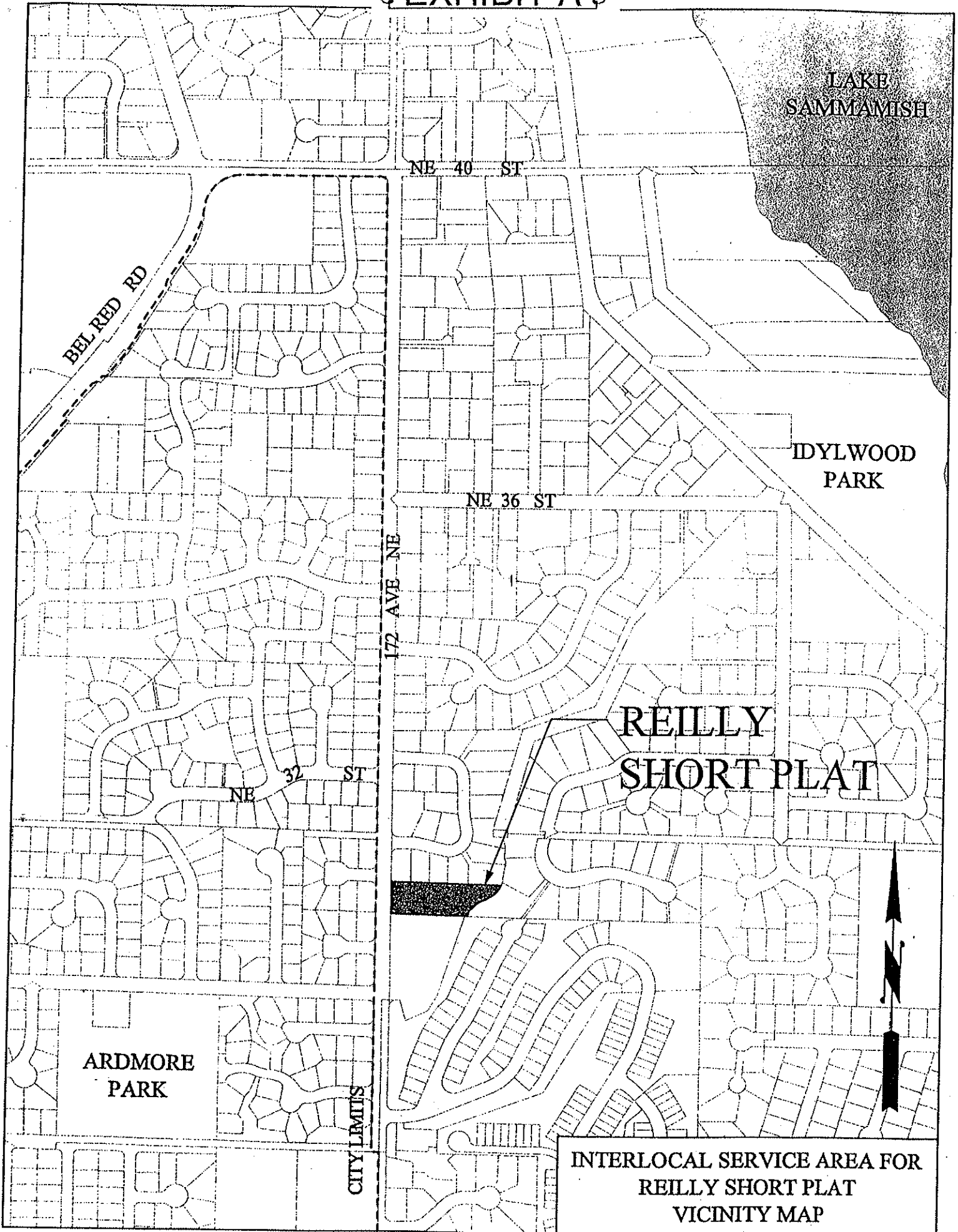
Approved As To Form:
 _____ Date 9-6-00
City Attorney for the
City of Bellevue

EXHIBIT A



**REILLY
SHORT PLAT**

**INTERLOCAL SERVICE AREA FOR
REILLY SHORT PLAT
VICINITY MAP**

0521-RES
8/30/00

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 6468

A RESOLUTION authorizing the City Manager or her designee to execute an interlocal agreement with the City of Redmond for the provision of sewer services to certain areas within the vicinity of mutual city limits along 172nd Avenue NE at approximately NE 31st Street.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The City Manager or her designee is authorized to execute that certain Interlocal Sewer Service Agreement for the Reilly Short Plat in the vicinity of mutual city limits along 172nd Avenue NE at approximately NE 31st Street, a copy of which Agreement has been given Clerk's Receiving No. 29117.

Passed by the City Council this 18th day of September, 2000, and signed in authentication of its passage this 18th day of September, 2000.

(SEAL)

Chuck Mosher
Chuck Mosher, Mayor

Attest:

Myrna L. Basich
Myrna L. Basich, City Clerk

INTERLOCAL SEWER SERVICE AGREEMENT
for the plats of
SHEFFIELD PLACE and INTERLAKE COURT

FILED NO. 24188
CITY OF BELLEVUE
DATE 3/8/97
M. Reed
CITY CLERK'S OFFICE

This agreement is made and entered into this day by and between the City of Redmond, a municipal corporation of the State of Washington, hereinafter referred to as "Redmond" and the City of Bellevue, a municipal corporation of the State of Washington, hereinafter referred to as "Bellevue",

WITNESSETH:

WHEREAS, Redmond and Bellevue are authorized by chapter 39.34 RCW, the Interlocal Cooperation Act, to enter into cooperative agreements; and

WHEREAS, the plat of Sheffield Place lies within the city limits of Bellevue and the sanitary sewer service for said plat, because of topography, flows into the Redmond sanitary sewer system; and

WHEREAS, the plat of Interlake Court lies within the city limits of Redmond and the sanitary sewer service for said plat, because of topography, flows into the Bellevue sanitary sewer system; and

WHEREAS, both parties desire, where possible and convenient, to mutually assist one another,
NOW, THEREFORE, the parties agree as follows:

1. Purpose. The purpose of this agreement is to provide sanitary sewer service in a reasonable manner to the plats of Sheffield Place and Interlake Court subject to the conditions stated herein.

2. Connections. All sanitary sewer facilities to be constructed within the service areas described and designated on Exhibits A and B, as attached hereto and by this reference incorporated herein, shall, upon construction and acceptance, become for all purposes, including customer service charges and maintenance, part of the sanitary sewer system of the respective city within which it lies but may, nevertheless, be connected to or flow into the sanitary sewer system of the other party.

Construction plans for actual connections to the other party's system shall be submitted in advance for approval. The owner of the facilities shall be notified prior to construction of any connections to their system and shall have the opportunity to inspect and approve such construction. Such approval of construction plans shall be made in writing and shall not be unreasonably withheld.

3. Acceptance of Sewage. Each city agrees to accept all sewage, which meets all applicable Metro, Department of Ecology or other applicable regulations, from the other party entering into its system through said connection points, provided there is adequate downstream system capacity as determined by the owner of the system, and to convey same through its systems to its connection with the Metro system for disposal. If downstream capacity is insufficient, the additional flow may not be accepted until an agreement is reached by the Joint Board for providing and paying for the additional capacity improvement. Each city shall, however, be responsible for payment to Metro for treatment of said sewage generated within its boundaries.

4. Construction, Maintenance and Repair Costs. No part of the cost of the construction, maintenance or repair of the respective sanitary sewer facilities to be constructed within the subject areas shall be borne by the other party unless agreed upon in writing by the Joint Board.

5. Customer Billing. It is understood and agreed that all properties within the subject areas shall be customers of the city within which the property lies and shall be billed by same city for sewer service in accordance with its own standard practices and rates.

6. Payments. Each city agrees to pay to the other party a monthly service charge in the amount of \$0.12 per month per residential customer or residential customer equivalent within the subject areas which are actually served by the connections.

7. Sewer System Property. Neither party shall, by virtue of this agreement, acquire any proprietary or governmental interest in the sewer systems of the other party.

8. Hold Harmless. Each party shall be solely responsible for the operation and maintenance of its own system of sewage collection and shall indemnify and hold the other party harmless from any claim for damage, real or imaginary, made by a third party, and alleging negligence or misfeasance in the owning party's operation or maintenance of its system, or in the acts or omissions of its officers or employees.

9. Joint Board. Pursuant to RCW 39.34.030 (4)(a), a Joint Board comprised of the Public Works Director of the City of Redmond or his/her designee and the Director of Utilities of the City of

Bellevue or his/her designee, shall be responsible for administering this agreement.

10. Assignment and Termination. Neither party shall have the right to assign this agreement or its rights or obligations hereunder, in whole or in part, to any entity without the prior written consent of the other party, and neither party shall have the right to terminate its obligations hereunder by dissolution or otherwise except for cause.

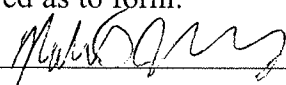
11. Effective Date and Duration. This interlocal agreement shall become effective upon authorized signature of both parties and shall remain in effect in perpetuity or until terminated or amended by mutual agreement of the parties.

12. Filing. A copy of this interlocal agreement shall be filed with the City Clerk of each respective City and the County Auditor.

13. Entirety. This writing embodies the entire agreement of the parties. There are no other promises, terms, conditions, or obligations other than those contained herein. This agreement may be amended only by written instrument signed by both parties.

IN WITNESS WHEREOF the parties hereunto set their hands and seals:

By  Date 4-2-97
CITY OF REDMOND

Approved as to form:

City Attorney for the
City of Redmond

By  Date 3/19/97
CITY OF BELLEVUE

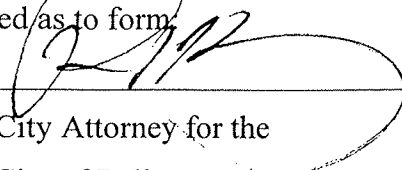
Approved as to form:

City Attorney for the
City of Bellevue

EXHIBIT - A

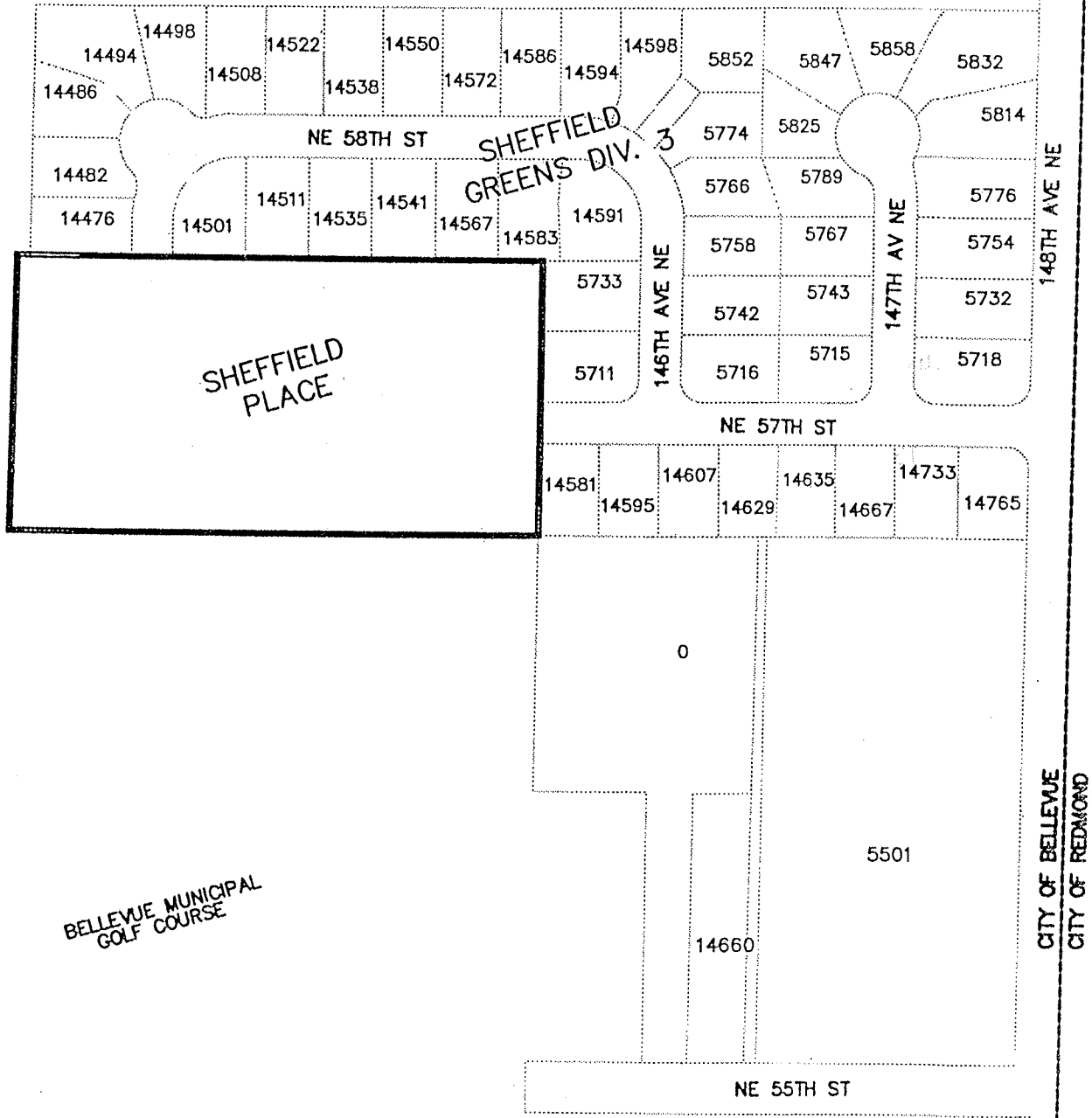
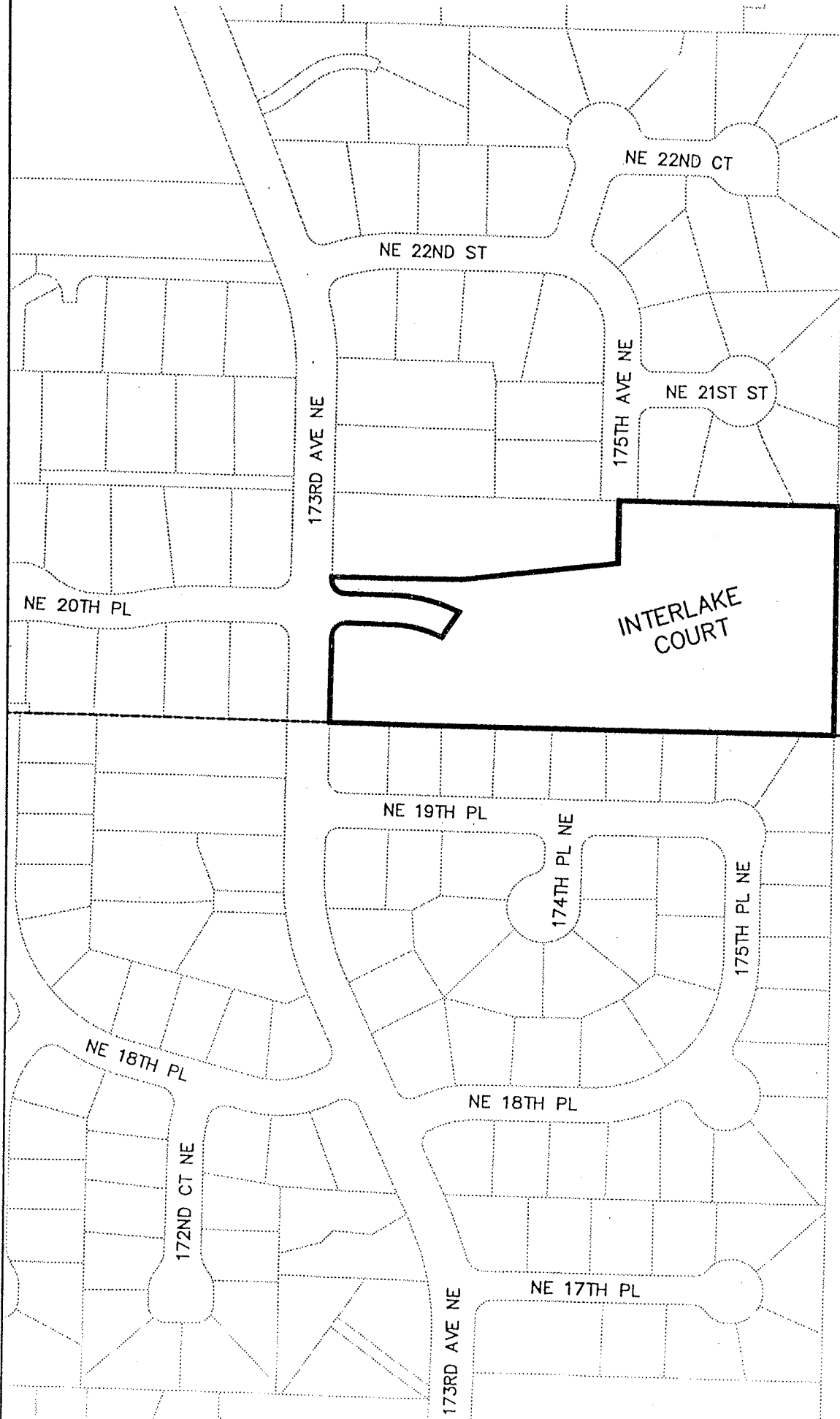


EXHIBIT - B



CITY OF REDMOND
CITY OF BELLEVUE





City of
Bellevue

Public Works/Utilities Department
Post Office Box 90012 • Bellevue, Washington • 98009 9012

June 6, 1990

Bob Bandarra, Utilities Manager
City of Redmond Public Works Department
15670 N.E. 85th Street
Redmond, WA 98052

RE: Proposed Plat - Sanitary Sewer Service
N.E. 20th East of 173rd Ave. N.E.
Developer: Gene Harfst

We have reviewed the request to provide sanitary sewer service to the referenced proposed plat within the City of Redmond and agree after discussions with your department that it is feasible to provide service by connection into the existing Bellevue sanitary sewer located at the southeast corner of the property, being manhole 30-649.

There are several existing interlocal sanitary sewer service agreements between the City of Redmond and the City of Bellevue, which are being reviewed and at this time, we are requesting that this letter serve as an understanding and approval for the City of Redmond to serve the proposed plat under similar conditions of the previous agreements and thus permit time for both agencies to review all agreements and include them into one for final acceptance as agreed to by both cities.

The conditions of approval are as follows:

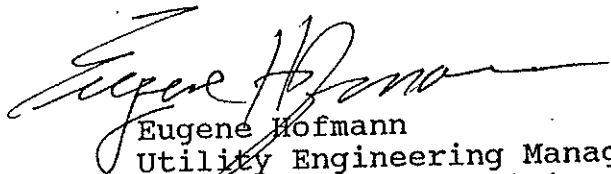
1. Purpose. The purpose of this letter of understanding is to provide sewer service to the proposed referenced Plat in the City of Redmond subject to the conditions stated herein.
2. Connections. All sanitary sewer facilities to be constructed within the referenced area shall, upon construction and acceptance, become for all purposes, including customer service charges and maintenance, part of the Redmond sanitary sewer system facility to that point designated as City of Bellevue sanitary sewer manhole 30-649 located in the existing Plat of Malibu Vista.
3. Acceptance of Sewage. Bellevue agrees to accept all sewage entering into its system through said connection points which meets all applicable METRO, D.O.E. or other regulations, and to convey same through its system to its connection with the City of Bellevue, City of Redmond Joint Use Sanitary Sewer trunkline.

4. Construction Maintenance and Repair Cost. No part of the cost of construction of the sanitary sewer facilities to be constructed within the subject area, nor any of its future maintenance or repair, shall be borne by the City of Bellevue.
5. Customer Billing. It is understood and agreed that all properties within the subject area shall be customers of Redmond and shall be billed by Redmond in accordance with its standard practices and rates.
6. Payment to Bellevue. The City of Redmond agrees to pay to the City of Bellevue a monthly service charge in an amount equal to \$0.12 per month per residential customer or residential equivalent, actually connected and served by facilities of the Bellevue sewer system within the subject area.
7. Assignment and Termination. Each party shall have the right to assign this agreement or its rights or obligations hereunder, in whole or in part, to any entity without the prior written consent of the other party, and neither shall have the right to terminate its obligations hereunder by dissolution or otherwise.
8. Sewer System Property. Neither party shall by virtue of this agreement acquire any proprietary or governmental interest in the sewer system or sewer line of the other party. Each party shall be solely responsible for the operation and maintenance of its own system of sewage collection and shall defend, indemnify and save the other party harmless from any and all claims for injury or death to persons or damage to property, real or imaginary, alleging negligence or misfeasance in the operation or maintenance of the other party's system, or in the acts or omissions of its own officers, employees or agents.
9. Effective Date and Duration. This temporary agreement shall become effective upon authorized signature of both parties and shall remain in effect until terminated by the combined final interlocal agreement to be initiated and accepted by both cities.
10. Entirety. This writing embodies the entire understanding of the parties. There are no promises, terms, conditions, or obligations other than those contained herein. This understanding may be amended only by written agreement signed by both parties.

If this meets with your approval, please sign both and return one copy for our records.

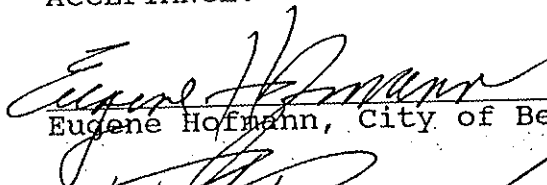
Wes Jorgenson of Bellevue will be working with Scott Thomason of Redmond in the near future to re-write all joint use and interlocal sewer service agreements between the City of Bellevue and the City of Redmond.

Sincerely,

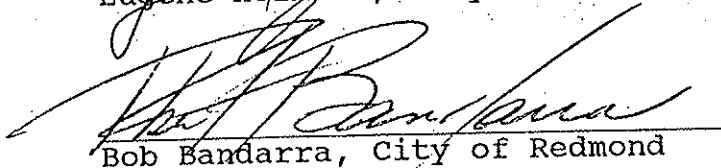


Eugene Hofmann
Utility Engineering Manager
Public Works & Utilities

ACCEPTANCE:



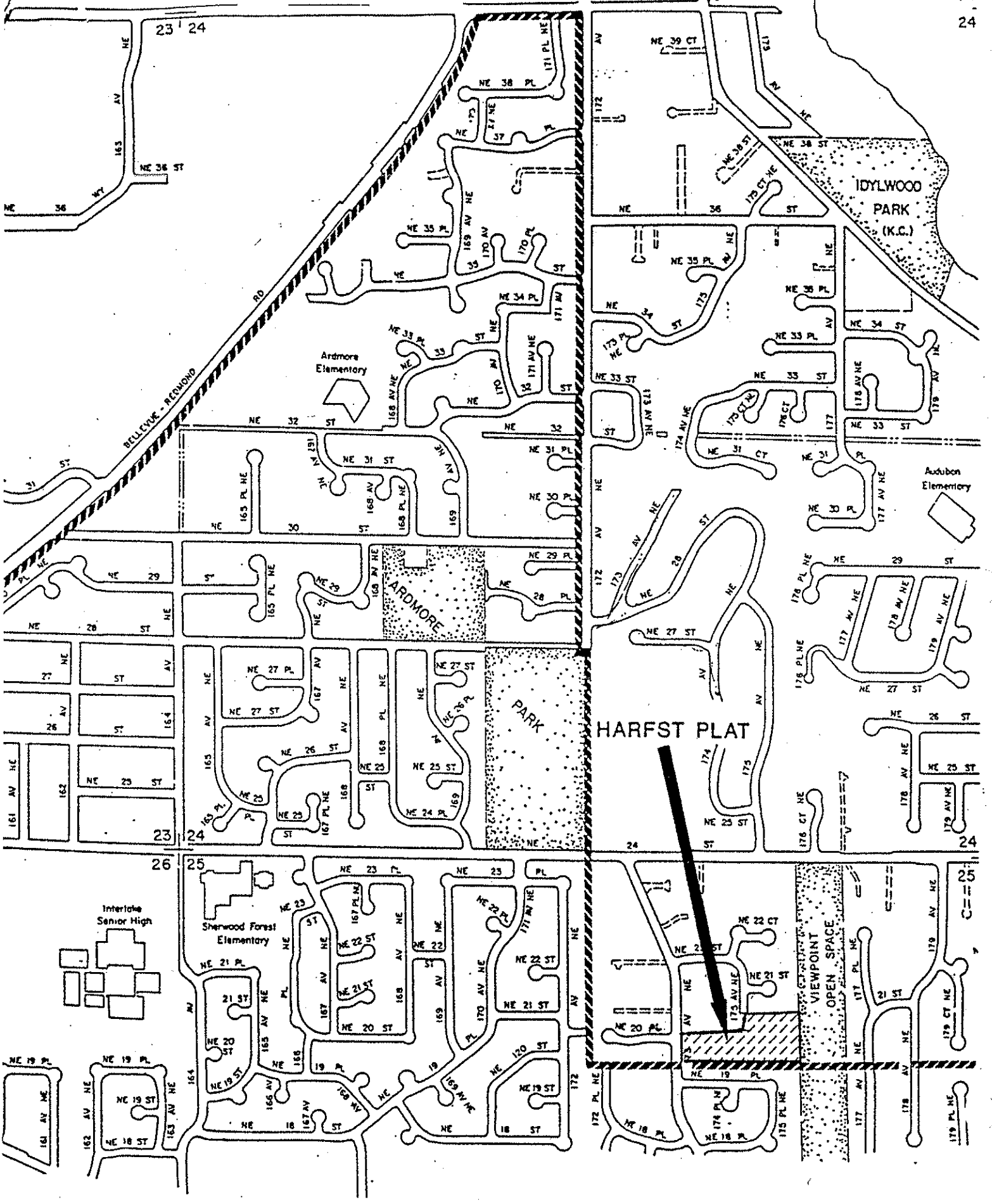
Eugene Hofmann, City of Bellevue



Bob Bandararra, City of Redmond

EXHIBIT E - VICINITY MAP

13
24



RECEIVED THIS D...

FILED NO. 11096

86/06/09

#0922 E

CITY OF BELLEVUE

RECD F 11.00
CASHSL

***11.00
55

DATE 4/8/86

CITY CLERK J. J. J.

O. Council

City of Redmond

JUN 9 2 43 PM '86
BY THE DIVISION OF
RECORDS & COMMUNICATIONS
KING COUNTY

INTERLOCAL SEWER SERVICE AGREEMENT
Plat of Sheffield Greens, Division 3

EXECUTED COPY

8606090922

This agreement made and entered into this day by and between the City of Redmond, a municipal corporation of the State of Washington hereinafter referred to as "Redmond" and the City of Bellevue, a municipal corporation of the State of Washington, hereinafter referred to as "Bellevue",

WITNESSETH:

WHEREAS, Redmond and Bellevue are authorized by Chapter 39.34 RCW, the Interlocal Cooperation Act, to enter into cooperative agreements; and

WHEREAS, the Plat of Sheffield Greens, Division 3, lies within the City limits of the City of Bellevue, and;

WHEREAS, the sanitary sewer system for the Plat of Sheffield Greens, Division 3, is not connected to the Bellevue sanitary sewer system, and because of the topography of the area, may not readily be so connected; and

WHEREAS, corporate boundaries of the City of Redmond and its sanitary sewer service area lie adjacent to the Plat of Sheffield Greens, Division 3; and said plat can conveniently be connected to a Redmond sanitary sewer system facility existing or under construction; and

WHEREAS, both parties desire where possible and convenient to mutually assist one another.

8606090922

NOW, THEREFORE, in consideration of the agreements herein contained, it is agreed as follows:

1. Purpose. The purpose of this agreement is to provide sewer service to the Plat of Sheffield Greens, Division 3, in the City of Bellevue subject to the conditions stated herein.

2. Connections. All sanitary sewer facilities to be constructed within the subject area described and designated on Exhibit "A", as attached hereto and by this reference incorporated herein, shall upon construction and acceptance, become for all purposes, including customer service charges and maintenance, part of the Bellevue sanitary sewer system but may, nevertheless, be connected to the Redmond sanitary sewer system facility line lying within twenty feet of said subject area and at those points designated as "connection points" on Exhibit "A".

3. Acceptance of Sewage. Redmond agrees to accept all sewage entering into its system through said connection points which meets all applicable METRO, D.O.E. or other regulations, and to convey same through its system to its connection with the Municipality of Metropolitan Seattle system.

4. Construction Maintenance and Repair Cost. No part of the cost of construction of the sanitary sewer facilities to be constructed within the subject area, nor any of its

future maintenance or repair, shall be borne by the City of Redmond.

5. Customer Billing. It is understood and agreed that all properties within the subject area shall be customers of Bellevue and shall be billed by Bellevue in accordance with its standard practices and rates.

6. Payment to Redmond. The City of Bellevue agrees to pay to the City of Redmond a monthly service charge in an amount equal to \$0.12 per month per residential customer or residential equivalent, actually connected and served by facilities of the Bellevue sewer system within the subject area.

7. Assignment and Termination. Each party shall have the right to assign this agreement or its rights or obligations hereunder, in whole or in part, to any entity without the prior written consent of the other party, and neither shall have the right to terminate its obligations hereunder by dissolution or otherwise.

8. Sewer System Property. Neither party shall by virtue of this agreement acquire any proprietary or governmental interest in the sewer system or sewer line of the other party. Each party shall be solely responsible for the operation and maintenance of its own system of sewage collection and shall save the other party harmless from any claim for damage, real or imaginary, made by a third party,

8606090922

and alleging negligence or misfeasance in the operation or maintenance of the other party's system, or in the acts or omissions of its own officers or employees.

9. Effective Date and Duration. This interlocal agreement shall become effective upon authorized signature of both parties and shall remain in effect in perpetuity or until terminated or amended pursuant to the terms of this interlocal agreement.

10. Joint Board. Pursuant to RCW 39.34.030 (4) (a), a joint board comprised of the Public Works Director or designee of each respective party shall be responsible for administering this agreement.

11. Filing. A copy of this interlocal agreement shall be filed with the City Clerk of each respective City, the County Auditor, and the Secretary of State.

12. Entirety. This writing embodies the entire agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein. This agreement may be amended only by written instrument signed by both parties.

8606090922

8606090922

IN WITNESS WHEREOF the parties have hereunto set their hands and seals.

By *Mary Lawrence*
CITY OF REDMOND

Date 4-9-86

Approved as to form:

Joy C. Martin
City Attorney for
CITY OF REDMOND

Date _____

By *[Signature]*
CITY OF BELLEVUE

Date 4-28-86

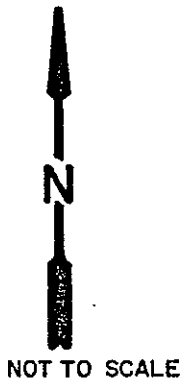
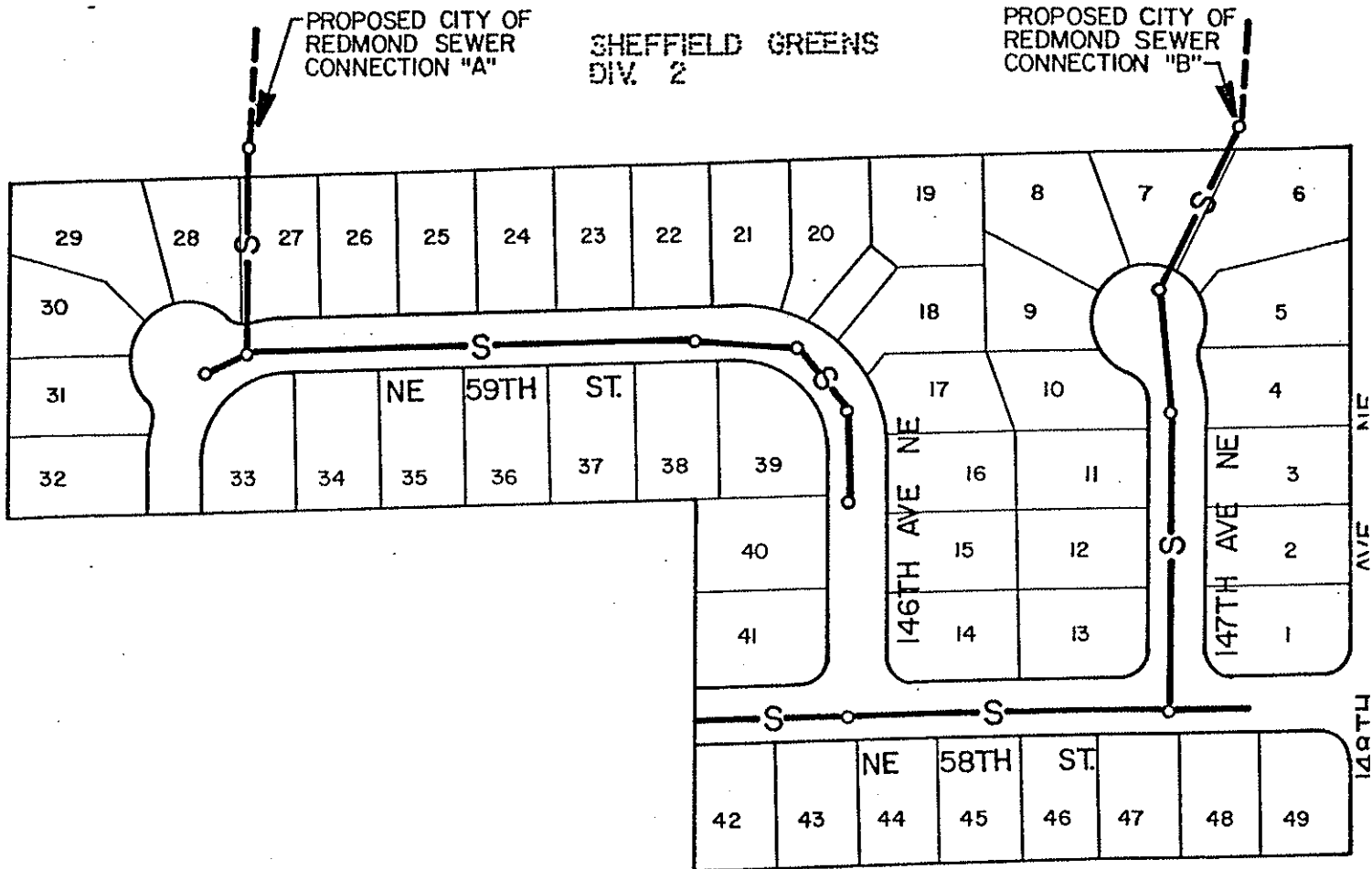
Approved as to form:

[Signature]
City Attorney for
CITY OF BELLEVUE

Date 4-18-86

EXHIBIT "A"
PLAT OF SHEFFIELD GREENS DIV. 3
SEWER SERVICE AREA

8606090922



8606090922

BRIDLE
TRAILS
STATE
PARK

BELLEVUE → REOMOND

140TH AVE NE

NE 61ST CT.

148TH AVE. NE

BELLEVUE
GOLF
COURSE

SITE

SHEFFIELD GREENS
DIVISION W

SR 520

NE 40TH ST

NORTH

SCALE: 1" = 2560'

VICINITY MAP

SCALE: 1" = 2560'

SANITARY SEWER SERVICE AGREEMENT

PLAT OF WETHERSFIELD SOUTH

This Agreement made and entered into this 15th day of Nov., 1981, by and between the City of Redmond, a municipal corporation of the State of Washington, hereinafter referred to as "Redmond" and the City of Bellevue, a municipal corporation of the State of Washington, hereinafter referred to as "Bellevue",

W I T N E S S E T H :

WHEREAS, both Redmond and Bellevue are authorized by State law to enter into cooperative agreements; and

WHEREAS, the subject area of the Plat of Wetherfield South, described and designated on Exhibit "A" (attached hereto and by this reference incorporated herein) is within Bellevue and is not presently connected to the Bellevue sewer system because of the topography and lack of gravity sanitary sewer service connections in the subject area, and

WHEREAS, the service area and corporate boundaries of Redmond and its sanitary sewer system lie adjacent to the subject area and the sanitary sewer within the subject plat can be conveniently connected into the Redmond sewer system facility at locations as described and designated on Exhibit "A", and

WHEREAS, both parties are desirous wherever possible and convenient to mutually assist one another,

NOW, THEREFORE, in consideration of the mutual covenants contained herein, it is hereby agreed as follows:

1. Connections. Redmond agrees to allow and accept the necessary

EXECUTED COPY

connections as established by developer extension agreements and supply gravity sanitary sewer service to subject plat at connection points A and B as shown on attached Exhibit "A".

2. Conveyance. Redmond agrees to accept all sewage entering into its system through said connection points and to convey same through its system to its connections with the municipality of Metropolitan Seattle System.

3. Construction Maintenance and Repair Cost. No part of the cost of construction of said sanitary sewer facilities within the plat of Wethersfield South subject area, nor any of its future maintenance or repair, shall be borne by Redmond. Bellevue shall bear all costs of said sanitary sewer service connections and bear the risk of loss or destruction of said sanitary sewer service connection as provided by Developer Extension Agreements with customers within subject area.

4. Customer Billing. It is understood and agreed that all properties within subject area shall be customers of Bellevue and shall be billed by Bellevue in accordance with its standard practices and rates. In addition, Bellevue shall collect and remit to Redmond any utility taxes levied by Redmond on the sanitary sewer utility in the city.

5. Payment to Redmond. Bellevue agrees to pay Redmond any charges imposed on Redmond by Metro and a sum of 12¢ per month for each customer or equivalent within subject plat of Wethersfield South served by Redmond's sanitary sewer system each month in which said customers utilize said sanitary sewer system, pursuant to the terms of that certain agreement between the City of Redmond and Lake Hills Sewer District dated February 23, 1968 and any amendments thereto.

6. Sewer Service Changes. It is understood and agreed that Bellevue reserves the right to plan, engineer, construct, maintain, operate, reconstruct, repair and replace the sanitary sewer systems and all appurtenances thereto within subject plat of Wethersfield South; to finance the same upon such terms and conditions as may be reasonable and appropriate; to enter into Developer Extension Agreements or other agreements with respect to the sanitary sewer system within subject area.

7. Assignment and Termination. Either party shall have the right to assign this agreement or its rights or obligations hereunder, in whole or in part, to any entity without the prior written consent of the other party, and neither shall have the right to terminate its obligations hereunder by dissolution or otherwise.

8. Sewage System Property. Neither party shall by virtue of this agreement acquire any proprietary or governmental interest in the sewage system or sewer line of the other part. Each party shall be solely responsible for the operation and maintenance of its own system of sewage collection and shall save the other party harmless from any claim for damage, real or imaginary, made by a third party, and alleging negligence or misfeasance in the operation or maintenance of the other party's system, or in the acts of omissions of its own officers or employees.

9. Entirety. This writing embodies the entire agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein. This agreement may be amended only by written instrument signed by both parties.

IN WITNESS WHEREOF the parties have hereunto set their hands and seals and each warrant that they have adopted ordinances and/or resolutions, respectively, authorizing the execution of this agreement and the undersigned parties warrant their authority on behalf of the parties to this agreement to execute the same for and on behalf of the respective parties.

CITY OF REDMOND

Attested:

By: Louis A. Schaefer
Deputy for Paul Kusakabe, City Clerk

By: Christine T. Himes
Christine T. Himes, Mayor



Date 10-29-81

CITY OF BELLEVUE

By: Robert H. Cook

Date 11-15-81

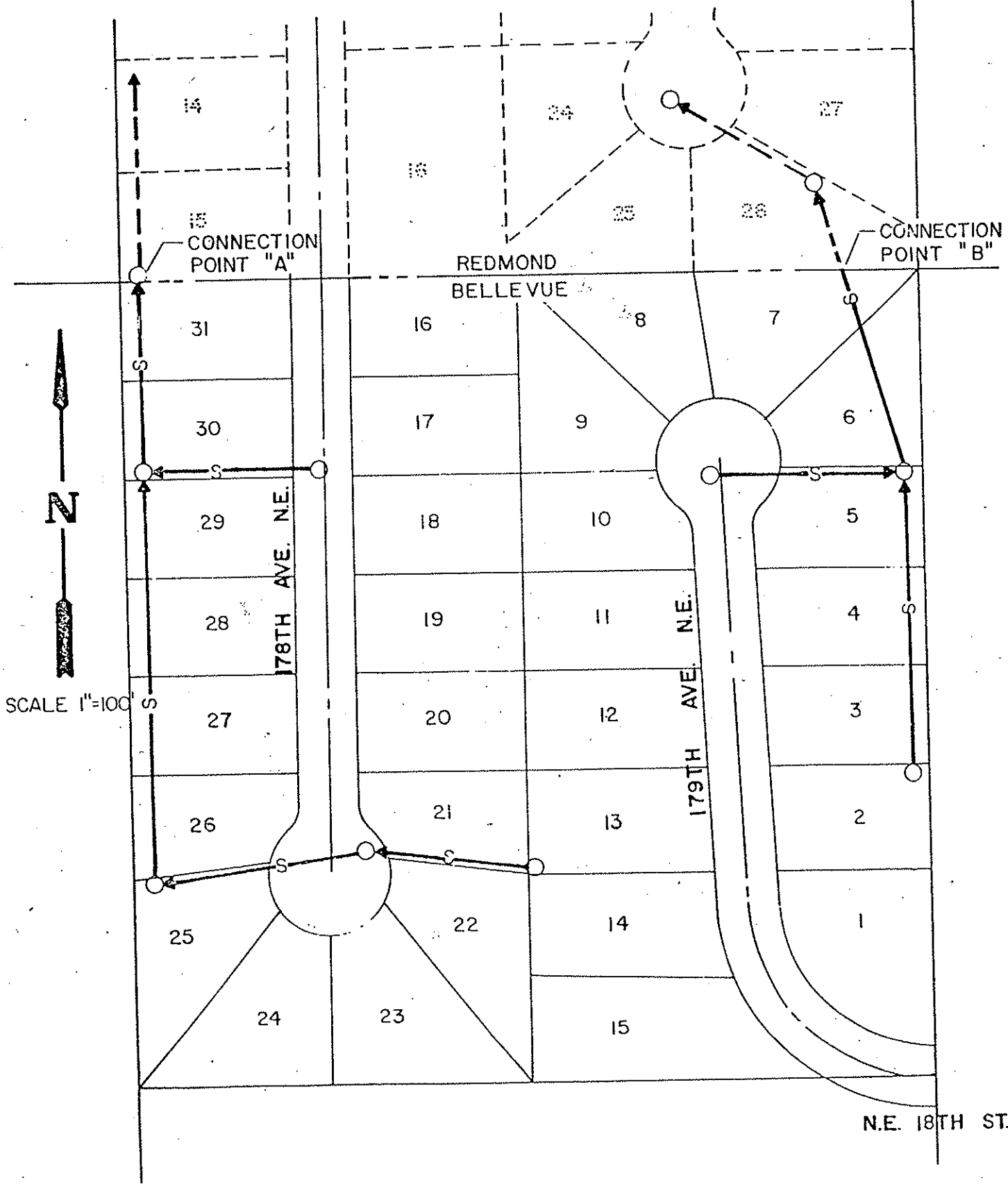
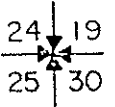
Execution of this Sanitary Sewer Agreement approved on behalf of the City of Redmond by resolution of its City Council, adopted the _____ day of _____, 1981, Resolution No. _____ and approved on behalf of the City of Bellevue by Resolution of its City Council, adopted the 11 day of November, 1981, Resolution No. 3929.

Approved as to form:

William C. Jones
Assistant City Attorney

EXHIBIT "A"

WETHERSFIELD SOUTH SANITARY SEWER SERVICE AREA



N.E. 18TH ST.

2511
4/18/75

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 2511

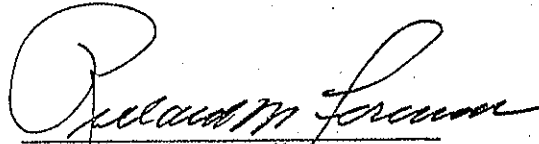
A RESOLUTION authorizing execution of Addendum No. 1 to the Agreement between the City of Bellevue and Lake Hills Sewer District.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

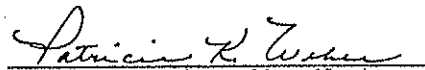
Section 1. The City Manager is hereby authorized and directed to execute, on behalf of the City, that certain Addendum No. 1 to the Agreement between the City of Bellevue and Lake Hills Sewer District, dated July 15, 1970, a copy of which has been given Clerk's Receiving No. 3242

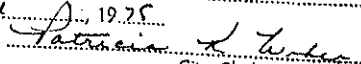
PASSED by the City Council this 21 day of April, 1975, and signed in authentication of its passage this 21 day of April, 1975.

(SEAL)


Richard M. Foreman, Mayor

Attest:


Patricia K. Weber, City Clerk

CERTIFICATE
I, the undersigned, PATRICIA K. WEBER, CLERK of the City of Bellevue, Washington, certify that this is a true and correct copy of Res No. 2511
Subscribed and sealed this 21 day of April, 1975

City Clerk

EX-101A

ADDENDUM NO. 1 TO JOINT USE AND TRANSFER OF FACILITIES AGREEMENT

00709160400

THIS ADDENDUM made and entered into effective this 13th day of May, 1971, by and between LAKE HILLS SEWER DISTRICT, of King County, Washington, a municipal corporation, hereafter referred to as "District", and The City of Redmond, a municipal corporation, hereafter referred to as "City",

W I T N E S S E T H:

WHEREAS, the parties heretofore contracted pursuant to a Joint Use and Transfer of Facilities Agreement dated February 23, 1968, reference being made to said agreement as if set forth in full herein, which agreement generally provided for the joint use of certain facilities and the transfer of certain facilities by and between District and City, which agreement provided in part as follows:

"WHEREAS, the District and City determined that it is not economically desirable for each to construct separate general or local facilities, independently of the other, and agree that it would be to the best interest of the respective parties and the public generally if certain existing general and local facilities heretofore constructed or acquired by the District and future general and local facilities were to be jointly used by the respective parties. . ."; and

WHEREAS, the parties have the statutory authority to jointly agree with respect to the joint use of sanitary sewer facilities pursuant to RCW 35.13.250 and RCW 56.08.060; and

WHEREAS, as a result of annexations of real property to City and the development of that property within City, there is an area in need of sanitary sewer service within the boundaries of City which will be provided with sanitary sewer service by facilities constructed by City, but that City desires to make a connection to the sanitary sewer system of District, located within the boundaries of District, and to utilize said facility of District, in conjunction

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and concurrently with the use of said line by District in order to transport sanitary sewage to an existing Municipality of Metropolitan Seattle facility (Metro); and

WHEREAS; District is agreeable to amending the prior agreement, above referred to, between the parties, to provide for a portion of the District's system to be used as a joint use general facility, as that term is defined in the prior agreement of the parties and the facility to be used jointly by the parties was not included as a joint use facility in the prior agreement of the parties, but the parties, by addendum to said agreement, desire to include this additional District facility as a joint use general facility, now, therefore,

IN CONSIDERATION of the mutual covenants and agreements herein contained, it is agreed by and between the parties as follows:

1. Description and Identification of Joint Use General Facility: The general joint use facility that will be the subject matter of this addendum and jointly used by District and City, upon the terms and conditions set forth herein, is located within District's boundaries, and is described as follows:

(a) 12-inch trunk sewer line extending from a point 315 feet east of Lake Hills Manhole No. 6 (U.I.I.D. No. 9) to the Metro trunk facility at Northeast 16th Place and the Bellevue-Redmond Road, Bellevue, Washington.

2. Amount and Date of Payment by City to District for Use of Joint Use General Facility: City shall, concurrently with the execution of this agreement, pay to District, in cash, the sum of ELEVEN THOUSAND ONE HUNDRED THIRTY-SEVEN and 27/100ths Dollars (\$11,137.27), as payment by City to District for City's right to jointly use said joint use facility. Said amount to be paid by City to District has been computed by determining the maximum number of potential City

customers and the maximum number of potential District customers who now or hereafter may use or utilize said joint use facility and applying said resulting proportion to the original capital cost of said joint use facility. The aforesaid computation has been heretofore made by engineers for City and District and be and is hereby approved by the parties hereto. District shall deposit the amount received for said joint use facility in the bond redemption fund that was created by District in the resolution adopted by District to fund said improvement.

3. Title to Joint Use General Facility: With respect to the joint use general facility described in this addendum, District shall retain title, ownership, jurisdiction and control over said joint use general facility and shall be deemed the owner thereof for all purposes, the capital contribution made by City to District for joint use of said line being a payment for the right of joint use of said general facility and does not entitle or vest in City any ownership in said joint use facility but only grants to City the right of joint use of capacity in said joint use facility.

4. Repair, Maintenance and Operation of Joint Use General Facility: District shall apply and provide all repairs, maintenance and operation necessary with respect to the operation and maintenance of said joint use facility in accordance with sound maintenance procedures and in accordance with good engineering practice. District agrees to maintain said joint use facility in good working order. City shall contribute a proportionate share of the cost of said repair, maintenance and operation expenses to District on the same terms and conditions as is set forth in paragraph section 2, E, subparagraph (1) and (2) of the agreement between the parties referred to hereinabove and incorporated in full herein as if set forth in full herein, provided that the word "City" shall be substituted for the word

"District" and the "District" shall be substituted for the word "City" where it appears in said quoted and referred to paragraphs. Further, the provisions of Section 2, E, (3), ~~XXX~~ and F, are incorporated from said agreement herein as if set forth in full herein with the word "District" to be substituted for the word "City" and the word "City" to be substituted for the word "District" where said designations appear in said referred to agreement.

5. Replacement of Joint Use Facility if Required Due to Other than Loss or Destruction: It is understood that District has designed said general joint use facility that is the subject matter of this agreement for a potential service located within District and that to the extent that City now desires to utilize said joint use facility, pursuant to this agreement, and if the total or substantial portion of the area within City that may use or utilize said joint use facility is developed that said development would create a surcharge on said joint use facility and as a result the existing joint use facility may not have sufficient capacity to serve both the District area and the City area that potentially will be served by said general joint use facility. It is acknowledged that if the area of District were to be totally developed, that the area within District would not create a surcharge or exceed the capacity of said general joint use facility but that with the addition of the City use of said general joint use facility, said capacity may be reached with all or a portion of said general joint use facility line. Therefore, in the event that capacity of said line is reached and City agrees, upon request by District, to construct a parallel line as may be necessary to serve the City area that uses or utilizes said joint use general facility, all at City's sole cost and expense, provided that District shall design the same to the extent that said parallel line connects to any portion of

the District's system. If, in the determination of District, it is more reasonable, from an engineering standpoint to enlarge the 12-inch joint use general facility, then City agrees to pay all capital cost and construction cost incurred in connection therewith. It is acknowledged that any replacement of said line for said purpose or construction of a parallel line will be solely for the benefit of City.

6. Cost of Connection: City shall bear all cost of connection to the joint use general facility including reasonable inspection charges as may be incurred by District in inspecting said connection and agrees not to make said connection to the District's system until such time as District has been notified of the time and date of said proposed connection, in writing.

7. Risk of Loss: The District shall bear the risk of loss or destruction of the general joint use facility as now constructed. If a parallel line is hereafter constructed by City then City shall bear the risk of loss with respect to the parallel line. If a replacement line is constructed, risk of loss shall be on City for the period of construction and after completion of the replacement line, District shall thereupon assume risk of loss or destruction of said replacement joint use facility line.

Handwritten initials: JLP, EAT

~~8. Metering Manhole: City agrees to construct and install~~ at its sole cost and expense a metering manhole whereby flows entering the joint use general facility, that is the subject matter of this agreement, can be measured and determined for purposes of reporting to Metro and for other purposes, and as between the parties, City shall be solely responsible for Metro charges due and payable Metro under the terms and conditions of the City's agreement with Metro ~~and District shall be held harmless therefrom by City.~~

9. Compliance with Engineering and Public Agency

Requirements: Each party agrees to abide by the rules and regulations of all governing agencies relating to the operation of sewer systems, particularly with the nature and type of sewage that can be discharged into the system and the City agrees to take such steps as may be reasonably necessary to eliminate storm or ground water being discharged into the joint use general facility in excess of minimum standards as established by general rules and regulations of Metro. Each party agrees to comply with reasonable engineering requests from the other party concerning the use, operation, and maintenance of the joint use general facility that is the subject matter of this agreement.

10. Application of other Terms and Conditions of Joint Use and Transfer of Facilities Agreement of February 23, 1968: It is agreed by and between the parties that the following terms and conditions of that certain Joint Use and Transfer of Facilities Agreement between the parties dated February 23, 1968, reference being made to said agreement as if incorporated in full herein shall apply and become a part of this contract, except where applicable, the terms thereof shall be reciprocally changed to refer to the City or District, and the word "District" shall be substituted for the word "City", and the word "City" shall be substituted for the word "District", where applicable:

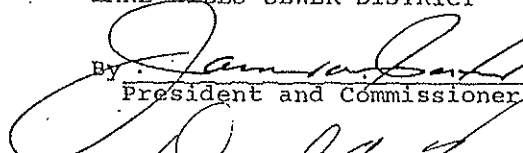
- (a) Section 1, Definitions, and subparagraph (a) City customer, (b) District customer, (c) capital cost or construction costs, (d) Metro or Metro facilities, (e) Use or utilize, and (f) Customer;
- (b) Section 6, Franchises and Easements;
- (c) Section 8, Compliance with Engineering and Public Agency Requirements;
- (d) Section 9, Payments Unconditional;
- (e) Section 10, Books and Accounts;

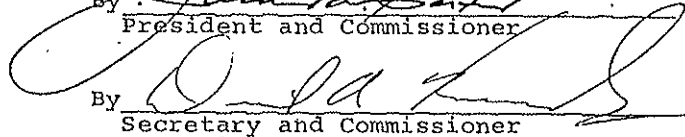
(f) Section 11, Conditions Precedent, excluding "and further subject to the condition precedent of concurrently herewith Lake Hills transfers and assigns all of its right, title and interest in and to the 18-inch trunk line and syphon, located within the City to Metro, upon terms and conditions satisfactory to Metro and the District.";

- (g) Section 12, Waiver;
- (h) Section 13, Remedies;
- (i) Section 14, Assignments;
- (j) Section 15, Entirety;
- (k) Section 16, Duration of This Agreement; and
- (l) Section 17, Fees.


IN WITNESS WHEREOF the parties have hereunto set their hands and seals and each warrant that they adopted ordinances and/or resolutions respectively authorizing execution of this agreement and the undersigned warrant their authority on behalf of the parties of this agreement to execute the same for and on behalf of their respective parties.

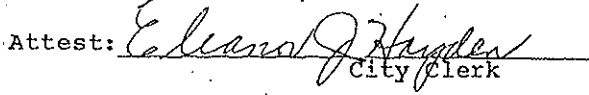
LAKE HILLS SEWER DISTRICT

By 
 President and Commissioner

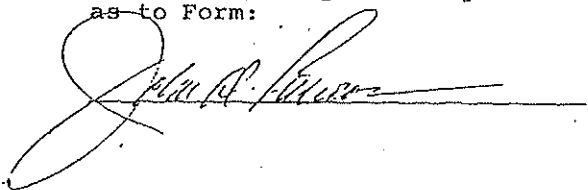
By 
 Secretary and Commissioner

CITY OF REYMOND

By 
 Mayor

Attest: 
 City Clerk

Approved by City Attorney
as to Form:



LAKE HILLS SEWER DISTRICT - CITY OF BELLEVUE

AGREEMENT

THIS AGREEMENT, dated this 15th day of July,
1970, between the CITY OF BELLEVUE, a municipal corporation,
under authority of Ordinance No. 1511, (hereinafter called the
"CITY"), and LAKE HILLS SEWER DISTRICT OF King County, Washington,
a municipal corporation, under authority of Resolution No. 70-55
(hereinafter called the "DISTRICT")

W I T N E S S E T H :

WHEREAS, the District was heretofore formed for the special purpose of providing sanitary sewer service for areas that were then located within King County and outside of the boundaries of any city or town; and

WHEREAS, the District has now expanded its sanitary sewer system and has enlarged its boundaries and City has likewise expanded its boundaries, by annexation, and as a result, the boundaries of City and District overlap, and now more than sixty percent (60%) of the territory of the District now lies within the City; and

WHEREAS, District has financed and constructed the sewage collection system sufficient to serve substantially all of the developed portions of the District and have planned for additional facilities to serve all presently undeveloped portions of the District, including a substantial part of the unsewered areas within the City which are located within and without the present existing boundaries of the District; and

WHEREAS, it is in the best interest of the residents of each of the parties to this agreement and in the best interest of the public generally that municipalities coordinate and cooperate in their sanitary sewer service planning to

the end that duplication of costs can be avoided and joint use made of existing and future facilities, and that a system serving an area within the District and the City be operated as a common sewer utility.

WHEREAS, R.C.W. 35.13.250 authorizes this agreement between the parties, providing for the maintenance and operation of sewage facilities of the City and District, providing for allocation of costs of maintenance and operation between the City and District, to provide for the financing and construction of new sewage facilities to serve unsewered portions of the district and city, to provide for temporary retention by the district of personal and real property, funds and assets, and providing for the eventual transfer of personal and real property, funds and assets of the District to the City, and reserving unto the District all powers, rights, duties, and privileges, including the right to fix rates and charges for sewer service, to issue bonds, to promulgate rules and regulations for the collection of such charges, and in general the powers of the District to do all things authorized prior to this agreement in the same manner and by the same means as heretofore provided by law, except as is otherwise provided for herein;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

Section 1. Definition of Terms. Wherever the following terms shall be used in this agreement they shall have the following meaning unless otherwise specifically indicated in the context in which they appear:

1. The term "District" shall mean Lake Hills Sewer District, a municipal corporation, located in King County, Washington, acting by and through its Board of Commissioners, and the term "District Sewer System" shall mean all sewage collection and transmission facilities now or hereafter owned by the Lake Hills Sewer District.

2. The term "City" shall mean the City of Bellevue, a municipal corporation, located in King County, Washington, acting by and through its City Council.

3. The term "Metro" shall mean the Municipality of Metropolitan Seattle, a municipal corporation.

4. The term "Service Charge" or "Sewer Service Charge" shall mean a monthly or other periodic charge for the use of sewer facilities.

5. The term "Side Sewer Permit Fee" shall mean a charge for the inspection of private side sewers to be connected to public sewerage facilities.

6. The term "Connection Charge" shall mean a charge to defray the cost of local and general facilities to real property seeking connection to public sewage facilities that has not been previously assessed for the general and special benefits conferred by such sewer improvements.

7. The term "Assessment" shall mean charges levied in Utility Local Improvement Districts or Local Improvement Districts for special or general benefits conferred by the construction of public sewerage facilities and shall include interest and any penalties thereon.

8. The term "Sewer System" shall mean all sewage collection and transmission facilities heretofore installed, acquired, or managed by the District or by the City, or hereafter installed, acquired, or managed within the District or hereafter installed, acquired, or managed by the District or by the City pursuant to this agreement, including all appurtenances to such facilities and all future additions and extensions thereof and subject to the contractual rights of the Bellevue Sewer System.

9. The term "City Sewer Utility" shall mean all sanitary sewerage facilities hereafter operated by the City.

10. The term "Actual Costs" shall mean those costs of labor, parts, equipment, supplies, maintenance expenses, engineering costs and replacement costs directly attributable to District's

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sewer system and the District's share of the overhead and directly related to the operation of the sewer system only. administrative costs of the City. The overhead and administrative costs of the City shall be apportioned between the City and the District on the following basis: The overhead and administrative costs of the City for operating the sewer system shall be determined and said overhead and administrative costs shall be apportioned between the City and the District in the same ratio as the miles of sewer line of the District's sewer system bears to the entire sewer system.

Section 2. Ownership of Properties. Consistent with the laws of the State of Washington and pursuant to this agreement, all the right, title and interest of the District in and to all real property, franchises, easements, sewers, force mains, pumping stations, lift stations, flushing stations, manholes, valves, fittings, appurtenances, all equipment and vehicles, and all personal property, cash, accounts receivable, investments and choses in action of all kinds which shall be in existence and on hand at the "Title Transfer Date" as hereinafter defined, including all additions thereto and extensions thereof hereafter acquired or constructed by the District shall be conveyed, transferred and quit claimed by the District to the City, effective on such date, subject to all of the provisions of this agreement. The City hereby agrees that until the Title Transfer Date the District shall have the right to use the City sewer utility and sewer system on the terms and conditions as the parties may hereafter agree.

The City shall pay nothing to the District in exchange for the property which the City shall acquire hereunder and the District shall pay nothing to the City for the facilities which the District is permitted to use hereunder and the covenants of this agreement to be performed by the parties shall constitute good and sufficient consideration for the conveyances contemplated by this agreement.

It is mutually agreed and recognized that the properties which the City may acquire pursuant to this agreement shall remain subject to all presently outstanding indebtedness of the District, bonded or otherwise, shall be subject to the

terms of the following resolutions of the District which are incorporated herein by this reference:

Lake Hills Sewer District Resolution Number: 47, 131, 210, 290 (as amended by 323), 332, 362, 509, 546, 627, 812, and shall be subject to all rights of the holders of revenue bonds of the District issued under said resolutions. The District will furnish certified copies of said resolutions to the City.

It is further agreed and recognized that the properties which the City shall acquire pursuant to this agreement shall at all times be operated for the benefit of all persons now or hereafter residing within the District and subject to the rights of all owners of property now or hereafter located within the District, whether such residents or property be inside or outside the City. All use shall be subject to the statutes, regulations, ordinances, and resolutions of the City or District. In particular, but not by way of limitation, trunk or lateral sewer lines and pumping facilities now or hereafter located within the City which are used for the transportation of sewage collected from any property located within the Sewer District shall continue to be made available for such use, provided that the users thereof shall pay reasonable nondiscriminatory fees and charges and comply with reasonable rules and regulations, all as provided in this agreement.

It is further recognized and agreed that this agreement is subject to the provisions of the outstanding agreements for sewage disposal between the District and Metro and between the City and Metro. Disposal of all sewage collected pursuant to this agreement shall continue to be made to Metro in accordance with such agreements or duly adopted amendments thereof. This agreement is further subject to any outstanding agreement of the District.

Section 3. Operation and Maintenance of Sewer Facilities.

From and after July 15, 1970 the City shall and agrees to maintain, operate, repair and replace all of the facilities of the Sewer System, whether located within the City or outside of the City, including all trunks, laterals, lift stations, pumping stations, flushing stations, vehicles, electronic warning system, office equipment, billing equipment and other facilities and equipment now or hereafter constructed, acquired or used as a part of the Sewer System or the business operated in connection therewith and including all sewers constructed or acquired by the City which the District shall use pursuant to this agreement. The City will furnish sewer service to all persons now or hereafter served by the Sewer System for and on behalf of the District.

At all times from and after said date, the City will maintain and keep the Sewer System and all additions and improvements thereto and all equipment used in connection therewith in good repair, working order and condition and will, at all times, operate such system and the business functions connected therewith in an efficient manner and at the lowest reasonable cost.

On the fifteenth (15th) day of each month, beginning Aug. 15, 1970, and continuing monthly thereafter until the Title Transfer Date, the City shall submit to the District an itemized statement of all actual costs incurred by the City in the operation and maintenance of the District Sewer System during the preceding month. Within sixty days from the receipt of such statement, the District shall pay to the City a sum equal to the total amount of said maintenance and operation costs. The District shall advance to the City on or before Aug. 15, 1970, a sum equal to sixty (60) days operating expenditure to be used as a revolving fund to meet costs incurred by the City for operation and maintenance of the District Sewer System during the two months period when District payments will lag

behind actual expenditures by the City. Such moneys shall ultimately²⁷ be applied toward the payment of the operating and maintenance costs incurred by the City during the two months immediately preceding the Title Transfer Date. Said itemized statement of cost shall be identified by code number, or otherwise, so that said cost as itemized can be identified with respect to the heading that said cost appears under in the annual budget hereinafter referred to. Further, said individual cost set forth in said itemized statement shall not discriminate in any respect against the District and said cost as itemized and submitted shall be based upon actual cost to the City and shall not vary from other costs incurred by the City solely due to the fact that said cost or expense is incurred within a geographic area that is located within the district's existing or future boundaries. Further, said costs shall not include any reserves or depreciation as a cost of operation and maintenance. Further, for purposes of this paragraph the term "Sewer System" shall not include any sewage collection or transmission facilities heretofore or hereafter installed, acquired, or managed by the City only and said itemized cost shall only include cost with respect to real and personal property, as defined in Section 2 of this agreement, that will be transferred to City on the "Title Transfer Date" and any cost incurred by City not related to property that will be conveyed to City, as defined in Section 2, will not be submitted to the District. District reserves the right to audit the books of account and records of City and all other data that would explain, verify or support said statement of costs.

An annual budget for each calendar year prior to the Title Transfer Date shall be prepared by the City and submitted

to the district at least thirty (30) days prior to its adoption. Said budget shall set forth the budget for the operation and maintenance of the sewer system, which for purposes of this paragraph shall refer to the District Sewer System which shall relate to the real and personal property that will be conveyed to the City on the Title Transfer Date as defined in Section 2 of this agreement. Said annual budget will be reviewed by the District and suggestions and corrections shall be submitted by the District to the City. However, said recommendations by the District shall be advisory only. No expenditure for operation and maintenance, other than emergency expenditures, shall be made by City unless the same is contained within the budget or is hereafter mutually approved by City and District. City shall maintain a record of all expenditures made in the operation and maintenance of the District Sewer System and shall furnish District not less than quarterly regular financial reports on the operation of said District Sewer System in sufficient detail and with code references, to enable District to relate said expenditures to said budget.

Section 4. Fixing and Collecting Charges: Until the Title Transfer Date, the District shall fix Service Charges, Connection Charges, Side Sewer Permit Fees and sewer extension contract payments for the District Sewer System. The District shall submit any proposed change in rates to the City thirty days before such change shall become effective thereon but determination of district is binding on the parties. Such charges shall be sufficient to pay District's proportion of all costs of maintenance and operation of the Sewer System including costs for the disposal of sewage by Metro, such as *as per* other costs may be incurred by the District in the performance

of its functions and such amounts as may, together with pledged assessments, be required to pay, secure payment of and provide covenanted coverage for, any revenue bonds of the District now or hereafter outstanding. The City shall perform the function of billing and collecting all monthly service charges, side sewer permit fees, connection charges and other amounts due the District, and shall maintain all records for accounting purposes incidental thereto. Such billing and collecting shall be performed for and on behalf of the District until the Title Transfer Date and the costs of such billing and collection shall be deemed to be a part of the cost of operation and maintenance of the District Sewer System. Enforcement of collection shall continue to be the responsibility of the District until the Title Transfer Date, and the City shall keep District fully informed as to all delinquencies.

All funds received by City shall be promptly deposited with the King County Treasurer in the District's maintenance fund, and the District shall make all determinations with respect to transfer of funds from the maintenance fund. ~~Prior to Title Transfer Date City agrees not to adopt any excise tax or other tax ordinance on revenue from the District system directly or indirectly without prior approval of the Board of Commissioners of District.~~

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Spencer

Section 5. Construction of Sewer Facilities by the District
Prior to the Title Transfer Date. Until the Title Transfer Date, the District shall have the right and power to continue to construct additions to or extensions of the District Sewer System located within the present or future District boundaries. For such purpose, the District shall have the right and power to carry out the provisions of its comprehensive plan, to adopt plans of additions and betterments thereto, subject to approval of agencies required by law to approve such plans, to annex territory, to issue and sell sewer revenue bonds, to apply to the payment thereof Service Charges, Connection Charges, Side Sewer Permit Fees and contract extension payments from persons or property served by the District Sewer System, whether located within or without of the City, or within or without the District, to create utility local improvement districts and to

levy and collect special assessments therein, all in the manner provided by law and this agreement, and to carry out any other activity, right, duty or privilege, not otherwise inconsistent with terms and conditions of this agreement.

If the District shall issue any sewer revenue bonds prior to the Title Transfer Date, such bonds shall be made expressly subject to the terms of this agreement and the City agrees from and after such Title Transfer Date to perform the covenants of said bonds and to assume and pay all of such bonds in accordance with their terms solely out of the revenue of the Sewer System and assessments pledged to the payment of such bonds. Neither such obligation nor any other obligation assumed by the City pursuant to this agreement shall be general obligations of the City.

Except as otherwise specifically provided herein, the District shall, during the period prior to the Title Transfer Date, cause all work to be performed in connection with the construction of additions to or extensions of the Sewer System located within present or future District's boundaries, including, but not by way of limitation, the engineering design of the sewer laterals, trunks, lift stations, pumping stations, flushing stations and appurtenances and the District shall let contracts for the work in the manner provided by law and upon completion of such work prepare as-built drawings therefor in form acceptable to Metro and reasonable engineering standards.

All plans and specifications for sewer improvements to be constructed by the District shall be submitted to and approved by the City prior to construction, however in the event of disagreement, the determination of District with respect to said sewer improvements shall be final and binding on the parties.

The City shall recommend change orders whenever same are deemed to be necessary during the course of construction.

As a part of the cost of construction to be borne by the District the District agrees to restore all streets disturbed by the construction of sewer improvements in accordance with applicable existing franchise requirements, to a condition equal to said streets' condition prior to construction.

The type of road restoration for all streets involved in a proposed improvement shall be determined in advance by a survey of the streets involved conducted jointly by a representative of the particular city or county which shall have jurisdiction over such streets and a representative of the District. The specifications shall state whether the respective city or county or the District or the contractor shall perform such restoration and resurfacing. All work undertaken on any city street shall be subject to the franchise agreement heretofore granted by City to District.

All easements which may be acquired subsequent to July 1, 1970, shall receive the approval of the City before execution and shall run jointly to the District and the City. City shall not make any charge for easements to District over City owned or controlled property.

A performance bond in the amount of not less than 100% of the contract price shall be furnished to the District and to the City jointly by the contractor before any work is commenced. Upon completion of any particular sewer improvements constructed by the District, the District may make final payment therefor in the manner provided by law. The title to all sewer lines, facilities, easements and rights of way hereafter constructed or acquired by the District shall inure to the City on the Title Transfer Date, without cost, subject to the provisions of this agreement,

and from and after the date of such completion, the City shall provide maintenance and operation of such sewer improvements in accordance with this agreement.

Section 6. Construction of Sewer Improvements by the City Prior to the Title Transfer Date. Prior to the Title Transfer Date, it is contemplated that the District will construct all sewer improvements within the District's existing and future boundaries. The City may, however, in the event that the District fails or refuses to proceed with the construction within six months after written request therefor by the City, unless delay is due to matters outside the District's control, create local improvement districts or authorize work by private contract within areas contemplated to be served by the District, provided that such improvements are constructed in conformity with the comprehensive plan of the District or amendments thereto and are approved by the District.

The City shall continue to collect assessments levied in local improvement districts of the City heretofore created for the purpose of constructing sewer improvements and to perform the obligations of outstanding local improvement bonds or warrants of the City. All charges and fees collected by the City from persons and properties connected to the Sewer System within District's boundaries and not for connection to a system constructed or managed by the City shall be deposited in the District Maintenance Fund. All properties heretofore assessed for sewer improvements constructed within the City local improvement districts shall have the right to connect to the improvements constructed therein upon payment of reasonable Side Sewer Permit Fees and Service Charges as provided herein. The District shall permit connection to the District Sewer System of any property which shall request such connection and which shall pay such regular connection charges and Side Sewer Permit Fees and Service Charges as shall be provided by general resolution of the District.

Section 7. Side Sewer Regulations and Permits. Each party to this agreement shall establish effective July 1, 1970, rules and regulations uniform with those of the District governing connections to and discharges into the District Sewer System. The said uniform rules and regulations shall govern the connection of all side sewers to the District Sewer System. The District shall continue to issue Side Sewer Permits and collect Side Sewer Permit Fees until the establishment of the aforesaid rules and regulations. Thereafter and until the Title Transfer Date, the City shall collect such permit fees and issue such permits for and on behalf of the District and deposit said funds to District's maintenance fund. After the Title Transfer Date, the City shall collect such fees as a part of the revenue of the Sewer System and shall issue such permits for and on behalf of the City provided only that such fees be non-discriminatory and limited to an amount equal to the cost of side sewer inspection. Such fees shall be collected from the respective property owners or sewer users applying for side sewer permits. Side Sewer Permit Fees fixed by the City shall be the same for all portions of the Sewer System, whether inside or outside the City. The City shall maintain an as-built drawing of all such side sewer connections.

Section 8. Title Transfer Date. The City may in its sole discretion, upon sixty days written notice to District, fix a date for the transfer of the System and properties of the District to the City (Title Transfer Date), provided either that all of the District's revenue bonds which are outstanding on the date and bonds subject to paragraph 5 of this agreement shall have been paid prior to the date of such notice or that the City shall have 60 days before the Title Transfer Date, assumed the obligation to pay such bonds and perform all covenants relating thereto then outstanding. The provisions of Section 9 to 11, inclusive, hereof shall apply and be effective immediately upon and after the Title Transfer Date.

Section 9. Assumption of District Obligations by the City.

The City shall assume, effective on the Title Transfer Date and pay in accordance with their terms solely out of the earnings and revenue of the Sewer System and assessments pledged thereto all obligations contingent and noncontingent of the District outstanding on the Title Transfer Date or thereafter incurred incident to this contract or in connection with winding up the affairs of the District, including but not limited to paying and securing payment of the principal of and interest on all of the District's then outstanding sewer revenue bonds and performance of all bond covenants in accordance with the terms thereof. Utility local improvement district assessments which have been levied by the District to secure the payment of such bonds shall continue to be collected by the King County Treasurer and applied to the payment of such bonds until all of such bonds shall have been paid or have been fully provided for.

Section 10. Obligation to Continue Service After Title

Transfer Date. From and after the Title Transfer Date, the City shall operate and maintain the Sewer System as a City utility in the manner provided by law, subject to the following requirements of this agreement:

a) The City shall for the useful life of those facilities of the Sewer System which serve persons and properties located within the District but outside of the City make such facilities available to serve such persons and property, upon payment of reasonable Service Charges, Connection Charges and Side Sewer Permit Fees as fixed by the City from time to time consistent with the provisions hereof.

b) The City shall provide sewer service to all portions of the District, whether inside or outside the City, equal in all respects to that provided to residents of the City and the City shall fix Service Charges in all portions of the District, whether located within the City or outside the City, no greater

than the lowest rate for the same class of service levied within any portion of the City. The term "class of service" as used in this paragraph shall refer to classification based on type of sewer use, i.e., single family residence, multiple residence, commercial, etc., City shall not discriminate in rates to customers of the District Sewer System outside the City based on geographical location or on jurisdictional bases.

c) The parties recognize that the District has financed its sewer facilities by assessments sometimes less than 100% of the total cost thereof. The parties also recognize that other sewer districts or private systems which may hereafter be operated by the City may not have fully paid for sewers equivalent to those installed by the District and/or may not have levied assessments upon benefited property in the same proportion of costs as those heretofore levied in the District, or may have constructed facilities of a standard substantially lower than that of the District Sewer System requiring replacement. Whenever such Districts or facilities are incorporated into the City Sewer Utility, the then outstanding revenue bonds of the District shall continue to have a first and prior lien upon the total net revenue of the District Sewer System and, wherever equitable treatment of the District residents shall require, the City shall either establish a differential rate structure for the area served by such other district or system or assess the cost of replacement of substandard sewers against the area served thereby or take such other action as shall avoid, insofar as possible, charging the residents or customers of the District directly or indirectly for costs properly chargeable to such other district or system.

d) The City shall fix rates and charges sufficient to operate and maintain the Sewer System, pay, secure and provide coverage for revenue bonds and repair and replace the facilities of the System as required. However, the revenues of the Sewer System

shall not at any time be applied by the City to the payment of the general expenses of City government not directly applicable to the construction, repair, replacement, administration, operation and maintenance of the Sewer System. City agrees to maintain separate accounting records so that this provision and enforcement thereof can be verified from time to time. The City may, however, subject to the foregoing limitation, combine its sewer and water systems into a single utility if such combination shall be deemed desirable by the City. No rate increase may be made by the City without first securing a complete rate analysis by an independent firm of engineers experienced in the development and operation of municipal public utilities. A copy of such rate analysis shall be furnished to any interested resident within the District's boundaries as of Title Transfer Date.

Section 11. District Funds. From and after the Title Transfer Date, the existing Bond Redemption Fund for the outstanding revenue bonds of the District shall continue to be held by the County Treasurer and invested or applied to the payment of such bonds in accordance with written directions given from time to time by the City, unless all of such bonds shall have been paid. The City shall make required deposits in such fund out of the earnings and revenue of the Sewer System. The City shall pay the County Treasurer the statutory fees provided for his services. Upon payment or provision for payment of all of such bonds, any District utility local improvement assessments thereafter collected by the King County Treasurer, shall be paid to the City quarterly and applied solely to the maintenance, operation, repair, replacement or improvement of the Sewer System and City agrees to maintain appropriate records demonstrating that this provision is being adhered to. Segregations of assessments requested after the Title Transfer Date shall be approved by the City, and the County Treasurer is hereby authorized to honor segregation approvals received from the City.

All cash in the maintenance fund or construction fund of the District, after payment of or provision for payment of all warrants drawn thereon prior to the Title Transfer Date, shall be immediately thereafter paid by the County Treasurer to the City and all money in such funds then on deposit in any bank or savings and loan association shall be withdrawn by the County Treasurer on the earliest practicable date after the Title Transfer Date, and together with all United States bonds held in such funds shall on said date be delivered by him to the City Treasurer upon receipt therefor and all such money and the proceeds of such bonds shall be applied solely to the maintenance, operation, repair, replacement or improvement of the Sewer System and shall not be diverted directly or indirectly to the general fund or operations of the City and City agrees to maintain appropriate records demonstrating that this provision is being adhered to.

Section 12. District Policies and Responsibilities of Commissioners. The parties contemplate that for a reasonable time after the Title Transfer Date and insofar as possible, the City will continue existing District policies for connection to the District Sewer System and for the construction of extensions of the District Sewer System and for the construction of extensions of said System by private developers in order to insure equitable treatment of the District's residents. During the time that present District bonds are outstanding, the District shall continue its corporate existence and the Commissioners of the District shall continue to function, provided that following the Title Transfer Date, the Commissioners only responsibility shall be limited to the enforcement of the provisions of this contract and to serve as an advisory commission to the City in the continuance of the District's policies and City shall assume all duties, obligations

and liabilities of District and its commissioners and shall hold all the commissioners harmless, including all costs of attorney's fees incurred for any claim or liability arising directly or indirectly from District's operation or failure to operate.

Section 13. Term of Agreement. This agreement shall be effective upon its execution by all the parties hereto and shall continue in effect for a term of ninety-nine (99) years from and after the date hereof.

Section 14. District Employees. The City shall offer employment to each person presently employed on a full-time basis by the District in a position of substantially equal or greater responsibility and without any decrease in salary or wages than that now held or paid to such district employee and all vacation and pension rights of such employee shall be preserved and not diminished in any respect. This provision shall apply to all District employees who shall qualify under standards applicable to all City employees and such offer and all terms thereof shall be made before the City shall undertake to perform operation and maintenance of the District Sewer System hereunder and District shall have the right to enforce this paragraph as condition precedent to City undertaking operation and maintenance.

Section 16. Hold Harmless and Payment of Expenses. It is contemplated that the District will continue its corporate existence for some time after the Title Transfer Date to perform such functions as may be required by law and to accomplish the winding up of its affairs. During such period, the City shall pay out of the revenues of the Sewer System all expenses of the District including, but not limited to, auditing costs, clerical, financial and legal services, commissioners' meetings and election costs and costs incident to final dissolution. Counsel for the District shall continue to prosecute and defend any then outstanding claims by or against the District and to recommend settlement thereof to the District. Upon approval by the District Commissioners of the settlement of any such claim or entry of judgment thereon, the City shall pay any District liability thereon out of the revenues of the City Sewer

Utility or shall receive any net proceeds thereof which may be due to the District and deposit same to the account of the City Sewer Utility. Solely out of the revenues of the City Sewer Utility and moneys received pursuant to this agreement, the City further agrees to pay and to save the District and its commissioners, employees, agents and advisors harmless from the payment and defense of any and all legal liability claimed or asserted for which the District is not insured and which is now or hereafter incurred in connection with the performance of the functions of the District and the duties of the commissioners thereof, including any costs, expenses and attorney's fees incurred in the defense of the District or its commissioners, employees, agents or advisors.

Section 17. Records Made Available and Documents Executed.

The District shall make available to the City all records which has pertaining to the construction of the Sewer System, schedules of Sewer Service Charges and Connection Charges and Charges in Lieu of Assessment heretofore made by the District. The District shall furnish to the City records of sewer connections which have been made by the District, sewer customers served by the District, as-built drawings of sewer mains and facilities and such other documents as the City may require to carry out this contract. All parties agree that they shall enter into and execute such instruments deeds or other documents as may be required to give effect to this agreement as may be approved by the parties' attorneys.

Section 18. Liability For Damages, Repair and Replacement.

The District shall be liable for all damages and claims resulting from the operation or use of the District Sewer System prior to the Title Transfer Date unless due to faulty maintenance or breach of this agreement by City and shall be entitled to expend funds for same whether in budget or not. The District shall also be liable for all damages and claims incurred in the construction of additions or extensions to or improvements of the District Sewer System prior to the Title Transfer Date. After the Title Transfer Date, the

City shall be solely liable for all damages or claims in connection with or arising out of the operation, maintenance, construction, repair or replacement of the Sewer System irrespective of date or period giving rise to said claim. The City shall from and after the Title Transfer Date have the duty to make necessary repairs or replacement of the Sewer System sufficient to maintain same in good repair and working order and to provide service to all residents and properties within the District or receiving service outside District as of Title Transfer Date in accordance with the provisions of this agreement.

Section 19. Insurance. Prior to and after the Title Transfer Date the City shall maintain not less than such levels of insurance coverage against casualty or loss to the System and against public liability as shall be required by District operations, assets, and obligations.

IN WITNESS WHEREOF, the parties have executed this agreement as of the day and year first above written.

CITY OF BELLEVUE

By [Signature]
City Manager

ATTEST:
[Signature]
City Clerk

LAKE HILLS SEWER DISTRICT

By [Signature]
Commissioner
By [Signature]
Commissioner
By [Signature]
Commissioner

JOINT USE AND TRANSFER OF FACILITIES
AGREEMENT

THIS AGREEMENT made and entered into this 23RD day of
February, 1968, by and between LAKE HILLS SEWER
DISTRICT of King County, Washington, a municipal corpora-
tion, hereafter referred to as "DISTRICT", and THE CITY OF
REDMOND, a municipal corporation, hereafter referred to
as "CITY",

W I T N E S S E T H:

WHEREAS, the District has heretofore constructed,
operated and maintained a sanitary sewer system, said system
extending outside the territorial boundaries of District
and since 1955 has been providing sewer service to the
public generally; and

WHEREAS, City has heretofore constructed, operated
and maintained a sewer system within the boundaries of
City and has provided sewer service to customers within the
boundaries of City; and

WHEREAS, City has heretofore annexed certain territory
to the City, pursuant to City Ordinance No. 331, adopted
February 27, 1964, thereby extending the boundaries of
City so that the territory of the City overlap portions of
the territory of District, resulting in an overlap of juris-
diction between City and District with respect to the pro-
viding of sewer service to real property within the over-
lap area; and

WHEREAS, at the time of said annexation, District had
theretofore constructed certain sewer facilities located
within the area annexed to the City pursuant to said ordinance,
and, subsequent to said annexation the District continued
to construct sewer facilities within the overlap area,
said sewer facilities being sized to provide sewer service

to the District and to areas not within the boundaries of the District at the time of construction of said facilities, and financing of said sewer facilities was accomplished by the District's sale of sewer revenue bonds; and

WHEREAS, subsequent to said annexation, the District contracted with land developers within the overlap area, whereby developers would construct local sewer facilities or collection systems, at developer's sole cost and expense, and conveyed said facilities to the District, in consideration of District agreeing to provide sewer service to the real property described in the developer extension agreements and with respect to the Braeburn pump and pressure line, the District agreed to reimburse the developer for the cost of said general facility, in that the same served real property other than that owned by the developer, said reimbursement to said developer being in accordance with the comprehensive plan of the District, however, with the exception of the Braeburn pump and pressure line, local facilities were constructed within the overlap area without capital outlay by the District for said construction; and

WHEREAS, both the City and District are legally capable of providing sewer service to the territory within the overlap area and a conflict of jurisdiction between the City and District has heretofore arisen and the parties are desirous of settling said conflict of jurisdiction, upon the terms and conditions as set forth herein, and City is desirous of providing sewer service to the real property within the boundaries of the City, including the real property within the boundaries of the City located within the overlap area and being in control of all incidents of said sewer service, including but not limited to the right

to bill for said sewer service and to maintain, operate and repair all sewer systems located within the City, including within the overlap area to the extent that said facilities are within the boundaries of City, and District is willing to allow City to take over and perform this function for real property located within the city boundaries, upon the terms and conditions set forth herein; and

WHEREAS, both parties desire to jointly use certain existing sewer facilities within the overlap area and sewer facilities hereafter constructed by either of the parties as may be necessary or convenient for the respective parties to provide sewer service to customers of the District and City and the parties are desirous of avoiding the duplication of facilities; and

WHEREAS, City and District will in the future construct additional local and general facilities which may be tributary to the other parties existing or subsequent sewer facilities; and

WHEREAS, the District and City determine that it is not economically desirable for each to construct separate general or local facilities, independently of the other, and agree that it would be to the best interest of the respective parties and the public generally if certain existing general and local facilities heretofore constructed or acquired by the District and future general and local facilities were to be jointly used by the respective parties, now, therefore,

IN CONSIDERATION of the mutual covenants and agreements set forth herein, the parties do hereby agree, pursuant to the authority set forth in R.C.W. 35.13.250 and R.C.W. 56.08 .060 as follows:

Section 1: Definitions. When used in this agreement, the following terms shall have the meaning and interpretation as the following as set forth hereinbelow:

A. City Customer: A customer receiving sanitary sewer service whose real property is located within the boundaries of the City of Redmond. This definition shall include a customer located within the City of Redmond who is likewise located within the existing boundaries of the Lake Hills Sewer District.

B. District Customer: A customer receiving sanitary sewer service, whose real property, receiving sanitary sewer service is located within the boundaries of the Lake Hills Sewer District, however excluding from this definition any and all customers located within the existing boundaries of the City of Redmond.

C. Capital Costs or Construction Costs: Shall mean the contract construction cost, including engineering, overhead, legal, sales tax, easement or franchise cost acquisition, interest cost during period of construction, attributable to the construction of the facility described and shall likewise include total cost of all labor, material and equipment in connection therewith.

D. Developer Extension Agreement: Shall mean those agreements between the District or the City on one hand and the land developer or owner on the other hand, whereby the developer constructs and installs the sewer collection system within a designated area defined in said agreement, at developer's expense, pursuant to plans and specifications prepared or approved by the municipal contracting agency, with the stipulation that the developer will convey the local system to the city or district, who will accept sewage and render maintenance and operation services to such constructed

collector system upon payment of the usual connection and service charges then applicable.

E. Metro or Metro Facilities: Shall refer to the Municipality of Metropolitan Seattle and to facilities constructed or owned by Metro.

F. Use or Utilize: Shall mean a residential or equivalent customer whose sanitary or industrial waste, or any part thereof, flows to or through the facility referred to.

G. Customer: Shall mean a single family residence receiving sewage service and being invoiced by either of the parties for sewer charges, and said term shall likewise include the conversion of non-residential customers i.e., commercial and other users, into residential customers or equivalents, by use of the formula
E equals $\frac{W}{F}$

E - equivalent residential customers

W - all water consumption by non-residential customers of the parties, less water that does not enter the sanitary sewer facilities for the month in question

F - 900 cubic feet

Section 2: Joint Use of Existing General and Local Facilities:

A. Identification of Existing Joint Use General Facilities:

The existing general facilities to be and that will be jointly used by District and City, all of which, as described, are within the boundaries of City, are as follows:

- (1) North area (Ardmore) trunk facility from manhole A-7 to manhole T-16.
- (2) Braeburn general facility consisting of lift station and pressure lines, the pressure line extending from the Braeburn pump located in plat of Braeburn to the 18" trunk line

sold by District to Metro.

- (3) Sherwood Elementary (N. E. 24 Street)
trunk line.
- (4) 172nd Avenue N. E. trunk sewer,
between Metro manhole on Highway 901
and center line of N. E. 40th Street.

B. Identification of Existing Joint Use Local Sewer
Facilities:

Existing joint use local sewer facilities shall include all sewer lines that are tributary to the existing joint use general facilities described in 'A' above or that are tributary to the 18" Metro trunk line, located within the boundaries of City, through which flows sewage, the source of which is from customers of District that are not located within the boundaries of City, a description and list of said joint use local sewer facilities being attached hereto marked Exhibit 1, reference being made thereto as if incorporated in full herein.

C. Amount and Date of Payment by City to District for
Use of Existing Joint Use General Facilities:

City shall, concurrently with the execution of this agreement, pay to the District, in cash, the sum of \$21,425.21, as payment by City to District for City's joint use of said facilities. Said amount is allocated among the said existing joint use general facilities as follows:

- (1) Ardmore trunk \$7,159.40
- (2) Braeburn pump and pressure line \$10,838.31
- (3) Sherwood Elementary (N. E. 24th Street)
trunk \$1,390.32.
- (4) 172nd Avenue N. E. trunk \$2,073.18

Said amount to be paid by City to District has been computed by determining the maximum number of potential City customers and the maximum number of potential District customers who

may use or utilize said facilities and applying said resulting proportion to the capital cost of said facilities. The aforesaid computation has been heretofore made by engineers for the City and District and approved by the respective governing bodies of said parties. District shall deposit the amount received for said respective existing joint use general facilities in the respective bond redemption fund that was created by the District in the resolution adopted by District to fund said improvement. If no fund has been yet established with respect to any of said improvements, then the amount received by District with respect to said improvements shall be deposited in the bond redemption fund as may be hereafter established to fund said improvement.

D. Amount and Date of Payment by City to District For Use of Existing Joint Use Local Facilities:

There shall be no payment by City to District for the joint use of existing joint use local facilities as defined in paragraph B above.

E. Repair, Maintenance and Operation of Joint Use Facilities:

City shall apply and provide all repairs, maintenance and operation reasonably necessary with respect to the existing joint use general and local facilities as described in A and B above, the same to be provided by City in accordance with sound maintenance procedures and in accordance with good engineering practice. City agrees to maintain said joint use facilities in good working order. District shall contribute a proportionate share of the cost of said repair, maintenance and operation expenses to City as follows:

- (1) Routine maintenance and operation: Due to the difficulty of certifying and keeping records as to the exact cost of routine maintenance and operation, the parties agree that District will pay to City the sum of 12¢ per month for each customer or equivalent of District using or utilizing any portion of said joint use facilities for the billing period. Said payment shall be made within fifteen days of receipt of invoice and City will invoice district every two months, subject to adjustment every five years by agreement.
- (2) Power costs, repairs, replacements, materials and supplies: In addition to the routine maintenance and operation charge referred to herein above, District shall pay to City the actual charge incurred by City for power cost, repairs, replacements materials and supplies attributable directly to said original joint use general and local facilities based on the following formula:

C equals E times R

C - charge to District

E - actual cost of power, materials supplies, repairs and replacements during billing period for joint use general and local facilities as described in paragraphs A and B of Section 2

R - ratio of District customers or equivalent actually using or utilizing any portion of said joint use general and/or local facilities during the billing period divided by the total number of District and City customers or equivalents utilizing said joint use general and local facility during said billing period.

Said charge as computed in accordance with this formula shall be paid to City by District within fifteen days of date of receipt of invoice for said charges, the City to invoice District every two months. It is agreed that each party shall supply to the other the total number of customers using or utilizing any portion of said joint use general or local facility for the months involved in said billing. In the event of any single replacement

or repair, for which the total cost of labor, materials and supplies used in connection therewith exceed the sum of \$ 1,000.00 , for said item of replacement or repair, then the same shall be deemed a major repair or replacement, and in computing the proportionate share of said cost to be paid by the District, the foregoing formula as set forth in (2) above shall be amended and in lieu of the term "actually using or utilizing" shall be substituted the term "potentially using or utilizing".

(3) Total Loss or Destruction: In the event of total loss or destruction of said joint use general or joint use local facility, each of the parties shall contribute to the capital cost of replacing the same in accordance with the formula set forth in (2) above, to-wit utilizing the term "potentially using or utilizing" as specified above, within the then existing boundary of the City and District as of the time that said facility is replaced.

(4) Replacement Due to Other Than Loss or Destruction: In the event that replacement of a general or local joint use facility is made by the City for purposes of providing sanitary sewer service to areas that the City may hereafter serve or to provide for connection to another facility hereafter acquired by the City, then in such event, the District shall not contribute in any event to the capital cost or any cost in connection with said replacement, unless the District, prior to replacement thereof agrees, in writing, that said replacement is of benefit to the District, in which event District shall share in the

proportionate cost of said replacement as if the same was due to destruction of said joint use facilities. Provided further that if any joint use general or local joint use facility is replaced by Redmond for said purposes or a substitute service provided, there shall be no additional cost to District and the transfer of service to the substitute or new facility will be without cost to District.

F. Insurance:

With respect to the joint use general or local facilities as hereinabove described, City shall be liable for all damages and claims resulting from the operation or use of said joint use facilities and City agrees to maintain a broad form public liability property and personal injury coverage, on an occurrence basis, in not less than \$100,000 per person and \$300,000 per occurrence liability and \$50,000 property damage.

Section 3. Jurisdiction.

A. Existing boundaries: City shall have the exclusive jurisdiction and control over providing of sanitary sewer service to real property within the City existing boundaries and District shall have exclusive jurisdiction and control over providing of sewer service to real property within District's existing boundaries, except such portion as is within the City existing boundaries. To the extent that both City and District have the legal right to extend their sanitary sewer system outside their respective boundaries, then both City and District shall retain its authority to extend its sewer service beyond its corporate limits, without the consent of the other, however each agrees that it will not extend sewer service into the corporate limits of the other party without the other party's prior written

consent, except as is authorized in paragraph (F) below. Jurisdiction and control shall mean and include, without limitation of said term, the right to establish and collect sewer service charges, connection charges, charges in lieu of assessment, without accounting to the other party for the same in any respect; to plan, engineer, construct, maintain, operate, reconstruct, repair, replace the sanitary sewer systems and all appurtenances thereto; to finance the same upon such terms and conditions as may be reasonable and appropriate; to enter into developer extension agreements or other agreements with respect to the sanitary sewer system.

B. Boundary Facilities: Existing boundary facilities, to-wit facilities installed by the District and located on the boundary line between the City and District existing boundaries, that can readily serve real property located within the District. To the extent that the customer can be readily served by the District, by direct connection to said facility, said real property and customers so connected will continue under the jurisdiction of District to the extent that said real property is located within 150 feet of said boundary facility and the property directly benefited by said facility will be considered within the jurisdiction and control of District, unless the parties otherwise agree in writing. Provided that if City desires to serve the customers located within the City existing limits, City will pay a proportionate charge of the cost of said facility providing sewer service.

C. Future boundaries: As annexations are made by the City of territories formerly within Lake Hills Sewer District, the issue as to whether or not the

jurisdiction and control of sewer facilities, then existing, within said newly annexed territory, shall be resolved by the parties, by mutual agreement, and in the event that the assumption of jurisdiction and control of said new territory, by the City, does not have an adverse economic or operational impact upon the District, then the District agrees to act reasonably in negotiating a joint use agreement, similar to this agreement with respect to said newly annexed area, or to execute an addendum hereto encompassing said newly annexed area.

D. Revenue: All service and connection revenue and all revenue of every type, kind and nature whatsoever, including charges in lieu of assessment, accruing within the jurisdiction of City shall be billed and collected by City after the effective date of this agreement and all sewer and connection revenue and all other revenue of every type, kind and nature whatsoever accruing prior to said effective date of this agreement shall remain the property of and shall be collected by District, and District reserves the right to collect unpaid accrued revenue and to enforce its statutory liens against the real property within City, to the extent necessary, to collect such prior accrued or unpaid charges.

E. Assumption of District Agreements: City does hereby expressly assume and agree to perform all written agreements heretofore entered into by District which are ~~listed on Exhibit 2 attached hereto~~ ^{that effect or} relate to the sewer system of District to the extent that the same is now located within the City, which agreements shall include, but shall not be limited to developer extension agreements, easements and sanitary sewer service agreements.

The City agrees to perform the same upon the same terms and conditions as were required of District and agrees to indemnify and save harmless District from any claim by parties to said agreement that the same have been breached, terminated or otherwise have not been fulfilled by City, as successor to District with respect to said agreements. Provided that nothing herein shall be construed as any limitation on the City's authority to set and collect a uniform rate for monthly sanitary sewer service, which may be a rate different than that set by the District for customers of the District.

F. Connection to Metro Facilities and to Joint Use General Facilities:

District retains the right and authority to make connections to Metro facilities and joint use general facilities as may be reasonably required by District in servicing real property located outside City boundaries. The parties have agreed, as set forth herein below, that future general facilities and local sewer facilities that are constructed by either City or District, which may serve both City and District, shall become joint use facilities, however, if for any reason future joint use facilities or existing joint use facilities are not appropriate for servicing District customers with sanitary sewer service, located outside the City boundaries, then District reserves the right to extend sewer lines within the boundaries of City, said lines to the extent that they are located within City boundaries, to be for the purpose of reaching Metro and existing or future joint use facilities. Provided, however, District shall cooperate with the City in regard to location and design of such connection lines and to submit plans and specifications

to the City for its approval thereof, which approval shall not be withheld unreasonably. Said lines shall be considered connection lines only and District shall not receive any revenue with respect to said lines to the extent that said revenue is from within City boundaries, however, City shall not have the right to utilize said connecting lines unless the parties agree that the same will become joint use facilities. To the extent that said connecting lines do not become joint use facilities, then District shall maintain and operate, repair and replace the same, however, City may at its option, elect to maintain, operate and repair the same at the expense of District, the maintenance and operation both routine and otherwise to be billed to the District and computed in accordance with the formula set forth in Section 2 E above.

Section 4. Transfer of Joint Use and Non-Joint Use Facilities:

This agreement is classified sewer facilities located presently within the boundaries of City, within the territory that is likewise in the boundaries of District, as follows:

- (1) Joint Use General Facilities
- (2) Joint Use Local Facilities
- (3) Local Facilities

District does hereby transfer, assign and set over to City all joint use general facilities, joint use local facilities and local facilities located within the existing boundaries of the City, that are likewise contained within the existing boundaries of District, subject to the District's continuing right of joint use of the joint use general facilities and joint use local facilities on the terms and conditions as set forth

herein, and capacity for the existing and future use of District to said joint use general and local facilities are hereby reserved unto District. Said facilities are transferred and assigned to City as of effective date of this agreement and from said date and thereafter, City shall have the title, custody and control and ownership of said facilities, located within the existing boundaries of City, and City shall be completely responsible for all maintenance, operation and repair of the same and all liability in connection therewith, and shall have the exclusive jurisdiction and control over the same subject to the District's continuing right of joint use and reservation of capacity as outlined hereinabove and in this agreement.

Section 5. Future Joint Use General and Local Facilities:

It is understood that as the City and District expand their respective boundaries and sanitary sewer service is required within said expanded boundaries, that new general and local joint use facilities may be required in order to avoid duplication of facilities. The parties agree that in the event that in development of real property, not presently served with sanitary sewer service, either party foresees that a proposed new facility may benefit customers or potential customers of the other party, then said facilities may become joint use general or joint use local facilities upon the following terms and conditions:

A. Planning. Either party contemplating the development of a sewer facility that could serve customers of the other party, shall in planning said new facility make said plans known and shall provide all preliminary engineering data to the other party as soon as the initiating party determines there is a need for said sewer facility.

Each of said parties then agree to jointly review said data and to cooperate in providing one another with the requirements of the other party with respect to said planned facility. Upon full review, the parties shall then determine, in writing between the parties, whether or not said facility plan can be feasibly utilized, from an engineering and economic standpoint, as a joint use facility, and if the determination is in the affirmative, by both parties, in writing, then all final plans, drawings and specifications, and engineering data, shall be prepared by the initiating party's engineering consultants, and shall be of such size and design as may be necessary, taking into consideration the potential use of said facility by customers of the other party. The initiating party shall be the party who initially determines that said joint use facility is necessary or feasible, and the construction of which would be within the initiating party's then existing boundaries, however, in the event that a joint use facility is required, by either of the parties, and the major portion of the construction of the same would occur within the other party's then existing territory, then the initiating party shall merely refer the request to the other party, and the other party, upon concurring that said joint use facility is necessary or desirable, shall take up and commence the planning, engineering and design of said proposed joint use facility, and shall thereafter be deemed the initiating party. After the parties have agreed in writing that the same shall be a "joint use facility" either local or general, then the parties shall proceed in accordance with the terms and provisions of this section.

B. Construction: The initiating party shall complete the design, plans, drawings and specifications for said new joint use facility which shall be submitted to the other party for approval, and upon approval by the other party of said drawings, plans and specifications, the initiating party and the other party shall, through their respective engineers, compute the estimated costs thereof and the proportionate costs to be borne by each of the parties of said new joint use facility, using the same criteria and methods as was utilized in determining the proportionate costs of the parties for the existing joint use general and local facilities, as referred and identified in Section 2 hereof. The proportionate share of the cost of said new joint use facility, by the other party shall be then arrived at and upon the demand of the initiating party, the other party shall deposit with the initiating party an amount equal to the other party's capital contribution to said new joint use facility, whereupon the initiating party shall submit the same to public bid and contract to construct the same. In the event that the capital costs contribution deposit is not made within thirty days after demand therefor by the initiating party, the initiating party may then declare that said facility will not be a new joint use facility and shall proceed to construct the same as if it were a facility servicing the initiating party only.

After construction of the same has been completed, the capital cost to be contributed by each of the parties towards said joint use facility shall be re-computed, utilizing the actual capital costs, based on said contract and an adjustment in the proportion to be paid by each of the

parties shall be made accordingly. It is understood and agreed that in computing the capital cost of said facilities the City and District will determine the existing and potential customers of the City and District that will use or utilize said new joint use general or local facility and shall apply the resulting proportion to the capital cost of said facility.

C. Connection to New Joint Use Facility: The cost of connecting the sewer system of the non-constructing party to the new joint use facility shall be borne by the party seeking connection thereto.

D. Completion of New Joint Use Facilities: Upon completion of said new joint use general or local facilities, pursuant to this section of this agreement, then the same shall thereafter be treated and deemed as if it were originally described as an existing joint use general or local facility and all the terms and provisions with respect to the existing joint use general and local facilities, as originally described and set forth in Section 2 hereof, shall apply except that the terms thereof shall be reciprocally changed to refer to the City or District, and the word District shall be substituted for the word City, should the joint use facility, as constructed, be located within the boundaries of the District.

Section 6: Franchises and Easements:

Each of the parties hereto agree to cooperate, reciprocally, in the granting and obtaining of easements and franchises as may be necessary for the construction of sewer lines and appurtenances within the boundaries

of the other party, the construction of said sewer lines being subject to the terms and conditions of this agreement.

Section 7: Risk of Loss and Destruction:

The City shall bear the risk of loss or destruction of any local facility or non joint use local or general facility located within the boundaries of the City and the District shall likewise bear the risk of the loss or destruction of all local facilities or non-joint use facilities within the boundaries of District, excluding from the boundaries of District, that portion of the City of Redmond located within the existing boundaries of the District.

The risk of loss or destruction for joint use general or local facilities shall be computed in accordance with the formulas set forth hereinabove.

The party having the responsibility for the operation and maintenance of an existing or future joint use general or local facility will, as between the parties, be liable for all damages and claims resulting from the operation of use of said sewer line as may be asserted against either the City or District by any third party, excluding claims for maintenance and operation, power, replacement or repair expense.

Section 8: Compliance with Engineering and Public Agency Requirements:

City and District agree to abide by the rules and regulations of all other governing agencies regarding the operation of sewer systems by municipalities in districts generally, particularly with respect to

the nature and type of sewage that can be discharged into the other system. Each agrees to take such steps as may be reasonably possible to eliminate storm or ground water being discharged into the joint use facilities in excess of minimum standards as established by general rules and regulations of Metro.

It is further agreed that the District and City will install such metering manholes or other devices as may be necessary, to determine the flow entering the Metro system and/or the joint use facilities, to determine the respective parties debts and obligations to Metro, pursuant to the parties' agreement with Metro and/or to determine whether or not excess storm or ground water is being discharged into the joint use facilities.

Each party agrees to comply with reasonable engineering requests from the other party concerning the use, operation and maintenance of the joint use facilities.

Section 9. Payments Unconditional:

The payments required to be made pursuant to this agreement shall be made regardless of any contingency or happening whatsoever, including the temporary interruption of services by any of the joint use facilities.

Section 10. Books and Account:

Both parties shall keep full and complete books of account, including but not limited to records of the number and nature of sewer customers and the user equivalent, and location of said customers within the District and City, expenses of maintenance and operation of the respective sewer collection systems, and in general,

fully disclose the financial condition and operating results of each district. Such books of account will be open at all times to inspection by either of the parties hereto or the duly authorized agents thereof.

City shall maintain separate and distinct books of account, or in the alternative, designate certain expenses within the books of account maintained by the City in the normal course of business, so as to differentiate those maintenance, operation and other costs and expenses attributable to use of jointly used facilities.

Either agency may request an annual audit by the other agency of the books and records of the other party, in which case such books will be made available to the other, and the cost of such audit shall be borne by the agency requesting the same.

Each party agrees to maintain records of volume of sewage discharged into the parties' respective systems when such volumes are measured, and records of the number of residential customers or equivalent of the respective districts on a monthly basis.

Section 11: Conditions Precedent.

It shall be a condition precedent to the effectiveness of this agreement that approval be obtained from such governmental agencies as may be required, if any, of the terms and conditions of this agreement; and if approval is obtained from said agencies, this agreement shall be binding upon the parties, their heirs, successors and assigns.

This contract is made and executed subject to those certain agreements between the parties, and the Municipality of Metropolitan Seattle, said agreements having been heretofore entered into between said parties and Metro,

reference being made to said contracts as if incorporated in full herein, and further is subject to the condition precedent that concurrently herewith, Lake Hills transfers and assigns all of its right, title and interest in and to the 18 inch trunk line and siphon, located within the City to Metro, upon terms and conditions satisfactory to Metro and the District.

Section 12: Waiver:

No waiver by either party of any term or condition of this agreement shall be deemed or construed as a waiver of any other term or condition, nor shall a waiver of any breach be deemed to constitute a waiver of any subsequent breach, whether the same or different provision of this agreement.

Section 13: Remedies:

In addition to other remedies provided by law, this contract may be specifically enforced by mandatory injunction, injunction or specific performance, by either party.

Section 14: Assignments:

Either party shall have the right to assign this agreement or its rights or obligations hereunder, in whole or in part, to any metropolitan authority, governmental entity or any other entity, without the prior written consent of the other party, and neither shall have the right to terminate its obligations hereunder by dissolution or otherwise, without first securing the written consent of the other party.

Section 15: Entirety:

This agreement merges and supercedes all prior negotiations, representations and agreements between the parties hereto, relating to the subject matter

hereof, and constitutes the entire contract between the parties with respect to the subject matters expressed herein.

Section 16: Duration of This Agreement:

This contract shall be in full force and effect, in perpetuity, or until such time as Metro should construct facilities rendering this joint use facilities unnecessary.

Section 17: Fees:

In the event either of the parties places this agreement in the hands of an attorney for enforcement, or in the event that suit is instituted to enforce this agreement, the defaulting party, agrees to pay all reasonable attorney's fees, engineering fees and costs and expenses related to said action in addition to any other damages or other relief sought, obtained or granted by the court.

IN WITNESS WHEREOF the parties have hereunto set their hands and seals and each warrant that they have adopted ordinances and/or resolutions, respectively, authorizing the execution of this agreement and the undersigned parties warrant their authority on behalf of the parties to this agreement to execute the same for and on behalf of the respective parties.

LAKE HILLS SEWER DISTRICT

BY [Signature]
President

BY [Signature]
Secretary

CITY OF REDMOND

BY [Signature]
Mayor

ATTEST:

Eleanor J. Hayden
City Clerk

Approved by City Attorney as to Form:

John A. Law

Appendix C
Sewer Utility Ordinances and
Code

Chapter 24.04 SEWER UTILITY CODE

Sections:

| | |
|-----------|--|
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| 24.04.020 | Purpose. |
| 24.04.030 | Applicability and compliance with other laws. |
| 24.04.040 | City not liable. |
| 24.04.041 | Conflict of provisions. |
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| 24.04.215 | Unauthorized and prohibited discharges. |
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| 24.04.240 | Regulations of other agencies. |
| 24.04.250 | Fees for permits/approvals/specific services. |
| 24.04.260 | Connection charges. |
| 24.04.270 | Sewer rates. |
| 24.04.275 | Capital recovery charges. |
| 24.04.280 | Code violations, enforcement, and penalties. |

24.04.010 Title.

This chapter shall be known as the sewer utility code and shall be referred to herein as the “code.” (Ord. 5964 § 1, 2010.)

24.04.020 Purpose.

This code is enacted as an exercise of the city of Bellevue’s (“city”) police power as set forth in Section 11 of the Washington Constitution to protect and preserve the public health, safety and welfare. The purpose of this code shall be liberally construed to:

- A. Provide for the planning, security, design, construction, use, maintenance, repair and inspection of public and private sanitary sewer systems;
- B. Establish programs and regulations to provide for the appropriate use of public and private sanitary sewer systems;
- C. Provide for the enforcement of the provisions of this code, the engineering standards and related city manuals and code provisions; and
- D. Provide for and promote the health, safety and welfare of the general public and not to create, establish, or designate any particular class or group of persons who may be especially protected or benefitted. (Ord. 5964 § 1, 2010.)

24.04.030 Applicability and compliance with other laws.

- A. This code supplements and references certain provisions of the Bellevue City Code, including but not limited to Chapter 1.18 BCC, and other city ordinances and regulations regarding protection of the public and private sanitary sewer system.
- B. Approvals, decisions, and permits granted under this code are not waivers of the requirements of any other laws, nor do they indicate compliance with any other laws. Compliance is still required with all applicable federal, state, and local laws and regulations.
- C. Compliance with the provisions of this code, the engineering standards, permits or other approvals, or rules promulgated by the director do not necessarily mitigate all impacts to the environment. The primary obligation for compliance with such regulations and standards is prevention of environmental harm, which ultimately is placed upon property owners and responsible parties as defined in this code and Chapter 1.18 BCC. (Ord. 5964 § 1, 2010.)

24.04.040 City not liable.

- A. Nothing contained in this code is intended to nor shall be construed to create or form the basis for any liability on the part of the city, or its officers, employees or agents, for any injury or damage resulting from the failure of property owners or responsible parties to comply with the provisions of this code, engineering standards, or related manuals, or by reason or in consequence of any inspection, notice, order, certificate, permission or approval authorized or issued in connection with the application or enforcement of this code, engineering standards, or related manuals, or by reason of any action or inaction on the part of the city related in any manner to the application or enforcement of this code, engineering standards, or related manuals by the city, its officers, employees, or agents.
- B. Nothing in this code, engineering standards, or related manuals shall impose any liability on the city or any of its officers, employees, or agents for cleanup or any harm relating to sites containing hazardous materials, wastes or contaminated soil.
- C. Nothing contained in this code, engineering standards, or related manuals shall require city involvement or enforcement of this code for private disputes occurring between property owners. (Ord. 5964 § 1, 2010.)

24.04.041 Conflict of provisions.

Should a conflict occur between the provisions of this code, the engineering standards or manuals adopted by the city in relation to this code, or between this code,

the engineering standards and related manuals with laws, regulations, codes or rules promulgated by other authority having jurisdiction within the city, the most restrictive requirement shall be applied, except when constrained by federal or state law, or where specifically provided otherwise in this code. (Ord. 5964 § 1, 2010.)

24.04.042 Severability.

If any provision of this code, engineering standards, or related manuals, or its application to any person or circumstance, is held invalid by a court of competent jurisdiction, the remainder of the code, engineering standards, or related manuals, or the application of the provision to other persons or circumstances is not affected, and to this end the provisions of this code are declared to be severable. (Ord. 5964 § 1, 2010.)

24.04.050 Definitions.

Except where specifically defined herein, all words used in this code shall carry their customary meanings. Words used in the present tense include the future, and the plural includes the singular; the word “shall” is always mandatory, whereas the word “may” denotes a use of discretion in making a decision. The following words and phrases, when used in this code, shall have the following meanings:

A. A Definitions.

“As-built” means a final drawing of the actual installation of the structures, materials and equipment.

B. B Definitions (Reserved).

C. C Definitions.

“Capital recovery charge” means a monthly charge imposed on improvements, developments, redevelopments or existing structures that place additional demand on each utility system after January 1, 1997. The capital recovery charge shall be based on an allocation of the utility plant in-service costs plus interest and the number of single-family equivalents served by each utility.

“Connection charges” means charges imposed as a condition of providing utility service so that each connecting property bears its equitable share of the costs of the public sewer system and the utility’s share of the cost of any regional sewer collection system and of the costs of facilities that benefit the property. Connection charges include latecomer charges, capital recovery charges and direct facilities charges.

D. D Definitions.

“Director” means the director of the Bellevue utilities department, or his/her designated representative or other person designated by the city manager.

E. E Definitions.

“Emergency” means any natural or human-caused event or set of circumstances which disrupts or threatens to disrupt or endanger the operation, structural integrity, or safety of the public sewer system; endangers the health and safety of the public; or otherwise requires immediate action by the utility.

“Emergency management plan” provides the foundation, framework and guidelines for initiating and maintaining direction and control of the utility’s response efforts during all emergency or disaster scenarios. The emergency management plan is consistent with and supports the city of Bellevue emergency operations plans and emergency response plans maintained at the regional, state and federal levels of government.

“Emergency operation plan” provides guidance for mitigation, preparedness, response and recovery operations including disaster and emergency responsibilities and procedures, training and community education. The plan provides for the coordination of operations throughout the city during emergencies and disasters, and the best utilization of the city’s resources. The plan meets the requirements of a comprehensive emergency management plan as described in Chapter 118-30 WAC.

“Engineering standards” means the city’s utility engineering standards, which include minimum standards for the design and construction of water, storm and surface water drainage and sanitary sewer facilities.

F. F Definitions.

“FOG” means fats, oils and grease.

G. G Definitions (Reserved).

H. H Definitions (Reserved).

I. I Definitions.

“Industrial waste” means any liquid, solid or gaseous substance or combination thereof, resulting from any process of industry, manufacturing, commercial food processing, business, trade or research, including development, recovering or processing of natural resources.

J. J Definitions (Reserved).

K. K Definitions (Reserved).

L. L Definitions.

“Latecomer agreement” means a contract that provides for the reimbursement of costs to developers who construct facilities that directly benefit other properties.

“Licensed side sewer contractor” means any person, partnership, corporation or association duly qualified and competent to do work incident to the construction or repair of side sewers under permits issued under this code and who shall have been duly licensed by the utility.

M. M Definitions (Reserved).

N. N Definitions.

“Nonpolar fats” means fats, oils or grease of animal or vegetable origin.

O. O Definitions (Reserved).

P. P Definitions.

“Polar fats” means fats, oils or grease of mineral origin.

“Pretreatment device” means any approved device, structure, system or method used and maintained for the purpose of bringing a waste stream within acceptable limits and standards of quality prior to its discharge to the public sewer system.

“Private sewer system” means any part of the sewer system that is not part of the public sewer system as defined in the code.

“Procedure” means a procedure adopted by the utility, by and through the director, to implement this code, or to carry out other responsibilities as may be required by this code, engineering standards, related manuals, or other codes, ordinances, or resolutions of the city or other agencies. “Procedure” as defined herein is often referred to as a standard operating procedure or SOP.

“Property owner” means any individual, company, partnership, joint venture, corporation, association, society or group that owns or has a contractual interest in the

subject property or has been authorized by the owner to act on his/her behalf, including but not limited to an agent, contractor, applicant, or developer.

“Public sewer system” means the sanitary sewer system owned and operated by the utility.

Q. Q Definitions (Reserved).

R. R Definitions.

“Residential structure” means a single-family or duplex structure.

S. S Definitions.

“Sewage” means waste discharged from the sanitary facilities of buildings and includes industrial wastes.

“Sewer facility” means any facility for the conveyance or storage of sewage, whether part of the public sewer system or a private sewer system, which is connected to or intended to be connected to the public sewer system.

“Sewer main” means a pipe designed or used to transport sewage, excluding side sewers.

“Sewer pretreatment” means the treatment of industrial waste before discharge to the public sewer system.

“Sewer service” means providing for the disposal of sewage from a structure into the public sewer system.

“Sewer system plan” means the comprehensive wastewater plan for the utility, as adopted by the city council, as now or hereafter amended.

“Side sewer” means a conduit extending from the public sewer main to the connection with a building’s plumbing system.

“Side sewer stub” means that portion of the side sewer in the right-of-way or easement dedicated to the utility.

Standard Operating Procedure or SOP. Refer to the definition of “procedure.”

“Structure” means a combination of materials constructed and erected permanently on or under the ground or attached to something having permanent location on or under the ground. Not included are residential fences, retaining walls less than 30 inches in height, rockeries less than 30 inches in height and similar improvements of a minor character.

T. T Definitions (Reserved).

U. U Definitions.

“Unsafe condition” means any condition on any premises, or in any private sewer system thereon, that is a hazard to public health, safety, welfare, or environment that does or may impair or impede the operation or functioning of any portion of the public sewer system or that may cause damage thereto.

“Utility” means the sewer utility component of the waterworks utility of the city of Bellevue, administered as a part of the Bellevue utilities department, as provided by Chapter 3.38 BCC.

“Utility developer extension agreement” means a contract between the utility and a property owner and/or developer that provides for plan review and inspection of sewer system facilities that satisfy all applicable code requirements.

“Utility service area” means that service area defined on the map filed with the city clerk under Clerk’s Receiving No. 8893, and as may be expanded through subsequent interlocal agreements, annexations and special utility district assumptions.

- V. V Definitions (Reserved).
- W. W Definitions (Reserved).
- X. X Definitions (Reserved).
- Y. Y Definitions (Reserved).
- Z. Z Definitions (Reserved). (Ord. 5964 § 1, 2010.)

24.04.060 Authority of the utility.

The utility, by and through its director or his designee, including enforcement officers, shall have the authority to:

A. Develop, adopt and carry out procedures as needed to implement this code and to carry out other responsibilities of the utility, including, but not limited to, emergency management and operations plans, procedures pertaining to the billing and collection of sewer service charges and all other fees and charges imposed pursuant to this code and procedures for periodic adjustment of fees and charges imposed pursuant to this code;

B. Prepare, adopt, update, administer and enforce, as needed, engineering standards to establish minimum requirements for the design and construction of sewer facilities and requirements for protecting existing facilities during construction. The engineering standards shall be consistent with this code and adopted city policies;

C. Administer and enforce this code and all procedures relating to the planning, acquisition, design, construction, inspection, maintenance, management, operation and alteration of the public sewer system, including capital improvements, and relating to the design, construction and inspection of private sewer systems;

D. Enter into contracts pursuant to Chapter 35.91 RCW, the Municipal Water and Sewer Facilities Act, including contracts that provide for the reimbursement of owners constructing facilities (latecomer agreements) and agreements with private property owners for the extension of the sewer system (utility developer extension agreements);

E. Advise the city council, city manager and other city departments and commissions on matters relating to the utility;

F. Prepare and recommend the sewer system plan referenced in BCC 24.04.070 for adoption by the city council and implementation by the utility;

G. Perform or direct the performance of financial review and analysis of the utility's revenues, expenses, indebtedness, rates and accounting and recommend budgets, rates and financial policy for adoption by the city council;

H. Develop and implement programs related to sewer use, including an industrial waste management program for protection of the public sewer system and a septic system management program;

I. Carry out other responsibilities as required by this code or other city codes, ordinances or regulations consistent with the Bellevue comprehensive plan; and

J. Take enforcement action, to the extent allowed by law, pursuant to Chapter 1.18 BCC. (Ord. 5964 § 1, 2010.)

24.04.065 Duty to serve.

The utility is responsible for providing sewer service to all customers within the utility service area, subject to the requirements of this code, other provisions of the Bellevue City Code and applicable state law. This responsibility is separate from contractual

obligations to provide sewer service outside the utility service area. (Ord. 5964 § 1, 2010.)

24.04.067 Service interruptions.

Notwithstanding BCC 24.04.065, the utility does not guarantee that sewer service will be continuously available within the utility service area. Sewer service may be temporarily unavailable due to a system failure, emergency, construction or maintenance or other unforeseen circumstances. The utility is not responsible for costs or damages incurred by property owner, tenant or customer due to an interruption in service, whether planned or unplanned. (Ord. 5964 § 1, 2010.)

24.04.070 Sewer system plan.

A sewer system plan, also referred to as the city's comprehensive wastewater plan, shall be developed by the utility for review and adoption by the city council as required by state law. The utility shall recommend supplements or updated plans for adoption by the city council as needed. (Ord. 5964 § 1, 2010.)

24.04.080 Reserved.

(Ord. 5964 § 1, 2010.)

24.04.100 Connections or modifications to the sewer system.

A. Connection to the Sewer System Required.

1. All structures which contain facilities for the disposal of sewage shall connect to the public sewer system unless a variance is granted pursuant to subsection B of this section. Where sanitary sewer service is not available and is required, the utility may require the property owner to install a sewer main extension.

2. Connections or modifications to the sewer system, including, but not limited to, the installation or repair of sewer mains or side sewers, and abandonment or removal of any structure connected to the public sewer system shall occur only if:

- a. Approval has been received from the utility (see BCC 24.04.120);
- b. All applicable requirements of this code and utility procedures have been met;
- c. All applicable engineering standards have been met or alternative standards have been approved by the utility as substantially equal;
- d. The property owner has paid all applicable fees and charges;
- e. Any existing on-site sewage disposal facilities are disconnected in accordance with health department requirements; and
- f. The property is within the utility service area or within an area served by the utility through agreement with an adjacent jurisdiction.

B. Variance from the Sewer Connection Requirement.

1. Any property owner may apply for a variance from the sewer connection requirement to allow for an on-site septic disposal system.

2. The director shall approve a variance only if all of the following decision criteria are met:

- a. The property is more than 200 feet or such other distance as may be required by King County board of health on-site sewage regulations, via dedicated

easements and/or right-of-way from the existing public sewer system or, in the case of subdivisions, the exterior boundary of the subdivision is more than 660 feet, measured in the same manner, from the existing public sewer system;

b. The proposed septic system will not have an adverse environmental effect on potable water wells, ground water, streams or other surface bodies of water;

c. The proposed septic system is in compliance with all applicable federal, state and local health and environmental regulations;

d. The cost of providing sewer service to the structure will result in an economic hardship. Economic hardship is defined as an unrecoverable cost equal to or exceeding 20 percent of the fair market value of a building site with utilities in place on which the structure is to be located.

3. Any variance issued by the director shall be subject to the following conditions:

a. The applicant must obtain King County health department approval of the septic tank system and must obtain any other permits which may be required by law for such system; and

b. The applicant shall record an agreement, in a form approved by the city and referred to herein as "agreement to connect," with the King County department of records and elections. Such agreement shall require payment of all connection charges at the time of actual connection to the system. The agreement shall be a covenant which runs with the land and is binding on the owners and successors in interest of the property. The agreement shall provide that the structure shall be connected to the public sewer system at such time as the system is available and that the property owner will not protest the formation of any future LID or ULID for extension of a sewer system that would serve the property. The sewer system shall be deemed available for purposes of this requirement whenever the structure can be connected to the system by an extension of 200 feet or less or, in the case of a subdivision, the boundary of the subdivision can be reached by an extension of 660 feet or less from the system.

4. The applicant may appeal a decision of the director denying a variance application pursuant to the Process II appeal procedures of LUC 20.35.250. (Ord. 5964 § 1, 2010.)

24.04.115 System ownership.

A. Utility Ownership of Sewer Facilities.

1. The utility owns all sewer facilities in public right-of-way and in easements dedicated to the public and accepted by the utility, except to the extent that private ownership is otherwise indicated as a matter of record. Such facilities typically include mains, pump stations and side sewer stubs (that portion of the side sewer between the public sewer main and the edge of right-of-way or easement line).

2. The utility may acquire existing private sewer facilities, provided:

a. Utility ownership of the facility would provide a public benefit;

b. Necessary and appropriate property rights are offered by the property owner at no cost to the utility;

c. The facility substantially meets current standards, as determined by the utility, or is brought up to current standards by the owner;

d. The utility has adequate resources to maintain the facility; and

e. The facility is transferred to the utility by bill of sale at no cost to the utility.

B. Private Ownership of Side Sewers. Side sewers located on private property are exclusively owned by the underlying property owner(s), unless otherwise assigned or dedicated by easement to and accepted by the city, except to the extent that public ownership is otherwise indicated as a matter of record. Property owners shall be responsible for the development, maintenance, and repairs of private side sewers and their appurtenances, including but not limited to check valves, cleanouts, and pumps. (Ord. 5964 § 1, 2010.)

24.04.120 Permits – Approvals.

A. General. The utility shall administratively develop submittal requirements for the various utility permits/approvals.

B. Side Sewer Permit.

1. A side sewer permit is required to construct a side sewer and/or to make any additions, repairs or connections to an existing side sewer.

2. If required, a side sewer permit application shall be made submitted and attested to by the property owner or his or her licensed and bonded contractor.

3. Side sewer permits for commercial projects, including multifamily structures, may be issued as part of the utility developer extension agreement, if one is required, pursuant to subsection (C)(1) of this section. The side sewer can be installed as part of the utility developer extension agreement and shall be put in use only after acceptance by the utility of the system extension.

4. Side sewer permits for lots in subdivisions shall be issued only after sewer main extensions have been accepted by the city.

5. Side sewer permits expire two years from the date of issuance. The director or his designee may extend the duration of an open side sewer permit for up to one year, provided the utility receives payment for any applicable fees.

6. Open applications for side sewer permits that have not been issued shall be canceled by the utility if not issued within one year from the date of submittal.

C. Utility Developer Extension Agreement.

1. The property owner and the utility shall enter into a utility developer extension agreement whenever an extension to an existing sewer main is required pursuant to BCC 24.04.100(A)(1) or 24.04.130(B)(2).

2. The utility shall approve constructed facilities as complete once the facilities have been built according to the approved plans and specifications, as confirmed by utility inspectors, as-built drawings have been completed as specified in the engineering standards and all applicable fees and charges have been paid.

3. The property owner shall be required to provide surety devices, in a form approved by the city, for sewer system extensions in city right-of-way, for connections to the sewer main during construction and for a one-year warranty period following acceptance by the city.

4. When a utility developer extension agreement is required to serve a proposed commercial or multifamily building, the utility will not approve the building permit until the system extension agreement has been initiated. When a utility developer extension agreement is required to relocate a sewer main from under a proposed building, the utility will not approve the building permit until the developer extension has been

completed and accepted by the utility, unless the building permit is conditioned to require relocation prior to site construction.

D. Temporary Sewer Service Agreement. Any single-family residential property owner may request temporary sewer service if permanent facilities, that is, facilities that meet all code requirements such as for system extension, are not available. The utility may provide temporary single-family residential service through a temporary sewer service agreement which shall:

1. Calculate and collect the property owner's fair share costs for installing permanent sewer facilities. When the property is not fully developed and therefore is subject to redevelopment, the city shall collect only the fair share cost for the developed portion at that time. When the property is redeveloped, the property owner shall build the permanent sewer facilities or, if they are already built, shall pay the remaining fair share costs. If a private property owner builds the permanent facilities, he/she will be paid the fair share costs that were collected under the temporary sewer service agreement plus accrued interest. Interest will be at a rate set by the director or his designee, based on appropriate standard cost indices. Total interest may not exceed the principal amount of the charge;

2. Establish a time limit for connecting to the permanent service once it is available;

3. Specify that the agreement runs with the land and is binding on the owners and their successors; and

4. Be recorded with King County against the real property on which the facilities are located.

E. Pump Station Agreement. Prior to construction of a privately owned sewer pump station other than for a single-family residence or serving a single-family lot, the property owner shall enter into a pump station agreement with the utility that sets forth the owner's maintenance and emergency responsibilities.

F. Agreement to Connect. When a variance to allow a septic system is granted, an "agreement to connect" must be recorded pursuant to BCC 24.04.100(B)(3).

G. Contractors shall be licensed in accordance with Washington State requirements and shall be registered with the city of Bellevue tax office.

H. Other Permits. It is the property owner's responsibility to identify and obtain all permits/approvals required for any proposed work. (Ord. 5964 § 1, 2010.)

24.04.125 Reserved.

(Ord. 5964 § 1, 2010.)

24.04.130 Engineering and design requirements.

A. General.

1. The property owner is responsible for sewer system design.

2. The sewer system designer shall be a civil engineer licensed in the state of Washington and qualified by both experience and educational background in the design of sewer facilities.

3. Engineering and design shall conform to the engineering standards.

4. Sewer facilities in a designated coal mine area are subject to additional design requirements. See the coal mine area subdivision, development, and building permit regulations adopted by Resolution No. 5712.

B. Sewer Facility Requirements.

1. Whenever property is developed or redeveloped in any way such that sewage discharge is changed in content or volume, new sewer facilities shall be required whenever necessary to:

- a. Meet hydraulic capacity requirements. See the engineering standards;
- b. Replace or relocate existing facilities as required or authorized by the utility; or
- c. Meet industrial waste pretreatment requirements pursuant to BCC

24.04.213.

2. Whenever property is developed or redeveloped, sewer mains shall be extended through and to the extremes of the property being developed, as required by the utility, when needed for the orderly extension of the public sewer system.

C. Side Sewer Design.

1. A maximum of four residential structures may be connected to a single side sewer.

2. Where physical conditions render compliance with utility side sewer requirements impracticable, the utility may require compliance insofar as is reasonably possible; provided, that the property owner execute and deliver to the utility an instrument, in a form furnished by the utility, agreeing to hold harmless and indemnify the utility and the city of Bellevue for any damage or injury resulting from such installation. The utility may require that such instrument be recorded against the property with the King County office of records and elections.

D. Pump Stations and Lifts.

1. Pump stations shall be permitted only for service to those properties which the director determines cannot reasonably be served by conventional gravity sewers.

2. In any structure in which the plumbing is too low to permit gravity flow to the designated connection point, the sewage shall be lifted by artificial means. When only the lower floor of a structure is too low for gravity flow, the sewage from the upper floors must flow by gravity. (Ord. 5964 § 1, 2010.)

24.04.140 Installation responsibility.

A. Property Owner Installation. The property owner shall be responsible for the installation of all sewer facilities required by this code. Installation shall be through a utility developer extension agreement or side sewer permit. See BCC 24.04.120.

B. Costs. The property owner shall be responsible for all installation costs regardless of whether the work is done by the utility or by the owner; provided, that:

1. If the utility requires a property owner to construct a sewer facility beyond the scope of city code and engineering standards requirements, the utility shall compensate the property owner for the difference in cost between the normally sized sewer facility and the additional sewer facility, based on the lowest of three bids from reputable licensed contractors furnished by the property owner. Extending the sewer system to the extreme of the property, per BCC 24.02.130(B)(2), is a development requirement and is specifically not subject to reimbursement by the utility.

2. A property owner who constructs a sewer system extension that directly benefits property in addition to the owner's may request a latecomer agreement in order to be reimbursed by benefitting properties that connect to the extension during the agreement's duration. See BCC 24.04.150 regarding latecomer agreements.

3. The city may install sewer facilities to facilitate development, coordinate with other city projects or for other utility purposes and may recover its costs, including interest, through a connection charge. (Ord. 5964 § 1, 2010.)

24.04.150 Latecomer agreements.

A. General. The utility may enter into any contracts authorized by Chapter 35.91 RCW, the Municipal Water and Sewer Facilities Act, including contracts which provide for the reimbursement of property owners constructing public facilities, commonly known as latecomer agreements.

B. Requesting a Latecomer Agreement. A property owner may request a latecomer agreement if the owner constructs a public sewer facility that benefits property in addition to the owner's property and it is not feasible for the owner to include such other benefitting property owner in the utility developer extension agreement. The request must be made in writing and unit costs must be provided before the utility accepts the public sewer facility.

C. Zone of Benefit. The utility shall determine which properties benefit from the public sewer facility that shall be subject to the latecomer agreement.

D. Method of Cost Allocation. The utility shall determine the method of cost allocation used.

E. Recording. The utility shall record the latecomer agreement with King County against the benefitting properties, at the property owner's expense.

F. Cost to Latecomer. As a condition of connection to the public sewer facility, each latecomer shall pay, at the time of connection, his/her pro rata share of the construction costs of the sewer facility, which are determined by the utility and specified in the latecomer agreement. Construction costs shall include but are not limited to design, installation, inspection, construction management, interest and the utility's project management costs.

G. Agreement Duration. Latecomer agreements may be in effect for up to 20 years following acceptance of the sewer facility.

H. Forwarding Latecomer Payment. While the latecomer agreement is in effect, the utility will collect the latecomer payments and forward them to the property owner who paid for the sewer facility, as specified in the agreement. (Ord. 5964 § 1, 2010.)

24.04.160 Sewer easement requirements.

A. When Required. An easement is required whenever:

1. A public sewer facility will be built on private property; or
2. A private sewer facility will be built on property owned by a different private party; or
3. A side sewer will serve two or more properties.

B. Requirements. All of the following requirements shall be met before the utility will accept, approve, or execute an easement:

1. Clear title in the grantor shall be demonstrated;

2. The proposed easement shall be compatible with utility clearance standards and setback standards and with other utilities, structures, buildings, or easements. The utility may require the easement to exclude other utilities and uses if necessary to protect the public sewer system;

3. The easement shall provide access to the facility for repair and maintenance. When deemed necessary by the utility, the easement shall contain provisions for long-term maintenance. Easements for side sewers serving more than one property must specify responsibility for costs of maintenance, repair and access;

4. The easement shall prohibit all buildings and structures within the easement area except those which can readily be removed, as determined by the utility, by the property owner at the owner's expense when access to the sewer facility is required by the utility. If such buildings or structures are within the easement area, an agreement with the utility to have the owner remove the structure upon request by the utility, approved by the city, shall be recorded; and

5. The easement dimensions and other requirements shall be in accordance with the engineering standards.

C. Costs. The property owner shall pay all costs of providing or obtaining and recording the easement.

D. Relinquishment of Easement. An easement granted to the utility may be relinquished only if the utility determines it is no longer needed and the city council authorizes the relinquishment. (Ord. 5964 § 1, 2010.)

24.04.170 Construction requirements.

A. General. When constructing or modifying sewer facilities, compliance is required with this code, the engineering standards, the approved permit, plans and specifications, the terms of any utility developer extension agreement, the recommendations of the manufacturer of the materials or equipment used and any applicable local, state or federal requirements.

B. Safety Requirements. Utility staff may perform inspections or hole-cuts only if shoring and other site conditions conform with WISHA safety standards and other safety requirements, as applicable.

C. Failure to Complete Work or Meet Requirements.

1. The utility may complete sewer facility construction begun by a property owner or contractor or take steps to restore the site (such as backfilling trenches and restoring the public way) if the work does not meet the requirements of this code, the engineering standard and other applicable utility requirements, provided the property owner or contractor fails to rectify the problem following notification by the utility and the work, in the opinion of the utility, constitutes a hazard to public safety, health or the public sewer system.

2. Utility costs incurred pursuant to subsection (C)(1) of this section shall be calculated pursuant to BCC 24.04.250(B) and charged to the property owner or contractor in charge of such work. The property owner or contractor shall pay the utility immediately after written notification is delivered to the responsible parties or posted at the location of the work. Such costs shall constitute a civil debt owing to the utility jointly and severally by such persons who have been given notice as herein provided. The debt shall be collectable in the same manner as any other civil debt owing the utility. In

addition, if the city collected an assurance device it collect the debt from the assurance device by use of all means available under the law.

3. If, in the opinion of the director, the work being performed is not in accordance with these codes or engineering standards and the responsible person is unwilling to change or correct the deficiencies, the director may issue a stop work order until the deficiencies are corrected.

D. Additional Side Sewer Construction Requirements.

1. Side sewers may be constructed only by the following:

- a. Contractors licensed in accordance with BCC 24.04.120(G);
- b. Property owners working on their own property.

2. The side sewer permit shall be readily available at the job site at all times. No inspections will be completed if the permit is not available.

3. Connection shall be made to the wye or tee or side sewer stub designated at the time the side sewer permit is issued unless written permission to do otherwise is obtained from the utility. If the designated stub cannot be found, the utility will install one at the utility's expense. The utility shall not be responsible for costs incurred by the owner/contractor when looking for the stub.

E. Utility Relocations – Developer Initiated.

1. Public Sewer System Relocations. To the extent authorized by law, when relocations of the public sewer system are necessary to accommodate any development or redevelopment, the property owner, applicant or project proponent for such development or redevelopment, including any governmental or regional entity, shall relocate at its sole cost and expense the affected facilities in accordance with all city codes, standards, permit conditions, and pursuant to any existing franchise or other agreement.

2. Nonmunicipal Utility Relocations. To the extent authorized by law and except as provided in BCC 14.60.230, when relocations of nonmunicipal utility facilities are necessary to accommodate any public sewer facility associated with development or redevelopment, the property owner, applicant or project proponent for such development or redevelopment, including any governmental or regional entity, shall, at its sole cost and expense, arrange for the relocation of such nonmunicipal utilities in accordance with all city codes, standards, permit conditions and pursuant to any existing franchise or other agreement. (Ord. 5964 § 1, 2010.)

24.04.175 Construction and warranty inspections and tests.

A. Construction/Installation Inspection.

1. All projects permitted or approved by the utility under a utility developer extension agreement or other permit are subject to utility inspection to ensure compliance with the code and permit/approval conditions. As a condition of permit issuance or execution of a utility developer extension agreement, the property owner shall consent to inspection and testing.

2. Newly installed sewer facilities shall be inspected, tested, and documentation completed according to the permit requirements or developer extension agreement conditions, the engineering standards, and procedures.

B. Warranty Inspections and Tests. Facilities and equipment accepted by the utility under specific warranties may be reinspected at the utility's discretion and, if necessary, retested prior to the expiration of the warranty period. (Ord. 5964 § 1, 2010.)

24.04.210 Maintenance of sewer system.

A. Responsibility. The utility has responsibility for maintenance of the public sewer system unless otherwise provided by agreement, local ordinance or state law. Owners of private sewer systems are solely responsible for maintenance and operation of such private systems.

B. Contract Maintenance. The utility may agree to provide maintenance service to maintain private sewage pump stations that serve more than one residence, by contract and at the owner's expense, in order to meet the city's obligation to the Washington State Department of Ecology for maintenance responsibility.

C. Side Sewer Cleaning. All side sewer cleaning contractors and/or plumbers, side sewer contractors and owners, prior to cleaning existing side sewers (as distinguished from plumbing and septic tank facilities), shall notify the utility of such operations and comply with utility requirements. Debris cleaned from a side sewer shall be removed and shall not be caused to enter the sewer main. If debris causes a downstream blockage, the owner or his agent shall be liable for any resulting damages. (Ord. 5964 § 1, 2010.)

24.04.213 Industrial waste discharge monitoring, abatement and pretreatment.

A. General. The industrial waste program is intended to prevent, control and correct the discharge of substances, such as hazardous, dangerous, caustic or explosive materials, polar and nonpolar fats, oils and greases, which could cause hazardous, dangerous or explosive conditions within the public sewer system or could cause blockages, operational failures or premature degradation of the public sewer system.

B. Applicability of Other Regulations. All discharges to the public sewer system shall comply with all applicable rules and regulations of any federal, state or local agency having governmental or contractual jurisdiction within the utility service area.

C. Pretreatment of Discharges. The utility shall require the pretreatment of discharges to the public sewer system, except single-family residences, if necessary to prevent and/or correct hazardous, dangerous, or explosive conditions or blockage, operational failure or premature degradation of the public sewer system.

Notwithstanding the above, all restaurants and food-processing businesses shall install pretreatment methods, such as grease interceptors, oil-water separators, biological or chemical treatment and other best available technology, to reduce or eliminate FOG discharges. All pretreatment systems are subject to review and approval by the utility.

D. Sampling and Inspection Tees and Manholes. Sampling and/or inspection tees or manholes in the side sewer connection(s) to the public sewer system may be required in all connections, except single-family residential connections. Inspection tees and manholes enable the utility to monitor and test the discharge for compliance with utility requirements or to allow monitoring and testing in accordance with the rules and regulations of other federal, state or local agency having governmental or contractual jurisdiction within the utility service area. (Ord. 5964 § 1, 2010.)

24.04.215 Unauthorized and prohibited discharges.

A. Certain Wastes Prohibited. No person shall discharge or cause the discharge of any of the following wastes into the public sewer system, by direct or indirect means:

1. Flammable liquids, solids or gases capable of causing or contributing to an explosion or supporting combustion in any public sewer facility or side sewer connection to the public sewer system, such as, but not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides, or any other substances that the utility, King County department of metropolitan services, a fire department or fire district with jurisdiction, any state agency or the Environmental Protection Agency have identified as a fire hazard or a hazard to the system;

2. Any solid or viscous substance or particles in a quantity, either by itself or in combination with other wastes, that is capable of obstructing flow or interfering with the operation or performance of the public sewer system;

3. Any gas or substance that, either by itself or by interaction with other wastes, is capable of creating a public nuisance or hazard to life or of preventing entry by authorized personnel to pump stations and other sewer facilities;

4. Any gas or substance that, either by itself or by interaction with other wastes, may cause corrosive structural damage to the public sewer system;

5. Heated substances in amounts that prevent entry into public sewer facilities by authorized personnel or that adversely impact facilities;

6. Food waste that cannot pass through a one-fourth-inch sieve;

7. Any radioactive wastes or isotopes that exceed such concentration limitations as established by applicable Washington State Department of Health regulations;

8. Trucked and hauled wastes, except as approved by the utility and discharged at designated locations;

9. Storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water, unpolluted waste water and/or any water or wastes generated during construction activities, unless specifically authorized by the utility;

10. Substances that may cause excessive foaming in the public sewer system;

11. Polar and nonpolar fats, oils and greases in amounts that cause a visible sheen on the discharge or in the public sewer system, build-up of grease in any public sewer facility or which accumulations either alone or in combination with other discharges cause obstruction of the public sewer system; or

12. Any wastes or substances which exceed local discharge limits of, or are prohibited by, any other federal, state or local agency having governmental or contractual jurisdiction within the sewer service area.

B. Discovery of Unauthorized or Prohibited Discharge. Upon discovery of an unauthorized or prohibited discharge, the utility shall notify the property owner and/or responsible party as defined in Chapter 1.18 BCC and the applicable King County department in writing as soon as possible of the nonconforming or prohibited discharge and of all corrective measures necessary.

C. Damage Caused by Unauthorized or Prohibited Discharges. Any person discharging or causing, either directly or indirectly, an unauthorized or prohibited discharge to the public sewer system, that results in damage to, blockage of or premature degradation of any public sewer facility, shall be liable for said damage and

financially responsible for any and all necessary repairs or other corrective actions necessary to restore the public sewer system to full and normal operation.

D. Any violation of this section or any provision of this code shall constitute a civil violation subject to the enforcement procedures set forth in Chapter 1.18 BCC. (Ord. 5964 § 1, 2010.)

24.04.220 Right of entry for inspection.

A. An authorized representative of the utility may enter private property at all reasonable times to conduct inspections, tests or to carry out other duties imposed by this code, provided the utility shall first notify the proper owner or person responsible for the premises. If entry is refused, the director shall have recourse to every remedy provided by law to secure entry.

B. For inspection programs authorized by the director or his designee, the utility may provide advance mailings of its intent to inspect properties consistent with such inspection programs. (Ord. 5964 § 1, 2010.)

24.04.240 Regulations of other agencies.

A. General. The responsibility for determining the existence and application of local, state and federal laws and regulations pertaining to sewer facilities and sewer use remains solely with the affected property owner.

B. Regulations of King County and Other Cities and Towns. Utility customers outside the city of Bellevue are subject to city of Bellevue requirements related to sewer facilities unless more stringent requirements of the local jurisdiction in which such customers are located are applicable.

C. King County Department Regulations. Utility customers shall comply with all applicable requirements of applicable King County departments. (Ord. 5964 § 1, 2010.)

24.04.250 Fees for permits/approvals/specific services.

A. General.

1. The applicable city director shall develop for city council review and adoption a schedule of fees and charges for all permits and other specific services provided by the utility, including:

- a. Utility developer extension agreements;
- b. Disconnection charge for unauthorized connections;
- c. Side sewer permits;
- d. Hole-cuts; and
- e. Miscellaneous maps, plans, drawings, copies and documents provided by

the utility.

2. The fees referenced in this section are in addition to applicable rates for sewer service and connection charges.

B. Fee Amount. The fee amount for each permit, approval or specific service shall cover the actual utility costs associated with that permit, approval or service, including all of the following that apply:

1. Labor, including any and all time spent on engineering, plan review, installation, properly abandoning any existing facilities, site restoration, inspection, testing, certification, creating an as-built of the project and legal review. Inspections and

other work requested beyond normal working hours are charged based on the utility's overtime pay practices.

2. Expenses including, but not limited to, supplies (not including office supplies), materials, equipment and tool rental, applicable state and federal taxes and any fees for permits the utility must obtain.

3. Overhead, at a rate to be established by the utility pursuant to written procedures.

C. Fee Schedule. The applicable city director may adjust the schedule of fees and charges without further city council action to the extent necessary to reflect actual changes in the utility's cost of providing the service. (Ord. 5964 § 1, 2010.)

24.04.260 Connection charges.

A. General.

1. The utility shall collect connection charges, in order that each connecting property shall bear its equitable share of the cost of the public sewer system.

2. Connection charges shall be paid before a property is allowed to connect to the public sewer system. Connection charges not previously paid, such as charges for new facilities that directly benefit the property, shall be paid when the property undergoes, either at one time or cumulatively through more than one project, a substantial remodeling as defined in LUC 20.50.044 or more substantial improvement or if an improvement or cumulative improvements significantly impact downstream system capacity.

3. Connection charges that have been paid as a result of development activities on the property or through participation in an LID or ULID shall not be reassessed.

4. The utility may enter into contracts with property owners of single-family homes and with the owners of redevelopment projects that meet criteria specified by the utility for payment of connection charges over time instead of as a lump sum. The utility will charge interest, at a rate set by the director or his designee, on any outstanding debt covered by a payment contract. A contract shall be payable in full at the time of closing upon sale of the property.

B. Direct Facilities Charges.

1. The utility shall assess and collect direct facilities charges from property owners that directly benefit from utility-built or privately built sewer facilities, except property owners who previously paid their fair share through an LID or ULID. Facilities that may be covered in a direct facilities charge include, but are not limited to, stubs built from the sewer main to the property line, pump stations and mains.

2. The direct facilities charge is the property owner's equitable share of the established costs of the facilities he/she benefits from. The equitable share shall include interest charges applied from the date of construction acceptance of the facility until the property connects, or for a period not to exceed 10 years, whichever is less, at a rate commensurate with the rate of interest applicable at the time of construction of the facility to which the property owner is seeking to connect but not to exceed 10 percent per year; provided, that the aggregate amount of interest shall not exceed the equitable share of the cost of the facility allocated to such property owner.

3. The facilities' costs shall be allocated to benefitting property owners based on the number of single-family equivalents. The director may, however, make such

allocation based on front footage or other reasonably based methodology if the director determines that such alternate basis or methodology better assures equitable sharing of cost by all properties benefitting from the facilities.

C. Administrative Procedures – Adjustment of Charges. The director is authorized to adopt administrative procedures for the purpose of administering the provisions of this section, and to adjust the charges established by subsections A and B of this section from time to time to reflect the actual cost of the facilities for which the charges are made. (Ord. 5964 § 1, 2010.)

24.04.270 Sewer rates.

A. General. The city council shall establish rates for sewer use and service; such rates are in addition to connection charges and fees for specific services. The utility may establish classifications of customers or service, using any method or methods authorized by law.

B. Rate Basis. Sewer rates shall be based on revenue requirements necessary to cover all costs of the utility, as authorized by the city council by the adoption of the biennial budget and subsequent amendments and shall be guided by adopted financial policies and bond covenants.

C. Rate Adjustments. Rates shall be evaluated periodically as part of the review and adoption of the biennial budget. Rate adjustments shall be recommended as needed to meet revenue requirements. Any recommended rate adjustment shall consider equity, adequacy, cost and other factors allowed by law.

D. Billing and Collection. The utility shall develop and implement procedures and systems pertaining to the billing and collection of sewer service charges and fees in accordance with state law.

E. Rate Relief. The city council may establish sewer rate relief measures for specific customer classes as authorized by state law. (Ord. 5964 § 1, 2010.)

24.04.275 Capital recovery charges.

A. The utility shall establish and collect a monthly capital recovery charge so that each new improvement, development, redevelopment or existing structure that places an additional demand on the public sewer system bears its equitable share of the cost of said public utility system.

B. Right-of-way and nonbuilding tracts shall be exempt from the capital recovery charge.

C. The capital recovery charge shall be based on the cost of the sewer utility plant-in-service, less the cost of donated facilities, less the cost of city-built local facilities for which direct facilities charges are imposed, plus recoverable interest divided by the customer base as quantified by single-family equivalent units.

D. The capital recovery charge shall be placed on affected properties as monthly charge for a period of 10 years.

E. The director or his designee is authorized to adjust the capital recovery charge value based upon updated values of the above-described elements. (Ord. 5964 § 1, 2010.)

24.04.280 Code violations, enforcement, and penalties.

The enforcement procedures and penalties associated with violations of this code are set forth in BCC 1.18.075. (Ord. 5964 § 1, 2010.)

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 6086

AN ORDINANCE establishing revised sewerage service charges; repealing Ordinance No. 5974; providing for severability; and establishing an effective date.

WHEREAS, the Environmental Services Commission has reviewed the Sewer Utility budget and rate proposal, held a public hearing thereon and recommended approval of the proposal; and

WHEREAS, it is in the public interest to establish the following amended schedule of rates and charges for the sewerage service area for the Sewer Utility of the City of Bellevue; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Charges Established. There are hereby established and shall be collected from each user in the sewerage service area for the Sewer Utility of the City of Bellevue sewerage service charges as hereinafter provided.

Section 2. Single Family Residential Structures.

A. The service charge for single-family residential units shall be \$79.58 per bimonthly billing period in 2013 and \$79.58 per bimonthly billing period in 2014, plus a volume charge based on the bimonthly winter-average water consumption for the structure, as follows:

| <u>Winter-Average Cubic Feet Consumed</u> | <u>Charge Per Hundred Cubic Feet of Water</u> | |
|---|---|-------------|
| | <u>2013</u> | <u>2014</u> |
| 0 to 5,000 | \$3.03 | \$3.37 |
| Over 5,000 | \$3.92 | \$4.36 |

B. For purposes of these charges, winter-average consumption is the average bimonthly water volume recorded on three normal meter readings during the period of December 15 through June 15 of the preceding year. Winter-average consumption for each residence will be recomputed before the start of each year and that volume will be used to compute the bimonthly sewer volume charge for the residence for the entire calendar year.

C. For those residences that are not Bellevue water customers, actual meter reading data necessary to compute the residence's winter-average water consumption will be obtained from the customer's water district, whenever possible.

Where that data is unavailable and for new structures where water consumption data necessary to compute actual winter-average consumption has not been recorded, bimonthly sewer volume charges for the residence will be based on Bellevue's system-wide winter-average residential consumption of 1,500 cubic feet for a two-month period.

Section 3. Multifamily Residential Structures or Facilities.

The service charge for each multifamily residential structure or facility shall be \$81.34 for 2013, and \$84.62 for 2014 per bimonthly billing period for each dwelling unit, plus \$6.71 for 2013 and \$6.98 for 2014 per 100 cubic feet of water consumed by such structure or facility in excess of 1,100 cubic feet per dwelling unit during each bimonthly billing period.

For the purposes of this Section 3, "multifamily residential structure or facility" shall mean any residential structure or facility containing two or more dwelling units, including but not limited to duplexes, triplexes, apartment buildings, condominiums, and parcels containing two or more separate dwelling units, but shall not include hotels, motels or trailer parks. Mixed-use structures that include both multi-family dwelling units and commercial non-residential units and that are served by one water meter shall be billed as multi-family.

Section 4. Non-residential Structures or Facilities.

The service charge for non-residential structures or facilities shall be based on water consumption by each structure or facility and shall be computed as follows:

\$8.04 for 2013, and \$8.36 for 2014 per 100 cubic feet of water consumption per bimonthly billing period

provided, there shall be a minimum charge of \$125.04 for 2013 and \$130.08 for 2014 per bimonthly billing period.

For purposes of this Section 4, "non-residential structure or facilities" shall mean any structure or facility not governed by Section 2 or Section 3 of this ordinance and shall include, but not be limited to, any commercial, industrial, business, trade, school or municipal structure or facility.

Section 5. King County/METRO Charges. In addition to these rates and charges for sewerage service established in this ordinance, or otherwise established by the City, the following King County/METRO charges are imposed to ensure compliance with Section 204 of Public Law 92-500 (22 U.S.C. 1251) CFR Part 35, Subpart E:

A. A "surcharge" in an amount to be determined as provided in King County/METRO Resolution Nos. 2315 and 2557 (now incorporated into Title 28 of the King County Code, Chapter 28.84.060), as now constituted or hereafter amended, said charge to be added to the customer's regular bill.

B. An "Industrial Cost Recovery (ICR)" charge in an amount to be determined as provided in King County/METRO Resolution Nos. 2556 and 3374 (now incorporated into Title 28 of the King County Code, Chapter 28.84.060), as now constituted or hereafter amended, said charge to be billed separately to qualifying industrial customers on an annual basis.

C. An administrative charge of \$17.11 shall be added to each customer bill that contains a King County/METRO "surcharge" or "ICR charge."

D. The City of Bellevue, in cooperation with King County/METRO, shall maintain such records as are necessary to document that its sewerage charges comply with the above-cited federal laws and regulations and King County/METRO regulations.

Section 6. User Charges. The charges for each user shall be the sum of any applicable charges under Sections 2, 3, 4 and 5 multiplied by the percentage indicated below for that city or town:

| | |
|--------------|-----------|
| Bellevue | 105.4856% |
| Clyde Hill | 110.3273% |
| Hunts Point | 107.2506% |
| Medina | 104.3408% |
| Yarrow Point | 105.4856% |
| All Other | 100.0000% |

provided that the percentages set forth above may be administratively adjusted by the Utility Department Director to reflect any increase or decrease in any franchise fee required to be paid to such city or town by the Utility.

Section 7. The Utilities Department Director shall have authority under this ordinance to adopt procedures necessary for the efficient and equitable administration of the sewer rate structure.

Section 8. Severability. If any section of this ordinance, or any portion of any section of this ordinance, or its application to any person or circumstance, is held invalid, the remainder of the ordinance or the application of the provision to other persons or circumstances shall not be affected.

Section 9. Repeal. Ordinance No. 5974 is repealed as of January 1, 2013; provided, however, that any charges made for sewerage service under Ordinance No. 5974 are not invalidated by the repeal of that ordinance.

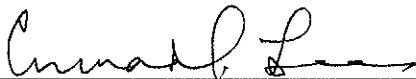
Section 10. Effective Date. Sections 1-9 of this ordinance shall take effect on January 1, 2013, shall apply to service provided on and after that date and shall supersede all existing schedules of charges as of that date. The specific sewerage service charges for 2013, as hereinbefore indicated, shall take effect on January 1, 2013 and shall remain in effect through and including December 31, 2013. The specific sewage service charges for 2014, as hereinbefore indicated, shall take

effect on January 1, 2014, and shall remain in effect until amended by the City Council.

Section 11. This ordinance shall take effect and be in force five (5) days after passage and legal publication.

Passed by the City Council this 3rd day of December, 2012 and signed in authentication of its passage this 3rd day of December, 2012.

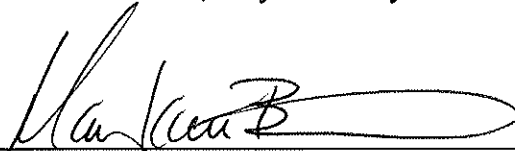
(SEAL)



Conrad Lee, Mayor

Approved as to form:

Lori M. Riordan, City Attorney



Mary Kate Berens, Deputy City Attorney

Attest:



Myrna L. Basich, City Clerk

Published December 14, 2012

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 5959

AN ORDINANCE delegating authority to the City Manager or his designee to sign a mutual aid agreement whereby the City of Bellevue joins the Washington Water/Wastewater Agency Response Network, which allows for voluntary sharing of public utility resources in emergency or disaster situations.

WHEREAS, the City Council desires to participate in the Washington Water/Wastewater Agency Response Network for the sharing of public utility resources in major emergency and/or disaster situations; and

WHEREAS, the mutual aid agreement follows a national model strongly promoted by the Federal Emergency Management Administration and the American Water Works Association; and

WHEREAS, although the City Council desires to enter into the mutual aid agreement as currently written, Council directs staff to continue to work with the members of the network to improve the terms of the mutual aid agreement;

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:


Section 1. The City Manager or his designee is authorized to execute the mutual aid agreement whereby the City of Bellevue joins the Washington Water/Wastewater Agency Response Network, a copy of which agreement has been given Clerk's Receiving No. 42933.

Section 2. Within nine months of the effective date of this ordinance, staff shall provide a report to the Council regarding the status of efforts to improve the terms of the mutual aid agreement.

Section 3. This ordinance shall take effect and be in force thirty (30) days after passage and legal publication.

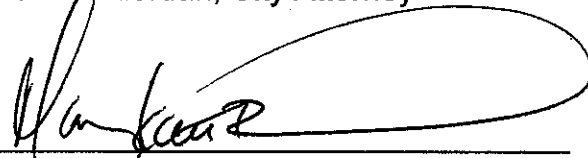
Passed by the City Council this 2nd day of August, 2010
and signed in authentication of its passage this 2nd day of August,
2010.

(SEAL)


Don Davidson, DDS
Mayor

Approved as to form:

Lori M. Riordan, City Attorney


Mary Kate Berens, Deputy City Attorney

Attest:


Myrna L. Basich, City Clerk

Published 8/5/10

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 5856

AN ORDINANCE authorizing and providing for the acquisition of interest in land for the purpose of completing the Meydenbauer Creek Sewer Replacement and Bank Stabilization Project; providing for condemnation, appropriation, taking of land and property rights necessary therefore; providing for the cost thereof and directing the initiation of appropriate proceedings in the manner provided by law for said condemnation.

WHEREAS, on December 1, 2008, the City Council adopted the 2009-2015 CIP, by Ordinance No. 5851, which included CIP Plan No. D-86, Stream Channel Modification Program (otherwise known as the Meydenbauer Creek Sewer Replacement and Bank Stabilization Project ("Project")); and

WHEREAS, the City Council has found that the public health, safety, necessity and convenience demand that said Project be undertaken at this time and that in order to carry out the Project it is necessary at this time for the City to acquire interests and rights to the properties described herein; and

WHEREAS, the City Council finds and declares it necessary and in the best interest of the public that interests in the land and property rights hereinafter described be condemned, appropriated, and taken for public use, subject to the making or paying of just compensation to the owners thereof in the manner provided by law; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES
ORDAIN AS FOLLOWS:

Section 1. The land and property rights within the City of Bellevue, King County, Washington, described in the attached Exhibits "A" and "B", are necessary for construction of the Project described above, subject to making or paying just compensation to the owners thereof in the manner provided by law.

Section 2. The City of Bellevue specifically finds construction of the Project to be a public use, specifically the construction or repair of public utilities. The City Council specifically finds construction of the Project to be necessary, and in the best interests of the citizens.

Section 3. The cost and expense of acquiring said property rights shall be paid for from the Capital Investment Plan, or from other monies the City may have available or may obtain therefore. The Director of the Utilities Department or his designee is hereby authorized to negotiate with and make offers to the owners of said land or property for the purposes of making or paying just compensation, and to


approve the payment of just compensation as negotiated with said owners or as ordered by the Court.

Section 4. The City Attorney is hereby authorized and directed to undertake proceedings provided by law to condemn, appropriate, and take the property necessary to carry out the provisions of this ordinance. The City Attorney is further authorized to approve and enter into any and all such agreements, stipulations, and orders necessary to carry out the provisions of this ordinance, including for the payment of just compensation as agreed to with the property owners, or as ordered by the Court.

Section 5. This ordinance shall take effect and be in force five (5) days after passage and legal publication.

Passed by the City Council this 9th day of February, 2009 and signed in authentication of its passage this 9th day of February, 2009.

(SEAL)



Grant S. Degginger, Mayor

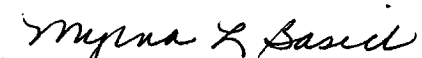
Approved as to form:

Lori M. Riordan, City Attorney



Lacey L. Madche, Assistant City Attorney

Attest:

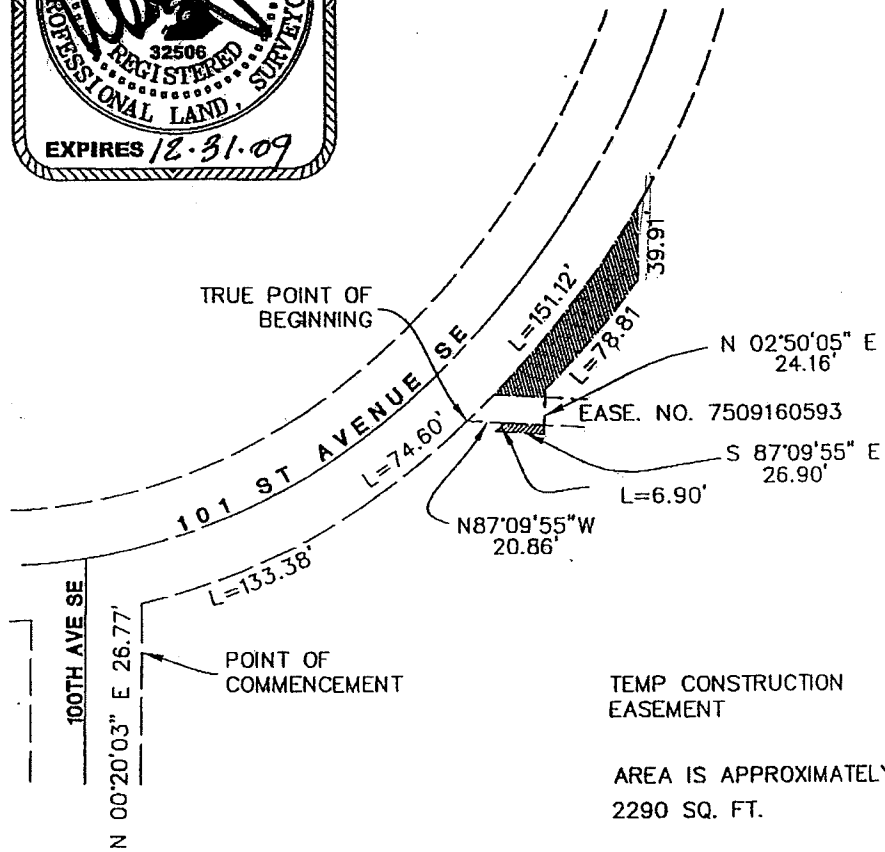
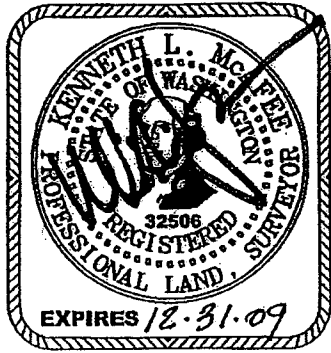


Myrna L. Basich, City Clerk

Published February 12, 2009

EXHIBIT A

SW1/4 OF SECT. 32, T. 25 N., R. 5 E., W.M.



TEMP CONSTRUCTION
EASEMENT

AREA IS APPROXIMATELY
2290 SQ. FT.

TEMPORARY CONSTRUCTION EASEMENT



Engineers
a Pacific company

PACIFIC PARK
1442 - 112TH AVENUE NE, STE 102
BELLEVUE, WASH 98004
425.451.7022

CITY OF BELLEVUE

KING COUNTY, WASHINGTON

EASEMENT EXHIBIT

JOB NO.
WA07.002.M0120

DATE
01.15.09

SHEET NO.

1

EXISTING LAND DESCRIPTION:

KING COUNTY PARCEL NUMBER: 0666000475

TRACTS 74 AND 75, BELLEVUE ACRE AND HALF ACRE TRACTS,
ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 11 OF PLATS,
PAGE 35, IN KING COUNTY, WASHINGTON;

TOGETHER WITH THAT PORTION OF LAKE WASHINGTON SHORELANDS IN
GOVERNMENT LOT 2, SECTION 32, TOWNSHIP 25 NORTH, RANGE 5 EAST,
W.M., IN KING COUNTY, WASHINGTON, LYING WEST OF TRACTS 57, 58, AND
59, OF SAID BELLEVUE ACRE AND HALF ACRE TRACTS, LYING NORTHERLY
OF TRACT 75 OF SAID BELLEVUE ACRE AND HALF ACRE TRACTS, LYING
EASTERLY OF 100TH AVE SOUTHEAST (ALSO KNOWN AS WILDWOOD
AVENUE AND ALCAZAR STREET) AS CONVEYED TO KING COUNTY BY
DEED RECORDED UNDER RECORDING NUMBER 3166974, AND LYING
SOUTHERLY OF 101ST AVENUE SOUTHEAST (ALSO KNOWN AS WILDWOOD
PARK ROAD) AS CONVEYED TO KING COUNTY BY DEED RECORDED UNDER
RECORDING NUMBER 3166973.

TEMPORARY CONSTRUCTION EASEMENT:

COMMENCING AT THE NORTHWEST CORNER OF TRACT 75 OF BELLEVUE
ACRE AND HALF ACRE TRACTS, ACCORDING TO THE PLAT THEREOF
RECORDED IN VOLUME 11 OF PLATS, PAGE 35, IN KING COUNTY,
WASHINGTON, ALSO BEING A POINT ON THE EAST MARGIN OF 100TH AVE
SE;

THENCE NORTH 00°20'03" EAST, 26.77 FEET ALONG SAID EAST MARGIN TO
THE SOUTHERLY MARGIN OF 101ST AVE SE;

THENCE NORTHEASTERLY ALONG SAID MARGIN OF 101ST AVE SE, ON A
NON-TANGENT CURVE HAVING A RADIUS OF 364.50 FEET, WHOSE CENTER
BEARS NORTH 12°57'01" WEST THROUGH A CENTRAL ANGLE OF 20°57'59",
AN ARC DISTANCE OF 133.38 FEET TO A POINT OF COMPOUND
CURVATURE;

THENCE CONTINUING ALONG SAID MARGIN ON A CURVE HAVING A RADIUS OF 507.68 FEET WHOSE CENTER BEARS NORTH 33°55'00" WEST AN ARC DISTANCE OF 74.60 FEET TO THE TRUE POINT OF BEGINNING;

THENCE CONTINUING ALONG SAID MARGIN AN ARC DISTANCE OF 151.12 FEET;

THENCE SOUTH 00°00'00" EAST A DISTANCE OF 39.91 FEET TO A POINT ON A NON-TANGENT ARC HAVING A RADIUS OF 507.68 FEET WHOSE CENTER BEARS NORTH 53°56'46" WEST;

THENCE SOUTHWESTERLY ALONG SAID CURVE AN ARC DISTANCE OF 78.81 FEET;

THENCE SOUTH 02°50'05" WEST A DISTANCE OF 24.16 FEET;

THENCE NORTH 87°09'55" WEST A DISTANCE OF 26.90 FEET;

THENCE NORTHEASTERLY ALONG A NON-TANGENT ARC HAVING A RADIUS OF 522.68 FEET WHOSE CENTER BEARS NORTH 43° 11'31" WEST AN ARC DISTANCE OF 6.90 FEET TO THE SOUTH LINE OF EASEMENT NUMBER 7509160593, RECORDED ON OCTOBER 1, 1975, RECORDS OF KING COUNTY, WASHINGTON;

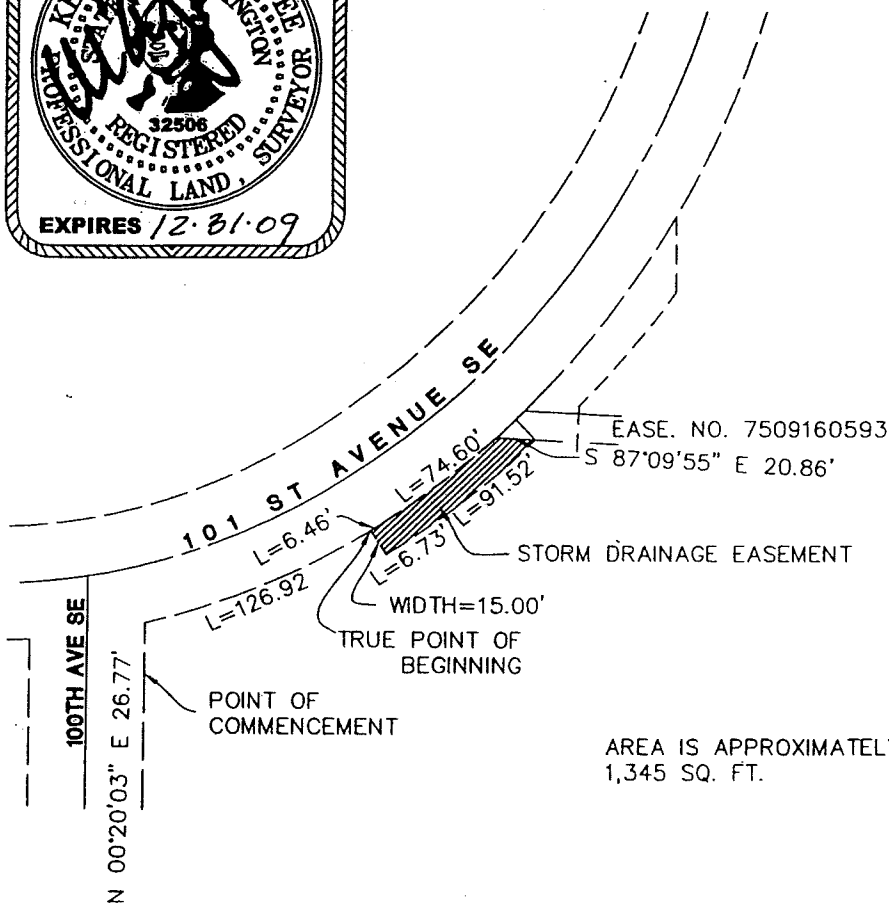
THENCE NORTH 87°09'55" WEST A DISTANCE OF 20.86 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THAT PORTION OF THE EASEMENT FILED UNDER KING COUNTY RECORDERS NUMBER 7509160593.

SAID DESCRIPTION CONTAINING APPROXIMATELY 2290 SQ. FT

EXHIBIT B

SW1/4 OF SECT. 32, T. 25 N., R. 5 E., W.M.



AREA IS APPROXIMATELY
1,345 SQ. FT.

SCALE: 1" = 100'



Engineers
a Pacific company
PACIFIC PARK
1412 - 112TH AVENUE NE, STE 102
BELLEVUE, WASHINGTON 98004
425.455.7622

CITY OF BELLEVUE

KING COUNTY, WASHINGTON

STORM DRAINAGE EASEMENT EXHIBIT

JOB NO.
WA07.002.M0120

DATE
01.14.09

SHEET NO.
1

EXISTING LAND DESCRIPTION:

KING COUNTY PARCEL NUMBER: 0666000475

TRACTS 74 AND 75, BELLEVUE ACRE AND HALF ACRE TRACTS,
ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 11 OF PLATS,
PAGE 35, IN KING COUNTY, WASHINGTON;

TOGETHER WITH THAT PORTION OF LAKE WASHINGTON SHORELANDS IN
GOVERNMENT LOT 2, SECTION 32, TOWNSHIP 25 NORTH, RANGE 5 EAST,
W.M., IN KING COUNTY, WASHINGTON, LYING WEST OF TRACTS 57, 58, AND
59, OF SAID BELLEVUE ACRE AND HALF ACRE TRACTS, LYING NORTHERLY
OF TRACT 75 OF SAID BELLEVUE ACRE AND HALF ACRE TRACTS, LYING
EASTERLY OF 100TH AVE SOUTHEAST (ALSO KNOWN AS WILDWOOD
AVENUE AND ALCAZAR STREET) AS CONVEYED TO KING COUNTY BY
DEED RECORDED UNDER RECORDING NUMBER 3166974, AND LYING
SOUTHERLY OF 101ST AVENUE SOUTHEAST (ALSO KNOWN AS WILDWOOD
PARK ROAD) AS CONVEYED TO KING COUNTY BY DEED RECORDED UNDER
RECORDING NUMBER 3166973.

STORM DRAINAGE EASEMENT:

COMMENCING AT THE NORTHWEST CORNER OF TRACT 75 OF BELLEVUE
ACRE AND HALF ACRE TRACTS, ACCORDING TO THE PLAT THEREOF
RECORDED IN VOLUME 11 OF PLATS, PAGE 35, IN KING COUNTY,
WASHINGTON, ALSO BEING A POINT ON THE EAST MARGIN OF 100TH AVE
SE;

THENCE NORTH 00°20'03" EAST, 26.77 FEET ALONG SAID EAST MARGIN TO
THE SOUTHERLY MARGIN OF 101ST AVE SE;

THENCE NORTHEASTERLY ALONG SAID MARGIN OF 101ST AVE SE, ON A
NON-TANGENT CURVE HAVING A RADIUS OF 364.50 FEET, WHOSE CENTER
BEARS NORTH 12°57'01" WEST THROUGH A CENTRAL ANGLE OF 19°57'02", A
DISTANCE OF 126.92 FEET TO THE TRUE POINT OF BEGINNING;

THENCE CONTINUING ALONG SAID MARGIN AN ARC DISTANCE OF 6.46 FEET TO A POINT OF COMPOUND CURVATURE HAVING A RADIUS OF 507.68 FEET WHOSE CENTER BEARS NORTH 33°55'00" WEST;

THENCE ALONG SAID MARGIN AN ARC DISTANCE OF 74.60 FEET TO A POINT;

THENCE SOUTH 87°09'55" EAST ALONG THE SOUTH LINE OF EASEMENT NUMBER 7509160593, RECORDED ON OCTOBER 1, 1975, RECORDS OF KING COUNTY, WASHINGTON A DISTANCE OF 20.86 FEET TO A POINT ON AN ARC HAVING A RADIUS OF 522.68 FEET WHOSE CENTER BEARS NORTH 43°56'55" WEST;

THENCE SOUTHWESTERLY ALONG SAID CURVE AN ARC DISTANCE OF 91.52 FEET TO A POINT OF COMPOUND CURVATURE HAVING A RADIUS OF 379.50 FEET WHOSE CENTER BEARS NORTH 33°55'00" WEST;

THENCE CONTINUING ALONG SAID CURVE AN ARC DISTANCE OF 6.73 FEET TO A POINT;

THENCE NORTHWESTERLY ALONG A RADIAL LINE 15.00 FEET TO THE TRUE POINT OF BEGINNING.

SAID DESCRIPTION CONTAINING APPROXIMATELY 1345 SQ. FT

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 5787

AN ORDINANCE amending Ordinance No. 5705; clarifying the sewer billing rate for mixed use structures that include both multi-family dwelling units and commercial non-residential units served by one meter.

WHEREAS, Ordinance No. 5705 established sewerage service charges that shall be collected from each user in the sewerage service area for the Sewer Utility of the City of Bellevue as hereinafter provided; and

WHEREAS, clarifying the billing rates of certain mixed use structures is desirable;

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Ordinance No. 5705, Section 3, is amended to read as follows

Multifamily Residential Structures or Facilities.

The service charge for each multifamily residential structure or facility shall be \$55.10 for 2007, and \$56.48 for 2008 per bimonthly billing period for each dwelling unit, plus \$5.00 for 2007 and \$5.13 for 2008 per 100 cubic feet of water consumed by such structure or facility in excess of 1,100 cubic feet per dwelling unit during each bimonthly billing period.

For the purposes of this Section 3, "multifamily residential structure or facility" shall mean any residential structure or facility containing two or more dwelling units, including but not limited to duplexes, triplexes, apartment buildings, condominiums, and parcels containing two or more separate dwelling units, but shall not include hotels, motels or trailer parks. Mixed use structures that include both multi-family dwelling units and commercial non-residential units and that are served by one water meter shall be billed as multi-family.

Section 2. Except as expressly amended herein, all other provisions of Ordinance 5705 shall remain in full force and effect.

Section 3. Severability. If any section of this ordinance, or any portion of any section of this ordinance, or its application to any person or circumstance, is held invalid, the remainder of the ordinance or the application of the provision to other persons or circumstances, shall not be affected.

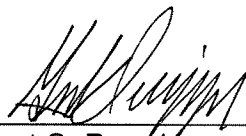
Section 4. Effective Date. Sections 1-3 of this ordinance shall take effect on January 1, 2008, and shall supersede all existing schedules of charges as of that date.

Section 5. This ordinance shall take effect and be in force five (5) days after its passage and legal publication.

Section 6. Attachment A to this Ordinance lists the charges for sewerage incorporating this amendment.

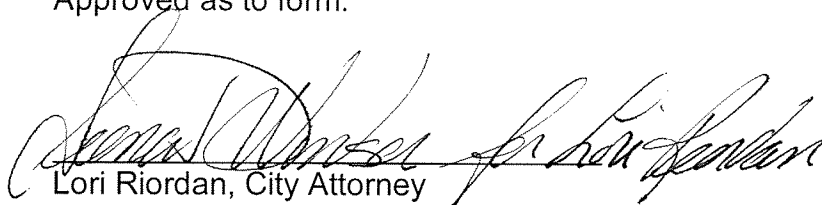
Passed by the City Council this 3rd day of December, 2007, and signed in authentication of its passage this 3rd day of December, 2007.

(SEAL)

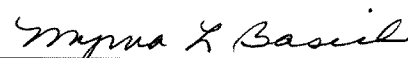


Grant S. Degginger, Mayor

Approved as to form:



Lori Riordan, City Attorney
Attest:



Myrna L. Basich, City Clerk

Published December 6, 2007

Attachment A

Section 1. Charges Established. There are hereby established and shall be collected from each user in the sewerage service area for the Sewer Utility of the City of Bellevue sewerage service charges as hereinafter provided.

Section 2. Single Family Residential Structures.

A. The service charge for single-family residential units shall be \$55.90 per bimonthly billing period in 2007 and \$55.90 per bimonthly billing period in 2008, plus a volume charge based on the bimonthly winter-average water consumption for the structure, as follows:

| <u>Winter-Average Cubic Feet Consumed</u> | <u>Charge Per Hundred Cubic Feet of Water</u> | |
|---|---|-------------|
| | <u>2007</u> | <u>2008</u> |
| 0 to 5,000 | \$2.04 | \$2.18 |
| Over 5,000 | \$2.87 | \$2.94 |

B. For purposes of these charges, winter-average consumption is the average bimonthly water volume recorded on three normal meter readings during the period of December 15 through June 15 of the preceding year. Winter-average consumption for each residence will be recomputed before the start of each year and that volume will be used to compute the bimonthly sewer volume charge for the residence for the entire calendar year.

C. For those residences that are not Bellevue water customers, actual meter reading data necessary to compute the residence's winter-average water consumption will be obtained from the customer's water district, whenever possible. Where that data is unavailable and for new structures where water consumption data necessary to compute actual winter-average consumption has not been recorded, bimonthly sewer volume charges for the residence will be based on Bellevue's system-wide winter-average residential consumption of 1,500 cubic feet for a two-month period.

D. The Utilities Department Director shall have authority under this ordinance to adopt procedures necessary for the efficient and equitable administration of the residential volume-based sewer rate structure.

Section 3. Multifamily Residential Structures or Facilities.

The service charge for each multifamily residential structure or facility shall be \$55.10 for 2007, and \$56.48 for 2008 per bimonthly billing period for each dwelling unit, plus \$5.00 for 2007 and \$5.13 for 2008 per 100 cubic feet of water consumed

by such structure or facility in excess of 1,100 cubic feet per dwelling unit during each bimonthly billing period.

For the purposes of this Section 3, "multifamily residential structure or facility" shall mean any residential structure or facility containing two or more dwelling units, including but not limited to duplexes, triplexes, apartment buildings, condominiums, and parcels containing two or more separate dwelling units, but shall not include hotels, motels or trailer parks. Mixed use structures that include both multi-family dwelling units and commercial non-residential units and that are served by one water meter shall be billed as multi-family.

Section 4. Non-residential Structures or Facilities.

A. The service charge for non-residential structures or facilities shall be based on water consumption by each structure or facility and shall be computed as follows:

\$5.56 for 2007, and \$5.70 for 2008 per 100 cubic feet of water consumption per bimonthly billing period.

Provided, there shall be a minimum charge of \$86.42 for 2007 and \$88.58 for 2008 per bimonthly billing period.

For purposes of this Section 4, "non-residential structure or facilities" shall mean any structure or facility not governed by Section 2 or Section 3 of this ordinance and shall include, but not be limited to, any commercial, industrial, business, trade, school or municipal structure or facility.

Section 5. King County/METRO Charges. In addition to these rates and charges for sewerage service established in this ordinance, or otherwise established by the City, the following King County/METRO charges are imposed to ensure compliance with Section 204 of Public Law 92-500 (22 U.S.C. 1251) CFR Part 35, Subpart E:

A. A "surcharge" in an amount to be determined as provided in King County/METRO Resolution Nos. 2315 and 2557 (now incorporated into Title 28 of the King County Code, Chapter 28.84.060), as now constituted or hereafter amended, said charge to be added to the customer's regular bill.

B. An "Industrial Cost Recovery (ICR)" charge in an amount to be determined as provided in King County/METRO Resolution Nos. 2556 and 3374 (now incorporated into Title 28 of the King County Code, Chapter 28.84.060), as now constituted or hereafter amended, said charge to be billed separately to qualifying industrial customers on an annual basis.

C. An administrative charge of \$15.50 shall be added to each customer bill that contains a King County/METRO "surcharge" or "ICR charge."

D. The City of Bellevue, in cooperation with King County/METRO, shall maintain such records as are necessary to document that its sewerage charges comply with the above-cited federal laws and regulations and King County/METRO regulations.

Section 6. User Charges - Outside. The charges for each user outside the city or town limits of Bellevue, Clyde Hill, Hunts Point, Medina and Yarrow Point shall be the sum of any applicable charges under Sections 2, 3, 4 and 5 of this ordinance.

Section 7. User Charges - Inside. The charges for each user inside the city or town limits of Bellevue, Clyde Hill, Hunts Point, Medina and Yarrow Point shall be the sum of any applicable charges under Sections 2, 3, 4 and 5 multiplied by the percentage indicated below for that city or town:

| | |
|--------------|-----------|
| Bellevue | 105.4856% |
| Clyde Hill | 109.0756% |
| Hunts Point | 107.2506% |
| Medina | 100.0000% |
| Yarrow Point | 105.4856% |

provided that the percentages set forth above may be administratively adjusted by the Utility Department Director to reflect any increase or decrease in any franchise fee required to be paid to such city or town by the Utility.

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 5668

AN ORDINANCE authorizing the City Manager, or his designee, to amend the 2005-2011 General and Utility Capital Investment Program (CIP) Plans and to increase the project budgets for the Kamber Roadway Improvements (CIP Plan PW-R-102), Fish Passage Improvement Program (D-81), the Stream Channel Modifications (D-86), the Richards Creek/East Creek Flow Management (D-90), the Small Diameter Water Main Replacement (W-16), and the Sewer System Pipeline Rehabilitation (S-24) to reflect \$515,000 in revenue received through disbursement of a Settlement Agreement with Olympic Pipe Line Company; and amending the 2005-2006 Budget for the General CIP Fund by increasing the appropriation by \$34,000; and amending the 2005-2006 Budget for the Utility CIP Fund by increasing the appropriation by \$481,000.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Section 1. The City's 2005-2011 Capital Investment Program (CIP) Plans adopted by Ordinance No. 5580 on December 6, 2004, as previously amended, are hereby amended by increasing the project budgets for the Kamber Roadway Improvements (CIP Plan PW-R-102), the Fish Passage Improvement Program (D-81), the Stream Channel Modifications (D-86), the Richards Creek/East Creek Flow Management (D-90), the Small Diameter Water Main Replacement (W-16), and the Sewer System Pipeline Rehabilitation (S-24) to reflect \$515,000 in revenue received through disbursement of a Settlement Agreement with Olympic Pipe Line Company.

Section 2. The City's 2005-2006 General CIP Fund appropriation adopted by Ordinance No. 5580 on December 6, 2004, as previously amended, is hereby further amended to increase the appropriation to said CIP Fund by \$34,000.

Provided however, if the actual revenue received from the source specified in said agreement shall be more or less than the anticipated amount set forth herein, the appropriation shall be adjusted to equal the amount actually received.

Section 3. The City's 2005-2006 Utility CIP Fund appropriation adopted by Ordinance No. 5580 on December 6, 2004, as previously amended, is hereby further amended to increase the appropriation to said CIP Fund by \$481,000.

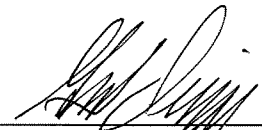
Provided however, if the actual revenue received from the source specified in said agreement shall be more or less than the anticipated amount set forth herein, the appropriation shall be adjusted to equal the amount actually received.

Section 4. The Finance Director or her designee is authorized to make interfund loans from appropriate City fund to the General CIP Fund in whatever amounts, for whatever duration or under whatever terms are appropriate and necessary to cover cash flow shortages in said fund that may be created by this agreement.

Section 5. This ordinance shall take effect and be in force five (5) days after passage and legal publication.

Passed by the City Council this 3rd day of April, 2006 and signed in authentication of its passage this 3rd day of April, 2006.

(SEAL)



Grant Degginger, Mayor

Approved as to form:

Lori M. Riordan, City Attorney



Jerome Y. Roaché, Assistant City Attorney

Attest:



Myrna L. Basich, City Clerk

Published April 7, 2006

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 5506

AN ORDINANCE amending the Utilities Codes, Bellevue City Code Title 24, as recommended by the Environmental Services Commission, to implement the results of the Development Services initiative and simplify, streamline, clarify and reduce the regulations relating to development of the water, sewer and storm and surface water facilities in the City and, wherever possible, improve the ease of use thereof by citizens, developers, and City staff.

WHEREAS, the City's Development Services Initiative has identified a number of changes that should be made to the City's Utilities Codes, Title 24 of the Bellevue City Code, in order to simplify, streamline, clarify and reduce the regulations relating to development of the water, sewer and storm and surface water facilities of the City; and

WHEREAS, the Environmental Services Commission has reviewed the changes and has determined that they will improve the ease of use of the Codes by citizens, developers and City staff and has recommended that they be made; and

WHEREAS, the City Council concurs in the recommendations of the Environmental Services Commission; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Sections 24.02.020, .050, .060, .100, .120, .130, .140, .170, .175, .200, .205, and 260 of the Bellevue City Code (Water Utility Code) are hereby amended to read as follows:

24.02.020 Purpose.

The purpose of this code is to: provide for the planning, security, design, construction, use, maintenance, repair and inspection of public and private water systems; establish programs and regulations to assure the quality of the water in such systems as well as provide for the efficient and conservative use of such water; and provide for the enforcement of the provisions of this code.

24.02.050 Definitions.

The following words and phrases, when used in this code, shall have the following meanings:

A. "As-built" means a final drawing of the actual installation of structures, materials and equipment.

- B. "Backflow" means the flow of contaminated water or other liquids, gases or substances into the potable water supply.
- C. "Backflow prevention assembly" means an assembly which prohibits the backflow of water into the potable water supply.
- D. "Capital recovery charge" means a monthly charge imposed on improvements, developments, redevelopments or existing structures that place additional demand on each utility system after January 1, 1997. The capital recovery charge shall be based on an allocation of the utility plant-in-service costs plus interest and the number of single family equivalents served by each utility. (Ord. 4951 1, 2, 1996; Ord. 4751 3, 1995.)
- E. "Connection charges" means charges imposed as a condition of providing utility service so that each connecting property bears its equitable share of the costs of the public water system and the utility's share of the cost of any regional water supply system and of the costs of facilities that benefit the property. Connection charges include latecomer charges, capital recovery charges, regional water supply system charges and direct facilities charges.
- F. "Cross-connection" means any physical arrangement in a public or private water system or plumbing system where the potable water supply is connected, directly or indirectly, with a real or potential source of contamination.
- G. "Cross-connection control" means a backflow prevention assembly, air gap or other control designed to prevent backflow from a cross-connection.
- H. "Director" means the director of the Bellevue utilities department, or his/her designated representative, or other person designated by the city manager.
- I. "Emergency" means any natural or human-caused event or set of circumstances which disrupts or threatens to disrupt or endanger the operation, structural integrity or safety of the public water system; constitutes an immediate health hazard to the potability of the utility's water supply or endangers the health and safety of the public; or otherwise requires immediate action by the utility.
- J. "Engineering standards" means the city of Bellevue utility engineering standards which include minimum requirements for the design and construction of water, storm and surface water drainage and sanitary sewer facilities.
- K. "Fire hydrant assembly" means a fire hydrant and the piping and valve to connect it to a water main.
- L. "Fire sprinkler system" means a privately owned and maintained system used for fire extinguishment only, including piping and appurtenances inside and outside a building but excluding fire hydrant assemblies.

- M. "Irrigation systems" means any means of applying water to landscaped areas.
- N. "Low-volume irrigation systems" means automatic irrigation systems, such as drip systems, micro-spray bubblers and soaker hoses that apply water directly to the root zone(s) of landscape plants only, in contrast to irrigation systems, such as those with overhead or broadcast nozzles, that apply water to all surfaces within the landscape.
- O. "Potable water system" means any part of the public water system or of a private water system that carries potable water.
- P. "Private water system" means any part of the water system that is not part of the public water system.
- Q. "Property owner" means any individual, company, partnership, joint venture, corporation, association, society or group that owns or has a contractual interest in the subject property or has been authorized by the owner to act on his/her behalf.
- R. "Public water system" means all pipes, pump stations, reservoirs, valves and appurtenances that are owned by the utility for the delivery of potable water. The public water system does not include those facilities located on the customer side of meters, or the customer side of backflow prevention assemblies on meterless fire services and serving individual properties.
- S. "Service connection" see "water service".
- T. "Redevelopment" means any site improvement that requires installation of water facilities greater than two inches in diameter to meet fire and/or domestic water pressure and flow requirements, or relocation of such existing facilities, except that facilities for the sole purpose of upgrading a backflow prevention assembly or retrofitting an internal fire sprinkler system are exempt. Construction of any new building(s) or any property subdivision is defined as new development rather than redevelopment, regardless of prior use of the site.
- U. "Regional water supply system" means any existing or planned water supply facilities or other assets which are owned by a regional water supply agency and which are utilized to provide water supply to the Utility. (Ord. 5427 12, 2002)
- V. "Unsafe condition" means any condition on any premises, or in any private water system thereon, that is a hazard to public health or safety, that does or may impair or impede the operation or functioning of any portion of the public water system, or that may cause damage thereto.
- W. "Utility" means the water utility component of the waterworks utility of the city of Bellevue, administered as a part of the Bellevue utilities department, pursuant to Chapter 3.38 BCC.

X. "Utility service area" means that service area defined in the East King County Coordinated Water Supply Plan (EKCCWSP) adopted by King County in June 1990, and approved by the city council pursuant to Resolution No. 5249, and as may be expanded through subsequent interlocal agreements, annexations and special utility district assumptions.

Y. "Water emergency" means that period of time during which water is not available or its availability is limited due to shortages in supply, interruptions in the water transmission or distribution systems, contamination of water supplies, or other conditions where use restrictions or prohibitions are necessary in order to efficiently and effectively safeguard the safety and health of the general public and to provide water for essential public uses.

Z. "Water facility" means any facility for the conveyance or storage of water and related appurtenances, whether part of the public water system or a private water system that is connected to or intended to be connected to the public water system.

AA. "Water main" means a water pipe that is part of the public or private water system used for the transmission and distribution of potable water, excluding service connections, fire hydrant assemblies and fire sprinkler systems.

BB. "Water service" (also called a service, water service connection or service connection) means the pipe and appurtenances used to provide potable water to an individual building or irrigation system, including the water service line (the pipe extending from the water main to the meter setter), meter setter, meter box, meter and miscellaneous fittings.

CC. "Water system" means the entire water system within the utility service area comprised of the public water system and the private water system.

DD. "Water system plan" means the water system comprehensive plan for the utility as adopted by Resolution No. 6273, as now or hereafter amended.

24.02.060 Authority of the utility.

The utility, by and through its director, shall have the authority to:

A. Develop, adopt and carry out procedures as needed to implement this code and to carry out other responsibilities of the utility, including, but not limited to, procedures pertaining to the billing and collection of water consumption charges, water service charges and all other fees and charges imposed pursuant to this code, and procedures for periodic adjustment of fees and charges imposed pursuant to this code.

B. Prepare and update, as needed, engineering standards to establish minimum requirements for the design and construction of water facilities and requirements for protecting existing facilities during construction. The engineering standards shall be consistent with this code and adopted city policies.

- C. Administer and enforce this code and all procedures relating to the planning, acquisition, security, design, construction, inspection, maintenance, management, operation and alteration of the public water system, including capital improvements, and relating to the design, construction and inspection of private water systems.
- D. Enter into any contracts pursuant to Chapter 35.91 RCW, the Municipal Water and Sewer Facilities Act, including contracts which provide for the reimbursement of owners constructing facilities (latecomer agreements) and agreements with private property owners for the extension of the public water system (system extension agreements).
- E. Advise the city council, city manager and other city departments and commissions on matters relating to the utility.
- F. Initiate and manage programs to further the water quality requirements and objectives of the utility including inspection of public and private property to identify and eliminate potential sources of contamination of the public water system and including inspection of backflow prevention assemblies installed to separate or isolate premises from the public water system.
- G. Develop and implement programs and restrictions related to water use, including the comprehensive water conservation program, landscape water budgeting requirements, irrigation system design and performance requirements, and a water shortage contingency plan to be implemented during water shortages caused by weather or by system failure.
- H. Prepare and recommend the water system plan referenced in BCC 24.02.070, and revisions thereto, for adoption by the city council and implementation by the utility.
- I. Carry out other responsibilities as required by this code or other city codes, ordinances or regulations consistent with the Bellevue comprehensive plan.
- J. Shut off water to any utility customer who is violating any provision of this code to the extent permitted by law.
- K. Perform or direct the performance of financial review and analysis of the utility's revenues, expenses, indebtedness, rates and accounting and recommend budgets, rates and financial policy for adoption by the city council.

24.02.100 Connections or modifications to the water system.

Connections or modifications to the public water system or to a private water system, including, but not limited to, extension of water mains, new service, meter size, location and grade changes, abandonment or removal of any structure connected to the public water system, and temporary connections to a fire hydrant, shall be allowed only if:

- A. Approval has been received from the utility, see BCC 24.02.120; and
- B. All applicable requirements of this code and utility procedures have been met; and
- C. All applicable engineering standards have been met or alternate standards have been approved by the utility as substantially equal; and
- D. The property owner has paid all applicable fees and charges; and
- E. The water is delivered from the utility to the user via a meter owned by the utility, except for fire sprinkler systems over two inches in diameter and except for authorized temporary use of fire hydrants through adapters under two inches in diameter; and
- F. Any private wells serving the property are disconnected from the potable water supply; and
- G. Any existing nonreusable water services are abandoned; and
- H. The property is within the utility service area or within an area served by the utility through agreement with another jurisdiction.

24.02.120 Permits – Approvals.

- A. General. The utility shall administratively determine submittal requirements for all utility permits and approvals.
- B. Application for Water Service. An application for water service is required to initiate a new or upgraded connection to the public water system or a meter set that is two inches in diameter or smaller.
- C. Water System Extension Agreement.
 - 1. The property owner and the utility shall enter into a water system extension agreement whenever any of the water facilities that must be installed to serve the property are greater than two inches in diameter. The water system extension agreement shall provide for the property owner to build all the water facilities needed to serve the property. These facilities may include meters and water services of any size, fire hydrant assemblies, fire sprinkler systems, water main extensions and/or other system components.
 - 2. The utility shall approve constructed facilities as complete once the facilities have been built according to the approved plans and specifications, as confirmed by utility inspectors; as-built drawings have been completed as specified in the engineering standards; and all applicable fees and charges have been paid.

3. The property owner shall be required to provide surety devices, in a form approved by the city: for water system extensions in city right-of-way; for connections to the water main during construction and for a one-year warranty period following acceptance by the city.

4. When a water system extension agreement is required to serve a proposed commercial or multi-family building, the utility will not sign off on the building permit until the system extension agreement has been initiated. When a water system extension agreement is required to relocate a water main from under a proposed building, the utility will not sign off on the building permit until the system extension has been completed and has been accepted by the utility, unless the building permit is conditioned to require relocation prior to site construction.

D. Approval for Single Fire Hydrant Installation. The utility may allow relocation or upgrade of a single fire hydrant through an administrative process rather than through a water system extension agreement, provided that proof of insurance and a surety device acceptable to the utility are furnished to the utility and all review and inspection fees are paid. A one-year warranty period shall be required.

E. Fire Hydrant Use Permit. A fire hydrant use permit is required to use water provided through fire hydrants. Each fire hydrant use permit expires at the end of the calendar year and must be renewed annually. A fire hydrant use permit will be issued only if the applicant demonstrates need and agrees in writing to the following conditions:

1. Water may be drawn from the fire hydrant only through hydrant meters or adapters owned by the utility, except the customer may supply his/her own hydrant adapter for tank lot sales.

2. Truck or tank backflow assemblies for tank lot sales are subject to utility approval. The customer must pass a utility cross-connection inspection prior to permit issuance.

3. Persons issued fire hydrant use permits must:

a. Return utility-owned equipment in good condition by the date specified and compensate the utility for any loss or damage.

b. For tank lot sales, the customer must report the number of tank lots purchased.

4. Tank trucks may only draw water from fire hydrants designated by the Utility for this purpose.

5. The utility may suspend fire hydrant use permits during water emergencies or if the customer violates any of the conditions listed under 24.02.120 E.

F. Approvals for Landscape Water Budgets and Irrigation System Design. When required by BCC 24.02.200 and/or 24.02.205, the owner's landscape and/or irrigation designer shall submit calculations and certification statements for utility review and approval.

G. Other Permits. It is the property owner's responsibility to identify and obtain all permits/approvals required for any proposed work.

H. Temporary Water Service Agreement. Any single-family residential property owner may request temporary water service if permanent facilities, that is, facilities that meet all code requirements (such as for system gridding) are not available. The utility may provide temporary single-family residential water service through a temporary water service agreement, which shall:

1. Calculate and collect the property owner's "fair share" costs for installing permanent water facilities. When the property is not fully developed and therefore is subject to redevelopment, the city shall collect only the developed portion's fair share cost at that time. When the property redevelops, the property owner must build the permanent water facilities, or if they are already built, must pay the remaining fair share costs. If a private property owner builds the permanent facilities, he/she will be paid the fair share costs that were collected under the temporary water service agreement plus accrued interest. Interest will be at a rate set by the city treasurer consistent with how interest rates are set for connection charges. Total interest may not exceed the principal amount of the charge.

2. Establish a time limit for connecting to the permanent service once it is available.

3. Indicate that the temporary water service agreement does not guarantee the availability of water for fire protection.

4. Specify that the agreement is a covenant which runs with the land and is binding on the owners and their successors.

5. Be recorded with King County against the property on which the facilities are located.

24.02.130 Engineering and design requirements.

A. General.

1. The property owner is responsible for water system design.

2. The water system designer must be a civil engineer licensed in the state of Washington and qualified by both experience and educational background in the design of water facilities.

3. Engineering and design shall conform to the engineering standards.

4. Water facilities in a designated coal mine area are subject to additional design requirements; see the coal mine area subdivision, development and building permit regulations adopted by Resolution No. 5712.

B. Water Facility Requirements.

1. Whenever property is developed or redeveloped in any way such that water demand or use is altered, new water facilities are required whenever necessary to:

a. Meet fire flow and other fire protection requirements, including the number and location of fire hydrants and fire sprinkler components, as determined by the fire marshal's office of the jurisdiction in which the project is located.

b. Meet domestic and irrigation flow requirements. See the engineering standards.

c. Meet pressure requirements. See the engineering standards.

d. Replace or relocate existing facilities as required or authorized by the utility.

2. Whenever property is developed or redeveloped, water mains shall be extended through and to the extremes of the property being developed as required by the utility when needed for the orderly extension or efficient gridding of the public water system.

C. Water Service Design.

1. Water services shall be designed in accordance with the engineering standards.

2. Each separate building is required to have its own water service, except detached garages, sheds and guest houses on the same single-family residential parcel.

D. Cross-Connection Control. All connections to the public water system shall comply with the backflow prevention requirements of BCC 24.02.190.

24.02.140 Installation responsibility.

A. Utility Installation.

1. The utility shall install meters two inches or less in diameter provided the owner pays all applicable costs, fees and charges pursuant to BCC 24.02.250.

2. The utility may install water services two inches and smaller in diameter,

where services are not provided through a water system extension agreement pursuant to BCC 24.02.120(C), provided the owner agrees to pay all costs, fees and charges pursuant to BCC 24.02.250.

B. Property Owner Installation. The property owner shall install all water facilities required by this code to serve the property when any of the required facilities are larger than two inches in diameter. The property owner may install water services two inches and smaller in diameter upon approval by the Utility. Installation shall be through a water system extension agreement. See BCC 24.02.120(C).

C. Costs. The property owner shall be responsible for all installation costs regardless of whether the work is done by the utility or by the owner, provided that:

1. If the utility requires a property owner to oversize a water facility for reasons other than fire protection purposes or to adequately serve the owner's property, the utility will compensate the property owner for the difference in cost between the normally-sized water facility and the oversized water facility, based on the lowest of three bids from reputable licensed contractors furnished by the property owner.

2. An owner who constructs a water system extension that directly benefits a property in addition to the owner's may request a latecomer agreement in order to be reimbursed from benefiting properties that connect to the extension during the agreement's duration. See BCC 24.02.150 regarding latecomer agreements.

3. If the city chooses to install water facilities to facilitate development, coordinate with other city projects, or for other utility purposes, it may recover its costs, including interest, through a connection charge. (Ord. 4751 3, 1995.)

24.02.170 Construction requirements.

A. General. When constructing or modifying water facilities, compliance is required with this code, the engineering standards, the approved permit, plans and specifications, the terms of any water system extension agreement, the recommendations of the manufacturer of the materials or equipment used and any applicable local, state or federal requirements.

B. Safety Requirements. Utility staff will perform inspections only if shoring and other site conditions conforms with WISHA safety standards and other safety requirements, as applicable.

C. Failure to Complete Work or Meet Requirements.

1. The utility may complete water facility construction begun by a property owner or contractor, or take steps to restore the site (such as backfilling trenches and restoring the public way) if the work does not meet the requirements of this code, the engineering standard and other applicable utility requirements, the contractor or person doing the work fails to rectify the problem following notification

by the utility; and the work, in the opinion of the utility, constitutes a hazard to public safety, health or the public water system.

2. Utility costs incurred pursuant to the preceding BCC 24.02.170(C)(1) shall be calculated pursuant to BCC 24.02.250(B) and charged to the owner or contractor in charge of such work. The permittee shall pay the utility immediately after written notification is delivered to the responsible parties or posted at the location of the work. Such costs shall constitute a civil debt owing to the utility jointly and severally by such persons who have been given notice as herein provided. The debt shall be collectable in the same manner as any other civil debt owing the utility.

3. If in the opinion of the Director, the work being performed is not in accordance with these codes or Engineering Standards and the permittee is unwilling to change or correct the deficiencies, the Director may issue a stop work order until the deficiencies are corrected.

24.02.175 Construction and warranty inspections and tests.

A. Construction/Installation Inspection.

1. All projects permitted or approved by the Utility under a Water System Extension Agreement or other permit are subject to utility inspection to ensure compliance with the code and permit/approval conditions. As a condition of permit issuance or extension agreement, the applicant shall consent to inspection and testing.

2. Newly installed water facilities shall be inspected, tested, and documentation completed according to the engineering standards and procedures.

3. Newly installed or relocated backflow prevention assemblies shall be inspected, tested, and certified pursuant to the requirements of BCC 24.02.190(D).

4. The quality, taste and odor of water drawn from new water mains shall be the same as the quality, taste and odor of water in the existing facility classed as acceptable for use by the utility. Should the water not be acceptable in quality, taste or odor, required steps as approved by the utility shall be taken to attain acceptable water quality standards.

B. Warranty Inspections and Tests. Facilities and equipment accepted by the utility under specific warranties may be reinspected at the utility's discretion and, if necessary, retested prior to the expiration of the warranty period.

24.02.200 Water conservation.

Waste of Water. The waste of water supplied by the utility is prohibited at all times. Waste of water includes, but is not limited to: continuous application of water to lawns or landscaping which results in excessive puddling or runoff of water, failure to repair leaking water service lines and irrigation systems, application of water to

impervious surfaces other than for cleaning purposes, and all other applications of domestic water which do not result in a beneficial use of the city's public water supply.

24.02.205 Landscape and irrigation water budgeting requirements.

A. Applicability. The water budgeting requirements of this section shall apply to new or modified landscaping whenever new or modified landscaping is required by the Land Use Code or proposed by the property owner except that the following shall be exempt from such requirements.

1. Single-family residential lots; provided, that community area landscaping installed by the developer is not exempt.

2. Any project with a total landscape area of less than 500 square feet. If a project is constructed in phases, the total landscape area shall include the total area of all phases.

3. Those portions of a site irrigated with water that is not supplied by the utility.

4. Turf portions of public athletic facilities where turf provides a playing surface and turf portions of public access land used for purposes of public recreation and activities, such as but not limited to outdoor assemblies, picnicking, unstructured sports fields and sunbathing. However, this exemption applies only if the applicant submits a statement designating such turf areas and specifying additional water needs above the irrigation water budget. The additional irrigation water needs shall be based upon the evapotranspiration information for the turf-grass species or species mix designated for the turf area.

5. Those portions of privately owned properties where athletic and recreation facilities, as identified by BCC 24.02.205(A)(4), are installed for use by the general public. However, this exemption applies only if the applicant submits a statement designating such area(s) as open to the public.

B. Water Budget Requirements. For each proposed landscape design not exempted by BCC 24.02.205(A), a state-registered landscape architect, Washington certified nurseryman (WCN) or Washington certified landscaper (WCL) shall certify that the estimated annual water use will not exceed the irrigation water budget, as calculated pursuant to the methodology contained in the engineering standards. Copies of the supporting calculations shall be submitted to the utility.

C. Landscape Management. All landscaped areas designed to meet water budget requirements shall be installed, operated and maintained such that the allowed annual water use is not exceeded.

D. All proposed new irrigation systems that will be connected to the public water system shall be designed in accordance with the engineering standards.

24.02.260 Connection charges.

A. General.

1. The utility shall collect connection charges in order that each connecting property shall bear its equitable share of the cost of the public water system and the Utility's share of the cost of any regional water supply system providing water supply to the utility.

2. Connection charges shall be paid:

a. Before a property is allowed to connect to the public water system.

b. At the time of re-development of the property, if connection charges apply that have not yet been paid such as charges for new facilities that directly benefit the property.

3. Connection charges that have been paid as a result of prior development activities or through participation in an LID or ULID will not be reassessed.

4. The utility may enter into contracts with the owners of existing single-family residences and with the owners of redevelopment projects that meet criteria specified by the utility for payment of connection charges over time instead of as a lump sum. The utility will charge interest at a rate set by the city treasurer on any outstanding debt covered by a payment contract. A contract shall be payable in full at the time of closing upon sale of the property.

B. Direct Facilities Charges.

1. The utility shall collect direct facilities charges from property owners that directly benefit from utility-built or privately-built water service facilities, except property owners who previously paid their fair share through an LID or ULID. Facilities that may be covered in a direct facilities charge include, but are not limited to, lines built from the water main to the property line, fire hydrant assemblies, pump stations, reservoirs and distribution and transmission mains.

2. The direct facilities charge is the property owner's equitable share of the established costs of the facilities he/she benefits from. The equitable share shall include interest charges applied from the date of construction acceptance of the facility until the property connects, or for a period not to exceed 10 years, whichever is less, at a rate commensurate with the rate of interest applicable at the time of construction of the facility to which the property owner is seeking to connect but not to exceed 10 percent per year; provided, that the aggregate amount of interest shall not exceed the equitable share of the cost of the facility allocated to such property owner.

3. The facilities' costs shall be allocated to benefitting property owners based on the number of single family equivalents. The director may, however, make such allocation based on front footage or other reasonably based methodology if the director determines that such alternate basis or methodology better assures equitable sharing of cost by all properties benefitting from the facilities.

C. Administrative Procedures; Adjustment of Charges. The director is authorized to adopt administrative procedures for the purpose of administering the provisions of this section, and to adjust the charges established by subsections A and B, above, from time to time to reflect the actual cost of the facilities for which the charges are made.

Section 2. Sections 24.02.125 and 24.02.210 of the Bellevue City Code (Water Utility Code) are hereby repealed.

Section 3. Sections 24.04.020, .050, .100, .120, .130, .140, .160 and .170 of the Bellevue City Code (Sewer Utility Code) are hereby amended to read as follows:

24.04.020 Purpose.

The purpose of this code is to: provide for the planning, security design, construction, use, maintenance, repair and inspection of public and private sanitary sewer systems; establish programs and regulations to provide for the appropriate use of such systems; and provide for the enforcement of the provisions of this code.

24.04.050 Definitions.

The following words and phrases, when used in this code, shall have the following meanings:

- A. "As-built" means a final drawing of the actual installation of the structures, materials and equipment.
- B. "Connection charges" means charges imposed as a condition of providing utility service so that each connecting property bears its equitable share of the costs of the public sewer system and of the costs of facilities that benefit the property. Connection charges include latecomer charges, capital recovery charges and direct facilities charges.
- C. "Director" means the director of the Bellevue utilities department, or his/her designated representative or other person designated by the city manager.
- D. "Emergency" means any natural or human-caused event or set of circumstances which disrupts or threatens to disrupt or endanger the operation, structural integrity, or safety of the public sewer system; endangers the health and safety of the public; or otherwise requires immediate action by the utility.

- E. "Engineering standards" means the city of Bellevue utility engineering standards which include minimum requirements for the design and construction of water, storm and surface water drainage and sanitary sewer facilities.
- F. "FOG" means fats, oils and grease.
- G. "Industrial waste" means any liquid, solid or gaseous substance or combination thereof, resulting from any process of industry, manufacturing, commercial food processing, business, trade or research, including development, recovering or processing of natural resources.
- H. "Licensed side sewer contractor" means any person, partnership, corporation or association duly qualified and competent to do work incident to the construction or repair of side sewers under permits issued under this code and who shall have been duly licensed by the utility.
- I. "Nonpolar fats" means fats, oils or grease of animal or vegetable origin.
- J. "Polar fats" means fats, oils or grease of mineral origin.
- K. "Pretreatment device" means any approved device, structure, system or method used and maintained for the purpose of bringing a waste stream within acceptable limits and standards of quality prior to its discharge to the public sewer system.
- L. "Private sewer system" means any part of the sewer system that is not part of the public sewer system as defined in the code.
- M. "Property owner" means any individual, company, partnership, joint venture, corporation, association, society or group that owns or has a contractual interest in the subject property or has been authorized by the owner to act on his/her behalf.
- N. "Public sewer system" means the sanitary sewer system owned and operated by the utility.
- O. "Residential structure" means a single-family or duplex structure.
- P. "Sewage" means waste discharged from the sanitary facilities of buildings and including industrial wastes.
- Q. "Sewer facility" means any facility for the conveyance or storage of sewage, whether part of the public sewer system or a private sewer system, that is connected to or intended to be connected to the public sewer system.
- R. "Sewer main" means a pipe designed or used to transport sewage, excluding side sewers.

S. "Sewer pretreatment" means the treatment of industrial waste before discharge to the public sewer system.

T. "Sewer service" means providing for the disposal of sewage from a structure into the public sewer system.

U. "Sewer system plan" means the sewer system comprehensive plan for the utility, as adopted by Resolution No. 5827, as now or hereafter amended.

V. "Side sewer" means a conduit extending from the public sewer main to the connection with a building's plumbing system.

W. "Side sewer stub" means that portion of the side sewer in the right-of-way or easement dedicated to the utility.

X. "Structure" means any building that contains facilities for the disposal of sewage.

Y. "Unsafe condition" means any condition on any premises, or in any private sewer system thereon, that is a hazard to public health or safety, that does or may impair or impede the operation or functioning of any portion of the public sewer system or that may cause damage thereto.

Z. "Utility" means the sewer utility component of the waterworks utility of the city of Bellevue, administered as a part of the Bellevue utilities department, as provided by Chapter 3.38 BCC.

AA. "Utility service area" means that service area defined on the map filed with the city clerk under Clerk's Receiving No. 8893, and as may be expanded through subsequent interlocal agreements, annexations and special utility district assumptions.

BB. "Capital recovery charge" means a monthly charge imposed on improvements, developments, redevelopments or existing structures that place additional demand on each utility system after January 1, 1997. The capital recovery charge shall be based on an allocation of the utility plant-in-service costs plus interest and the number of single family equivalents served by each utility.

24.04.100 Connections or modifications to the sewer system.

A. Connection to the Sewer System Required.

1. All structures which contain facilities for the disposal of sewage shall connect to the public sewer system unless a variance is granted pursuant to BCC 24.04.100(B). Where sanitary sewer service is not available and is required, the utility may require the property owner to install a sewer main extension.

2. Connections or modifications to the sewer system, including, but not limited to, the installation or repair of sewer mains or side sewers, and abandonment or removal of any structure connected to the public sewer system shall occur only if:

a. Approval has been received from the utility (see BCC 24.04.120);

and

b. All applicable requirements of this code and utility procedures have been met; and

c. All applicable engineering standards have been met or alternative standards have been approved by the utility as substantially equal; and

d. The property owner has paid all applicable fees and charges; and

e. Any existing on-site sewage disposal facilities are disconnected in accordance with health department requirements; and

f. The property is within the utility service area or within an area served by the utility through agreement with an adjacent jurisdiction.

B. Variance from the Sewer Connection Requirement.

1. Any property owner may apply for a variance from the sewer connection requirement to allow for an on-site septic disposal system.

2. The director shall approve a variance only if all of the following decision criteria are met:

a. The property is more than 200 feet or such other distance as may be required by King County Board of Health On-Site Sewage Regulations, via dedicated easements and/or right-of-way from the existing public sewer system or, in the case of subdivisions, the exterior boundary of the subdivision is more than 660 feet, measured in the same manner, from the existing public sewer system; and

b. The proposed septic system will not have an adverse environmental effect on potable water wells, ground water, streams or other surface bodies of water; and

c. The proposed septic system is in compliance with all applicable federal, state and local health and environmental regulations; and

d. The cost of providing sewer service to the structure will result in an economic hardship. Economic hardship is defined as an unrecoverable cost equal to or exceeding 20 percent of the fair market value of a building site with utilities in place on which the structure is to be located.

3. Any variance issued by the director shall be subject to the following conditions:

a. The applicant must obtain King County health department approval of the septic tank system and must obtain any other permits which may be required by law for such system; and

b. The applicant shall record an agreement, in a form approved by the city and referred to herein as "agreement to connect," with the King County department of records and elections. Such agreement shall require payment of all connection charges at the time of actual connection to the system. The agreement shall be a covenant which runs with the land and is binding on the owners and successors in interest of the property. The agreement shall provide that the structure shall be connected to the public sewer system at such time as the system is available and that the property owner will not protest the formation of any future LID or ULID for extension of a sewer system that would serve the property. The sewer system shall be deemed available for purposes of this requirement whenever the structure can be connected to the system by an extension of 330 feet or less or, in the case of a subdivision, the boundary of the subdivision can be reached by an extension of 660 feet or less from the system.

4. The applicant may appeal a decision of the director denying a variance application pursuant to the Process II appeal procedures of LUC 20.35.250.

24.04.120 Permits – Approvals.

A. General. The utility shall administratively determine submittal requirements for all utility permits and approvals.

B. Side Sewer Permit.

1. A side sewer permit is required to construct a side sewer and/or to make any additions, repairs or connections to an existing side sewer.

2. A side sewer permit application must be made by the property owner or his/her licensed sewer contractor.

3. Side sewer permits for commercial projects, including multifamily structures, may be issued as part of the sewer system extension agreement, if one is required, pursuant to BCC 24.04.120 (C)(1). The side sewer can be installed as part of the sewer system extension agreement and shall be put in use only after acceptance by the utility of the system extension.

4. Side sewer permits for lots in subdivisions and short plats will be issued only after sewer main extensions have been accepted by the city.

5. Side sewer permits shall expire 12 months from date of issuance.

C. Sewer System Extension Agreement.

1. The property owner and the utility shall enter into a sewer system extension agreement whenever an extension to an existing sewer main is required pursuant to BCC 24.04.100(A)(1) or 24.04.130(B)(2).

2. The utility shall approve constructed facilities as complete once the facilities have been built according to the approved plans and specifications, as confirmed by utility inspectors, as-built drawings have been completed as specified in the engineering standards and all applicable fees and charges have been paid.

3. The property owner shall be required to provide surety devices, in a form approved by the city, for sewer system extensions in city right-of-way, for connections to the sewer main during construction and for a one-year warranty period following acceptance by the city.

4. When a sewer system extension agreement is required to serve a proposed commercial or multi-family building, the utility will not sign off on the building permit until the system extension agreement has been initiated. When a sewer system extension agreement is required to relocate a sewer main from under a proposed building, the utility will not sign off on the building permit until the system extension has been completed and accepted by the utility, unless the building permit is conditioned to require relocation prior to site construction.

D. Temporary Sewer Service Agreement. Any single-family residential property owner may request temporary sewer service if permanent facilities, that is, facilities that meet all code requirements such as for system extension, are not available. The utility may provide temporary single-family residential service through a temporary sewer service agreement which shall:

1. Calculate and collect the property owner's fair share costs for installing permanent sewer facilities. When the property is not fully developed and therefore is subject to redevelopment, the city shall collect only the fair share cost for the developed portion at that time. When the property is redeveloped, the property owner shall build the permanent sewer facilities, or if they are already built, shall pay the remaining fair share costs. If a private property owner builds the permanent facilities, he/she will be paid the fair share costs that were collected under the temporary sewer service agreement plus accrued interest. Interest will be at a rate set by the city treasurer consistent with how interest rates are set for connection charges. Total interest may not exceed the principal amount of the charge.

2. Establish a time limit for connecting to the permanent service once it is available.

3. Specify that the agreement runs with the land and is binding on the owners and their successors.

4. Be recorded with King County against the property on which the facilities are located.

E. Pump Station Agreement. Prior to construction of a privately owned sewer pump station other than for a single-family residence or serving a single-family lot, the property owner shall enter into a pump station agreement with the utility that sets forth the owner's maintenance and emergency responsibilities.

F. Agreement to Connect. When a variance to allow a septic system is granted, an "agreement to connect" must be recorded pursuant to BCC 24.04.100(B)(3).

G. Contractors shall be licensed in accordance with Washington State requirements and shall be registered with the City of Bellevue Tax Office.

H. Other Permits. It is the property owner's responsibility to identify and obtain all permits/approvals required for any proposed work.

24.04.130 Engineering and design requirements.

A. General.

1. The property owner is responsible for sewer system design.
2. The sewer system designer must be a civil engineer licensed in the state of Washington and qualified by both experience and educational background in the design of sewer facilities.
3. Engineering and design shall conform to the engineering standards.
4. Sewer facilities in a designated coal mine area are subject to additional design requirements. See the coal mine area subdivision, development, and building permit regulations adopted by Resolution No. 5712.

B. Sewer Facility Requirements.

1. Whenever property is developed or redeveloped in any way such that sewage discharge is changed in content or volume, new sewer facilities are required whenever necessary to:

- a. Meet hydraulic capacity requirements. See the engineering standards; or
- b. Replace existing facilities that need to be relocated; or
- c. Meet industrial waste pretreatment requirements pursuant to BCC

24.04.213.

2. Whenever property is developed or redeveloped, sewer mains shall be extended through and to the extremes of the property being developed, as required by the utility, when needed for the orderly extension of the public sewer system.

C. Side Sewer Design.

1. A maximum of four residential structures may be connected to a single side sewer.

2. Where physical conditions render compliance with utility side sewer requirements impracticable, the utility may require compliance insofar as is reasonably possible provided that the property owner execute and deliver to the utility an instrument, in a form furnished by the utility, agreeing to hold harmless and indemnify the utility and the city of Bellevue for any damage or injury resulting from such installation. The utility may require that such instrument be recorded against the property with the King County office of records and elections.

D. Pump Stations and Lifts.

1. Pump stations shall be permitted only for service to those properties which the director determines cannot reasonably be served by conventional gravity sewers.

2. In any structure in which the plumbing is too low to permit gravity flow to the designated connection point, the sewage shall be lifted by artificial means. When only the lower floor of a structure is too low for gravity flow, the sewage from the upper floors must flow by gravity.

24.04.140 Installation responsibility.

A. Property Owner Installation. The property owner shall be responsible for the installation of all sewer facilities required by this code. Installation shall be through a sewer system extension agreement or side sewer permit. See BCC 24.04.120.

B. Costs. The property owner shall be responsible for all installation costs regardless of whether the work is done by the utility or by the owner, provided that:

1. If the utility requires a property owner to oversize a sewer facility for reasons other than to adequately serve the owner's property, the utility will compensate the property owner for the difference in cost between the normally sized sewer facility and the oversized sewer facility, based on the lowest of three bids from reputable licensed contractors furnished by the property owner.

2. A property owner who constructs a sewer system extension that directly benefits property in addition to the owner's may request a latecomer agreement in order to be reimbursed by benefiting properties that connect to the extension during the agreement's duration. See BCC 24.04.150 regarding latecomer agreements.

3. The city may choose to install sewer facilities to facilitate development, coordinate with other city projects or for other utility purposes and may recover its costs, including interest, through a connection charge.

24.04.160 Sewer easement requirements.

A. When Required. An easement is required whenever:

1. A public sewer facility will be built on private property; or
2. A private sewer facility will be built on property owned by a different private party; or
3. A side sewer will serve two or more properties.

B. Requirements. All of the following requirements shall be met before the city will accept and/or approve any easement:

1. Clear title in the grantor shall be demonstrated; and
2. The easement shall be consistent with utility clearance standards and setback standards and with other utilities or easements. The utility may require the easement to exclude other utilities and uses if necessary to protect the public sewer system; and
3. The easement shall provide access to the facility for repair and maintenance. When deemed necessary by the utility, the easement shall contain provisions for long-term maintenance. Easements for side sewers serving more than one property must specify responsibility for costs of maintenance, repair and access; and
4. The easement shall prohibit all structures except those which can readily be removed by the structure's owner at the owner's expense when access to the sewer facility is required by the utility. If such structures are in the easement, an agreement with the utility to remove the structure on request shall be recorded; and
5. The easement dimensions and other requirements shall be in accordance with the engineering standards.

C. Costs. The property owner shall pay all costs of providing or obtaining and recording the easement.

D. Relinquishment of Easement. An easement granted to the utility may be relinquished only if the utility determines it is no longer needed and the city council authorizes the relinquishment.

24.04.170 Construction requirements.

A. General. When constructing or modifying sewer facilities, compliance is required with this code, the engineering standards, the approved permit, plans and specifications, the terms of any sewer system extension agreement, the recommendations of the manufacturer of the materials or equipment used and any applicable local, state or federal requirements.

B. Safety Requirements. Utility staff will perform inspections or hole-cuts only if shoring and other site conditions conforms with WISHA safety standards and other safety requirements, as applicable.

C. Failure to Complete Work or Meet Requirements.

1. The utility may complete sewer facility construction begun by a property owner or contractor, or take steps to restore the site (such as backfilling trenches and restoring the public way) if the work does not meet the requirements of this code, the engineering standard and other applicable utility requirements, the contractor or person doing the work fails to rectify the problem following notification by the utility; and the work, in the opinion of the utility, constitutes a hazard to public safety, health or the public sewer system.

2. Utility costs incurred pursuant to the preceding BCC 24.04.170(C)(1) shall be calculated pursuant to BCC 24.04.250(B) and charged to the owner or contractor in charge of such work. The permittee shall pay the utility immediately after written notification is delivered to the responsible parties or posted at the location of the work. Such costs shall constitute a civil debt owing to the utility jointly and severally by such persons who have been given notice as herein provided. The debt shall be collectable in the same manner as any other civil debt owing the utility.

3. If in the opinion of the Director, the work being performed is not in accordance with these codes or engineering standards and the permittee is unwilling to change or correct the deficiencies, the Director may issue a stop work order until the deficiencies are corrected.

D. Additional Side Sewer Construction Requirements.

1. Side sewers may be constructed only by the following:

- a. Contractors licensed in accordance with BCC 24.04.120(G);
- b. Property owners working on their own property;

2. The side sewer permit shall be readily available at the job site at all times. No inspections will be completed if the permit is not available.

3. Connection shall be made to the wye or tee or side sewer stub designated at the time the side sewer permit is issued unless written permission to

do otherwise is obtained from the utility. If the designated stub cannot be found, the utility will install one at the utility's expense. The utility shall not be responsible for costs incurred by the owner/contractor when looking for the stub.

24.04.260 Connection charges.

A. General.

1. The utility shall collect connection charges, in order that each connecting property shall bear its equitable share of the cost of the public sewer system.

2. Connection charges shall be paid before a property is allowed to connect to the public sewer system. Connection charges not previously paid, such as charges for new facilities that directly benefit the property, shall be paid when the property undergoes, either at one time or cumulatively through more than one project, a substantial remodeling as defined in Land Use Code Section 20.50.040 or more substantial improvement or if an improvement or cumulative improvements significantly impact downstream system capacity.

3. Connection charges that have been paid as a result of development activities on the property or through participation in an LID or ULID will not be reassessed.

4. The utility may enter into contracts with the owners of existing single-family residences and with the owners of redevelopment projects that meet criteria specified by the utility for payment of connection charges over time instead of as a lump sum. The utility will charge interest, at a rate set by the city treasurer on any outstanding debt covered by a payment contract. A contract shall be payable in full at the time of closing upon sale of the property.

B. Direct Facilities Charges.

1. The utility shall assess and collect direct facilities charges from property owners that directly benefit from utility-built or privately-built sewer facilities, except property owners who previously paid their fair share through an LID or ULID. Facilities that may be covered in a direct facilities charge include, but are not limited to, stubs built from the sewer main to the property line, pump stations and mains.

2. The direct facilities charge is the property owner's equitable share of the established costs of the facilities he/she benefits from. The equitable share shall include interest charges applied from the date of construction acceptance of the facility until the property connects, or for a period not to exceed 10 years, whichever is less, at a rate commensurate with the rate of interest applicable at the time of construction of the facility to which the property owner is seeking to connect but not to exceed 10 percent per year; provided, that the aggregate amount of interest shall not exceed the equitable share of the cost of the facility allocated to such property owner.

3. The facilities' costs shall be allocated to benefitting property owners based on the number of single family equivalents. The director may, however, make such allocation based on front footage or other reasonably based methodology if the director determines that such alternate basis or methodology better assures equitable sharing of cost by all properties benefitting from the facilities.

C. Administrative Procedures; Adjustment of Charges. The director is authorized to adopt administrative procedures for the purpose of administering the provisions of this section, and to adjust the charges established by subsections A and B, above, from time to time to reflect the actual cost of the facilities for which the charges are made.

Section 4. Section 24.04.125 of the Bellevue City Code (Sewer Utility Code) is hereby repealed.

Section 5. Sections 24.06.020, .050, .060, .075, .090, .100, .115, .120, .130, .140, .160, .170, .175, .185, .195, .220, .260 and .280 of the Bellevue City Code (Storm and Surface Water Utility Code) are hereby amended to read as follows:

24.06.020 Purpose.

The purpose of this code is: to provide for the planning, security, design, construction, use, maintenance, repair and inspection of the public and private storm and surface water system; to establish programs and regulations to assure the quality of the water in such system, to preserve the integrity of the system, and to minimize the chance of flooding; and to provide for the enforcement of the provisions of this code. This code supplements other city ordinances and regulations regarding protection of the storm and surface water system, including but not limited to the wetland and riparian corridor regulations included in Land Use Code Part 20.25H, the Sensitive Area Overlay District.

24.06.050 Definitions.

The following words and phrases, when used in this code shall have the following meanings:

A. Area of Special Flood Hazard means the land in the Floodplain subject to a one percent or greater chance of flooding in any given year as calculated in the Storm and Surface Water Utility Code, Chapter 24.06 BCC.

B. "As-built" means a final drawing of the actual installation of structures, materials and equipment.

C. "Best management practice" (BMP) means those physical, structural and/or managerial practices that, when used individually or in combination, prevent or reduce pollution of water. BMPs include, but are not limited to, structural solutions covered by the terms "best available technology" (BAT) and "all known available and reasonable methods of treatment" (AKART).

D. "Capital recovery charge" means a monthly charge imposed on improvements, developments, redevelopments or existing structures that place additional demand on each utility system after January 1, 1997. The capital recovery charge shall be based on an allocation of the utility plant-in-service costs plus interest and the number of single family equivalents served by each utility.

E. "Comprehensive drainage plan" means the latest version of the city of Bellevue comprehensive drainage plan as adopted by the city council.

F. "Connection charges" means charges imposed as a condition of connecting to the utility system so that each connecting property bears its equitable share of the costs of the public drainage system and of the costs of facilities that benefit the property. Connection charges include latecomer charges, capital recovery charges and direct facilities charges.

G. "Conveyance System" means that part of the storm and surface water system that conveys runoff from any portion of public right-of-way.

H. "Detention facility" means an above or below ground facility, such as a pond or vault, that temporarily stores storm water runoff and subsequently releases it at a slower rate than it is collected by the drainage facility. There is little or no infiltration of stored storm water.

I. "Director" means the director of the Bellevue utilities department, or his/her designated representative, or other person designated by the city manager.

J. "Drainage system" see "storm and surface water system."

K. "Emergency" means any natural or human-caused event or set of circumstances that disrupts or threatens to disrupt or endanger the operation, structural integrity or safety of the drainage system; or endangers the health and safety of the public; or otherwise requires immediate action by the utility.

L. "Engineering Standards" means the city of Bellevue utility engineering standards which include minimum requirements for the design and construction of water, storm and surface water drainage and sanitary sewer facilities.

M. "Flood insurance rate map" (FIRM) means the Flood Insurance Study map delineating the Area of Special Flood Hazard effective December 1, 1978, that was prepared by the Federal Insurance Administration for the city, or as subsequently amended or revised by the Federal Emergency Management Agency. The map accompanies the engineering report "Flood Insurance Study – City of Bellevue, Washington."

N. "Hydroperiod" means the seasonal occurrence of flooding and/or soil saturation; encompasses the depth, frequency, duration and seasonal pattern of inundation.

O. "Land disturbing activity" means any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, demolition, construction, clearing, grading, filling and excavation.

P. "Large parcel new development" means new development that includes the creation or addition of 5,000 square feet or more of new impervious surface and/or land disturbing activity of one acre or more within a 12-month period, except for the following:

1. Individual, detached single-family residences;
2. Individual, detached duplex residences;
3. Commercial agriculture;
4. Forest practices regulated under WAC Title 222 other than Class IV general forest practices that are conversions from timber land to other uses.

Q. "Maintenance standards" means city of Bellevue utility maintenance standards which include minimum requirements for maintaining drainage facilities so they function as intended and provide water quality protection and flood control.

R. Maximum Extent Practicable, or "MEP" means the use of best management practices that are technically and financially achievable and is the technically sound and financially responsible, non-numeric criteria (standard of compliance) applicable to all municipal stormwater discharges through the implementation of "best management practices."

S. "One hundred-year, 24-hour storm" (100-year, 24-hour storm) means a storm with a 24-hour duration with a 0.01 probability of exceedance in any one year.

T. "Pollution" means the contamination or other alteration of the physical, chemical, or biological properties of any natural waters including change in temperature, taste, color, turbidity, or odor of the waters, or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, *per RCW 90.48.20*.

U. "Procedure" means a procedure adopted by the utility, by and through the director, to implement this code, or to carry out other responsibilities as may be required by this code or other codes, ordinances, or resolutions of the city or other agencies.

V. "Property owner" means any individual, company, partnership, joint venture, corporation, association, society or group that owns or has a contractual interest in the subject property or has been authorized by the owner to act on his/her behalf.

W. "Private system or private drainage facility" means any element of the storm and surface water system which is not a part of the public drainage system as defined in this code.

X. "Public storm and surface water system, or public drainage system" means those elements of the storm and surface water system maintained and operated by the city:

1. Located on property owned by the city or in public right-of-way; or
2. Located on property on which the city has an easement, license or other right of use for utility purposes.

Y. "Redevelopment" means, on an already developed site, the creation or addition of impervious surfaces; structural development including construction, installation, or expansion of a building or other structure; and/or replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities associated with structural or impervious development.

Z. "Runoff control BMPs" means BMPs that are intended to control or manage the rate and/or quantity of storm water runoff.

AA. "Source control BMPs" means BMPs that are intended to prevent pollutants from entering storm and surface water.

BB. "Storm and surface water system," also referred to as the drainage system, means the entire system within the city, both public and private, naturally existing and manmade, for the drainage, conveyance, detention, treatment or storage of storm and surface waters. However, facilities directly associated with buildings or structures such as foundation drains, rockery/retaining wall drains, gutters and downspouts or groundwater are not considered parts of the storm and surface water system.

CC. "Stream" means any and all surface water routes generally consisting of a channel having a bed, banks, and/or sides in which surface waters flow in draining from higher to lower land, both perennial and intermittent; and including intervening artificial components.

DD. "Unsafe condition" means any condition on any premises which is a hazard to public health or safety that does or may impair or impede the operation or functioning of any portion of the public drainage system or which may cause damage thereto.

EE. "Utility" means the storm and surface water utility component of the waterworks utility of the city of Bellevue, administered as part of the Bellevue utilities department, as provided by Chapter 3.38 BCC.

FF. "Water quality design storm" means a six-month return period, 24-hour duration storm.

GG. "Zone A" means the Area of Special Flood Hazard (ASFH), except coastal V Zones, shown on a community's Flood Insurance Rate Map (FIRM). There are five types of A Zones:

A: ASFJ where no base flood elevation is provided.

A#: Numbered A Zones (e.g., A7 or A14), ASFH where the FIRM shows a base flood elevation in relation to NGVD.

AE: ASFH where base flood elevations are provided. AE Zone delineations are now used on new FIRMS instead of A# Zones.

AO: ASFH with sheet flow, ponding, or shallow flooding. Base flood depths (feet above grade) are provided.

AH: Shallow flooding ASFH . Base flood elevations in relation to NGVD are provided.

HH. "Zone V" means the special flood hazard area subject to coastal high hazard flooding. There are three types of V Zones: V, V#, and VE and they correspond to the A Zone designations.

24.06.060 Authority of the utility.

The utility, by and through its director, shall have the authority to:

A. Develop, adopt and carry out procedures as needed to implement this code and to carry out other responsibilities of the utility, including, but not limited to, procedures pertaining to the billing and collection of monthly drainage charges and procedures for periodic adjustment of fees and charges imposed pursuant to this code.

B. Prepare and update as needed engineering standards to establish minimum requirements for the design and construction of drainage facilities and requirements for protecting existing facilities during construction. The engineering standards shall be consistent with this code and adopted city policies.

C. Administer and enforce this code and all procedures relating to the planning, acquisition, security, design, construction and inspection of new storm and surface water facilities and relating to the regulation of storm and surface water system alterations.

- D. Enter into any contract pursuant to Chapter 35.91 RCW, the Municipal Water and Sewer Facilities Act, including contracts which provide for the reimbursement of owners constructing facilities (latecomer agreements) and agreements with private property owners for the extension of the drainage system (system extension agreements).
- E. Prepare, update, administer and enforce as needed maintenance standards to establish minimum requirements for the maintenance of drainage facilities so they function as intended, protect water quality and provide flood control.
- F. Develop and implement a program that includes administration, inspection and enforcement of private drainage facilities to ensure continued compliance of drainage facilities with this code.
- G. Advise the city council, city manager and other city departments and commissions on matters relating to the utility.
- H. Prepare, revise as needed, recommend and implement a comprehensive drainage plan for adoption by the city council. Prepare basin plans and other studies that are approved in the utility's adopted budget.
- I. Administer the Area of Special Flood Hazard area provisions of this code.
- J. Develop a storm water management program, as required by state and/or federal agencies for review and adoption by the city council.
- K. Establish and implement programs to protect and maintain water quality and to manage storm water runoff within the storm and surface water system in order to maintain compliance to the maximum extent practicable with applicable water quality standards established by state and/or federal agencies as now or hereafter adopted.
- L. Perform or direct the performance of financial review and analysis of the utility's revenues, expenses, indebtedness, rates and accounting and recommend budgets, rates and financial policy for adoption by the city council.
- M. Carry out such other responsibilities as required by this code or other city codes, ordinances or regulations consistent with the Bellevue comprehensive plan.
- N. Conduct public education programs related to protection and enhancement of the drainage system.
- O. Develop and implement a program that includes administration, inspection and enforcement of new or modifications to public or private drainage facilities for activities listed under BCC 24.06.120 and BCC 24.06.130A to ensure continued compliance of drainage facilities with this code. Repair or replacement of private drainage facilities in kind are exempt from this program unless applicable under other portions of the code.

24.06.075 Studies and basin plans.

The utility may conduct studies and may develop basin plans. Plan recommendations which impact development or land use regulations shall be reviewed and adopted by the city council. Upon adoption, such plan recommendations shall supersede the requirements of this code, provided that the basin specific requirements provide an equal or greater level of water-quality and runoff control protection.

24.06.090 Area of Special Flood Hazard

A. Adoption of Flood Insurance Study and Flood Insurance Rate Map. The flood insurance study and the flood insurance rate map, dated December 1, 1978, and as subsequently amended and revised by the Federal Emergency Management Agency, prepared for the city by the Federal Insurance Administration, are hereby adopted by reference.

B. Map Adjustment. The utility shall adjust special flood hazard area boundaries on the flood insurance rate map if:

1. The adjustment is first approved by the Federal Insurance Administration and a new boundary is established; or

2. A letter of map amendment is received from the Federal Emergency Management Agency.

C. Records. The utility shall:

1. Maintain for public inspection a record of the elevations provided by the department of community development pursuant to Land Use Code Section 20.25H.110(A)(3)(b); and

2. Maintain for public inspection a record of certification indicating the specific elevation (datum as defined in Engineering Standards) to which such structures are flood proofed; and

3. Maintain a copy of the notification required by BCC 24.06.090(C)(1) with a record of all variance actions, including justification for their issuance, and report such variances issued in the annual report submitted to the Federal Insurance Administration; and

4. When base flood elevation has not been provided, obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer the city's special flood hazard area standards, regulations and ordinances; and

D. Compliance. All development, redevelopment, subdivision, short subdivision and planned unit development applications shall comply with this code and with the requirements of Land Use Code Section 20.25H.110(A).

E. Watercourse Relocation Notice. The utility shall notify, in riverine situations, adjacent communities and the Department of Ecology prior to any alteration or relocation of a watercourse and shall submit copies of such notification to the Federal Insurance Administrator. The flood-carrying capacity within the altered or relocated portion of any watercourse shall be maintained.

24.06.100 Connections or modifications to the drainage system.

Connections or modifications to the public drainage system or modifications to a private drainage system that are applicable under BCC 24.06.130 A., and abandonment or removal of any structure connected to the public storm system shall be allowed only if:

- A. Approval has been received from the utility (see BCC 24.06.120); and
- B. All applicable requirements of this code and utility procedures have been met; and
- C. All applicable engineering standards have been met or alternative standards have been approved by the utility as substantially equal; and
- D. The property owner has paid all applicable fees and charges.

24.06.115 Facility ownership.

- A. The utility owns all elements of the storm drainage system in public right-of-way and in easements or tracts dedicated to and accepted by the utility, except to the extent private ownership is indicated as a matter of record.
- B. The utility may accept ownership (or other property rights) and responsibility for privately built drainage facilities when all of the following conditions are met:
 - 1. Ownership of the facility by the utility would provide a public benefit; and
 - 2. Necessary and appropriate property rights are offered by the property owner at no cost; and
 - 3. The facility substantially meets current engineering standards, as determined by the utility, or is brought up to current engineering standards by the owner; and

4. There is access for utility maintenance in accordance with criteria provided in the engineering standards; and
5. The utility has adequate resources to maintain the facility; and
6. In the case of runoff control facilities, the facility serves a residential subdivision or short plat (rather than a commercial property); and
7. The facility is transferred to the utility by bill of sale at no cost to the city.

24.06.120 Permits – Approvals.

A. General.

1. The utility shall administratively determine submittal requirements for the various utility permits/approvals.
2. When a drainage connection permit or drainage system extension agreement is required, it shall require the property owner to build all the drainage facilities needed to serve the property including, but not limited to, conveyance systems, runoff treatment best management practices, detention facilities and other system components.
3. When a drainage connection permit or drainage system extension agreement is required to provide drainage facilities for a commercial or multi-family proposed building, the utility will not sign off on the building permit until the drainage connection permit has been issued or the drainage system extension agreement has been initiated. When a drainage connection permit or drainage system extension agreement is required to relocate a drainage facility from under a proposed building, the utility will not sign off on the building permit until the replacement drainage work has been completed and accepted by the utility, unless the building permit is conditioned to require relocation prior to site construction.

B. Drainage Connection Permit.

1. A drainage connection permit is required to connect to or modify the public drainage system or modify a private drainage system for activities listed under BCC 24.06.130 A, unless a drainage system extension agreement is required pursuant to BCC 24.06.120(C)(1) or unless the work is specifically covered under another permit such as a Clearing and Grading or Right-of-Way Use Permit.
2. A drainage connection permit application must be made by the property owner or his/her licensed and bonded contractor.
3. Drainage connection permits for lots in subdivisions and short plats will be issued only after the drainage extension, if one is required, is accepted by the city.
4. Drainage connection permits expire 12 months from the date of issuance.

C. Drainage System Extension Agreement.

1. The property owner and the utility shall enter into a drainage system extension agreement whenever new development or redevelopment involves any of the following:

- a. Detention or other runoff control facilities; or
- b. Runoff treatment facilities, other than spill control structures; or
- c. Work on the public drainage system or within the right-of-way except for the following:
 - lateral connections to the public drainage system
 - limited conveyance system modifications such as catchbasins, manholes
 - culverts for new driveways that can be covered under a drainage connection permit or another permit such as a Clearing and Grading or Right-of-Way Use Permit.
- d. Work on private drainage systems that could be covered under another permit such as a Building or Clear and Grade Permit.

2. The utility will accept constructed facilities as complete once the facilities have been built according to the approved plans and specifications, as confirmed by utility inspectors; as-built drawings have been completed as specified in the engineering standards; and all applicable fees and charges have been paid.

3. The property owner shall be required to provide surety devices, in a form approved by the city, for drainage system extensions during construction and for a one-year warranty period following acceptance.

D. Contractors. Contractors shall be licensed in accordance with Washington State requirements and shall be registered with the City of Bellevue Tax Office.

E. Other Permits. It is the property owner's responsibility to identify and obtain all permits/approvals required for any proposed work, such as any approvals required by the Washington State Department of Fish and Wildlife, the Washington State Department of Ecology and the Army Corps of Engineers.

24.06.130 Engineering and design requirements.

A. Applicability. The engineering and design requirements of this section shall apply to the following:

1. All new development and redevelopment is subject to the engineering and design requirements of BCC 24.06.130(B), (C), (D) and (J).

2. Large parcel new development, as defined in BCC 24.06.050, is subject to all of the engineering and design requirements of this section, except that wetland discharge and recharge requirements (BCC 24.06.130(H)) apply only if the site discharges directly to a wetland. The requirements apply to the entire tax lot or lots being developed.

3. Redevelopment of 5,000 square feet or greater within a 12-month period is subject to all of the engineering and design requirements of this section, except that wetland discharge and recharge requirements (BCC 24.06.130(H)) apply only if the site drains directly to a wetland. The requirements apply only to the portion of the site being developed except that source controls (BCC 24.06.130(F)) shall be applied to the entire site, including adjoining parcels if they are part of the project.

4. Redevelopment on a site that is larger than one acre and has 50 percent or more impervious surface or that discharges to a receiving water with a water quality problem that is documented in a basin plan or other study or plan adopted by the city council shall also submit a schedule to implement the following for the entire site, including adjoining parcels if they are part of the project, to the maximum extent practicable:

- a. Runoff control (BCC 24.06.130(E)); provided the site drains to a stream, either directly or indirectly;
- b. Runoff treatment BMPs (BCC 24.06.130(G));
- c. Wetland discharge and recharge requirements (BCC 24.06.130(H)); provided the site drains to a wetland;
- d. Off-site analysis and mitigation (BCC 24.06.130(I));
- e. An operation and maintenance plan (BCC 24.06.130(K)).

5. Source control BMPs and runoff treatment BMPs shall be required whenever changes to the use of property occur that could generate significant pollutants as identified in the engineering standards and are subject to the engineering and design requirements of BCC 24.06.130 (B), (C) and (D).

6. Any modifications to existing runoff control or treatment systems or the Conveyance System shall be subject to the engineering and design requirements of BCC 24.06.130 (B), (C) and (D). Repair and replacement of private drainage facilities in kind are exempt.

B. General.

1. The property owner is responsible for drainage design and performance of their private drainage facilities.

2. The drainage designer must be a civil engineer licensed in the state of Washington, unless this requirement is waived in writing by the utility.

3. Engineering and design shall conform to the engineering standards.

4. The utility may impose, on any development or redevelopment, requirements that differ from the requirements of this section based on adopted basin plans or other studies adopted by the city council, provided that such alternative requirements provide an equal or greater level of protection than the requirements of this section.

5. Subject to approval by the utility, the property owner may contribute to runoff-control or runoff-treatment facilities that serve multiple sites in lieu of providing such facility(s) on-site.

C. Site Drainage.

1. General. All development and redevelopment shall provide for the control of storm water runoff so as to minimize impact to downstream properties.

2. Discharge Locations.

a. The property owner shall maintain natural drainage patterns and discharge drainage in a manner and location that existed prior to undertaking land/runoff altering activities, to the maximum extent practicable, unless the utility determines alterations would be beneficial and would not cause adverse impacts.

b. Drainage that originates within a structure, as defined by the Uniform Building Code, must be discharged to the sanitary sewer.

3. Energy Dissipation. Adequate energy dissipation is required at all drainage discharge points to prevent erosion and shall be designed per the Utility's Engineering Standards.

4. Conveyance requirements for public or private drainage systems . The property owner shall:

a. Accommodate existing storm water runoff from upstream properties. Downstream property owners are obligated according to Washington State case law, to receive and convey waters that are historically tributary to their property.

b. Use gravity conveyance, unless downslope conditions make gravity systems not feasible according to criteria in the engineering standards.

c. For large parcel new development and for redevelopment of 5,000 square feet or greater, extend drainage conveyance to the extremes of the property being developed or redeveloped when the utility determines such extension is needed for the orderly extension of the drainage system.

d. Design conveyance that, in conjunction with runoff control pursuant to BCC 24.06.130(E), accommodate runoff from a 100-year, 24-hour storm, using methods contained in the engineering standards.

e. Ensure that improvements do not reduce or constrict the conveyance capacity or storage volume of existing drainage systems, including natural streams.

5. Drainage Pipe Setbacks. Pipes shall be set back from other utilities and buildings, and buildings shall be set back from existing pipes, as required by the engineering standards.

D. Sensitive Area Protection and Work in Streams.

1. The property owner shall:

a. Protect open channel conveyance that are within riparian corridors, as defined in the Land Use Code.

b. Comply with Land Use Code requirements related to the protection of sensitive areas, including riparian corridors, wetlands, coal mine areas, steep slopes and special flood hazard areas. See Land Use Code Part 20.25H.

c. Where stream bridging is allowed by the Land Use Code, design the bridge to ensure hydraulic capacity and to protect water quality as specified in the engineering standards.

d. Where relocation or piping of a Type C riparian corridor is allowed, provide hydraulic capacity pursuant to BCC 24.06.130(C)(4) and provide the same or better water quality protection.

2. If a developing or redeveloping property is contributing to an existing water quality or capacity problem within an on-site stream which could be improved through planting riparian vegetation, adding energy dissipation at outfalls, extending roof and footing drains to protect sensitive slopes, or removing yard debris and rubbish from stream banks, such measures shall be required.

E. Runoff Control.

1. Applicability. Runoff control is required as specified in BCC 24.06.130(A), except that properties within the Meydenbauer Drainage Basin are exempt from this requirement to the extent provided pursuant to Ordinance No. 3372.

2. Runoff Control for Sites That Drain to a Stream. When runoff control is required for a site that drains either directly or indirectly to a stream, such control shall be provided by detention or infiltration, as specified below:

a. Detention is an approved method of providing runoff control for all sites that drain to a stream. Such detention facilities shall be designed in accordance with the following (refer to the engineering standards for design details):

i. The post-development peak runoff rate from a two-year, 24-hour storm shall not exceed 50 percent of the existing peak runoff rate from a two-year, 24-hour storm.

ii. The post-development peak runoff rate from a 100-year, 24-hour storm shall not exceed the existing peak runoff rate from a 100-year, 24-hour storm.

iii. The post-development peak runoff rate from a 10-year, 24-hour storm shall not exceed the existing peak runoff rate from a 10-year, 24-hour storm.

iv. When calculating runoff control, the correction factor contained in Figure III-1.1 in the 1992 state Stormwater Management Manual for the Puget Sound Basin shall be used.

b. Infiltration systems shall be permitted for runoff control only if:

i. All of the site's drainage facilities are privately owned and maintained; and

ii. The site meets criteria in the engineering standards; and

iii. The facility is designed in accordance with the engineering standards.

3. Runoff Control for Sites That Do Not Drain to a Stream. When runoff control is required for a site that does not drain directly or indirectly to a stream, such control shall be provided as specified below:

a. Detention is an approved method of providing runoff control for all sites that do not drain to a stream. Such detention facilities shall be designed pursuant to BCC 24.06.130(E)(2)(a), except that it is not necessary to limit the post-development peak runoff rate from a two-year, 24-hour storm to 50 percent of the existing peak runoff rate from a two-year, 24-hour storm.

b. Infiltration may be used for runoff control on sites that do not drain to a stream only if there is no reasonable alternative and can meet criteria in the engineering standards. If an infiltration facility is used, the requirements in BCC 24.06.130 (E)(2)(b) shall apply.

c. Runoff control may be provided by conveying the runoff from a 100-year storm from the site directly to Lake Washington or Lake Sammamish. If this approach is used, conveyance shall be designed to carry the runoff from a 100-year,

24-hour design storm from the entire basin that drains to the system, considering full development potential of that basin, providing such capacity is not considered oversizing pursuant to BCC 24.06.140(B)(1).

F. Source Control BMPs. When required by BCC 24.06.130(A), source controls shall be applied in accordance with the engineering standards to the maximum extent practicable.

G. Runoff Treatment BMPs. When runoff treatment is required by BCC 24.06.130(A) the property owner shall:

1. Provide runoff treatment BMPs to treat pollutants anticipated from the proposed land use.

2. Provide runoff treatment BMPs to treat nutrients, in addition to other pollutants, if the site drains to Phantom Lake, Larsen Lake or Lake Sammamish or the proposed land use otherwise warrants nutrient treatment.

3. Design runoff treatment BMPs to capture and treat the water quality design storm.

4. Select and design runoff treatment BMPs in accordance with the engineering standards. Infiltration BMPs shall be allowed only if the site conditions are appropriate and ground water quality is protected based on criteria in the engineering standards. All infiltration facilities and systems draining to them shall be privately owned and maintained.

H. Wetland Discharge and Recharge Requirements.

1. When wetland discharge and recharge requirements apply pursuant to BCC 24.06.130(A) the property owner shall, in addition to meeting the Land Use Code wetland protection requirements:

a. Maintain the hydroperiod and flows of existing site conditions to the extent necessary to protect the characteristic uses of the wetland. Methodology to determine existing hydroperiod is in the Utilities engineering standards.

b. Evaluate alternative discharge locations and maximize natural water storage and infiltration opportunities outside the wetland.

c. Apply BMPs to treat pollutants anticipated from the proposed land use.

2. Wetlands can be used to treat storm water only if the wetlands are constructed and managed for that purpose and only if constructed on sites that are not already wetlands.

3. Created wetlands that are intended to mitigate for loss of acreage, function and value shall not be designed to also treat storm water.

I. Off-Site Water Quality Analysis and Mitigation.

1. When an off-site analysis is required by BCC 24.06.130(A), the property owner shall conduct an analysis of the project's expected off-site water quality impacts. The analysis shall extend at least one quarter mile downstream from the project, and shall at a minimum, evaluate the following:

- a. Excessive sedimentation.
- b. Stream bank erosion.
- c. Discharges to ground water contributing to recharge zones.
- d. Violations of water quality standards.
- e. Spills and discharges of priority pollutants.

2. In addition to meeting the requirements of this section, the property owner shall mitigate project impacts that are identified in the off-site analysis.

J. Off-Site Capacity Analysis. Where the rate or location of discharge will be changed by a proposed development, the utility may require the property owner to analyze the capacity of the receiving system. Analysis shall be in accordance with the requirements of the engineering standards. The property owner shall mitigate insufficient capacity impacts caused by the proposed development.

K. Operation and Maintenance. When required by BCC 24.06.130(A), the property owner shall provide an operation and maintenance plan for all proposed storm and surface water facilities and BMPs and identify the responsible party. The operation and maintenance plan must be consistent with the maintenance standards, where applicable, and must address facilities and conditions unique to the site.

24.06.140 Installation responsibility.

A. Property Owner Installation. The property owner shall install all drainage facilities as required by this code. Installation shall be through a drainage connection permit or a drainage system extension agreement as required in BCC 24.06.120.

B. Costs. All installation costs are the property owner's responsibility, except that:

1. If the utility requires a property owner to oversize a drainage facility, the utility will compensate the property owner for the difference in cost between the normally sized facility and the oversized facility, based on the lowest of three bids

furnished by the property owner from reputable licensed contractors.

2. An owner who constructs a public drainage system extension that directly benefits a property in addition to the owner's may request a latecomer agreement in order to be reimbursed from benefitting properties that connect to the extension during the agreement's duration. See BCC 24.06.150 regarding latecomer agreements.

3. The city may choose to install drainage facilities to facilitate development, coordinate with other city projects, or for other utility purposes, and may recover its costs, including interest, through a connection charge.

24.06.160 Drainage easement requirements.

A. **When Required.** An easement is required whenever a private drainage facility will be built on property owned by a different private party and whenever a private drainage facility will serve two or more properties that are not in common ownership or that will no longer be in common ownership following the sale of lots in a subdivision. In addition, public drainage facilities, including any drainage facilities that will be publicly maintained, shall be located in public right-of-way or drainage easements or tracts deeded to the utility.

B. **Requirements.** All of the following requirements shall be met before the utility will accept and/or approve any easement:

1. Clear title in the grantor shall be demonstrated; and

2. The proposed easement shall be compatible with utility clearance standards and setback standards and with other utilities or easements; and

3. The easement shall provide for access to the facility for repair and maintenance. When deemed necessary by the utility, the easement shall contain provisions for long-term maintenance; and

4. The easement shall prohibit all structures within the easement except those which can readily be removed by the structure's owner at the owner's expense when access to the drainage facility is required by the utility. If such structures are within the easement area, an agreement to remove the structures on request by the utility, approved by the city, shall be recorded; and

5. The easement dimensions and other requirements shall conform with the engineering standards.

C. **Costs.** The property owner shall pay all costs of providing or obtaining and recording the easement.

D. Relinquishment of Easement. An easement granted to the utility may be relinquished only if the utility determines it is no longer needed and the city council authorizes the relinquishment.

24.06.170 Construction requirements.

A. General. When constructing or modifying drainage facilities, compliance is required with this code, the engineering standards, the approved permit, plans and specifications, the terms of any drainage system extension agreement, the recommendations of the manufacturer of the materials or equipment used and any applicable local, state or federal requirements.

B. Safety Requirements. Utility staff will perform inspections only if shoring and other site conditions conform with WISHA safety standards and other safety requirements, as applicable.

C. Failure to Complete Work or Meet Requirements.

1. The utility may complete drainage facility construction begun by a property owner or contractor, or take steps to restore the site (such as backfilling trenches and restoring the public way) if the work does not meet utility requirements, the contractor or person doing the work fails to rectify the problem following notification by the utility, and the work, in the opinion of the utility, constitutes a hazard to public safety, health or the drainage system.

2. Utility costs incurred pursuant to subsection C1 of this section shall be calculated pursuant to BCC 24.06.250 (B) and charged to the owner or contractor in charge of such work. The permittee shall pay the utility immediately after written notification is delivered to the responsible parties or is posted at the location of the work. Such costs shall constitute a civil debt owed to the utility jointly and severally by such persons who have been given notice as herein provided. The debt shall be collectable in the same manner as any other civil debt owing the utility. In addition, if an assurance device was collected for the project, the city may collect the debt from the assurance device.

3. If in the opinion of the Director, the work being performed is not in accordance with these codes or the engineering standards and the permittee is unwilling to change or correct the deficiencies, the Director may issue a stop work order until the deficiencies are corrected.

C. Authorized Drainage Construction. Only the following persons are authorized to install drainage facilities:

1. Contractors licensed in accordance with BCC 24.06.120(D).
2. Property owners working on their own property.

D. Posting of Drainage Connection Permit. If a drainage connection permit is

required for the work, the permit shall be readily available at the job site to utility inspectors.

E. Location of Connection. Connection to the drainage system shall be made at a point approved by the utility.

F. As-Builts. An as-built plan of the site's drainage facilities shall be completed according to the requirements in the engineering standards prior to the city's acceptance of the improvements, issuance of a certificate of occupancy or final sign-off by utility inspectors.

24.06.175 Construction and warranty inspections and tests.

A. Construction/Installation Inspection. All projects permitted or approved by the Utility under a Drainage System Extension Agreement or a drainage connection permit are subject to utility inspection to ensure compliance with the code and permit/approval conditions. As a condition of permit issuance or extension agreement, the applicant shall consent to inspection and testing.

B. Warranty Inspections and Tests. Facilities and equipment accepted by the utility under specific warranties may be reinspected at the utility's discretion and, if necessary, retested prior to the expiration of the warranty period.

24.06.185 Maintenance of drainage facilities.

A. Maintenance Responsibility

1. The utility is responsible for maintaining public drainage facilities.
2. Owners of private drainage facilities, including but not limited to detention facilities, runoff treatment facilities and conveyance facilities, are responsible for the operation and maintenance of those facilities.
3. In new subdivisions and short plats, maintenance responsibility for private drainage facilities shall be specified on the recorded subdivision or short plat.
4. If a private drainage facility serves multiple lots and the responsibility for maintenance has not been specified on the subdivision plat, short plat or other legal document, maintenance responsibility shall rest with the homeowners association, if one exists, or otherwise with the properties served by the facility, or finally, with the owners of the property on which the facilities are located.

B. Maintenance Standards. Drainage facilities shall be maintained so that they operate as intended. Maintenance shall be in accordance with the utility's maintenance standards and in accordance with the project operation and maintenance plan, if one is developed pursuant to BCC 24.06.130(K).

24.06.195 Discharge of polluting matter.

A. Discharge of Polluting Matter Prohibited. No person shall discharge, either directly or indirectly, any organic or inorganic matter into the storm and surface water system that may cause or tend to cause water pollution, including but not limited to the following:

1. Petroleum products including but not limited to oil, gasoline, grease, fuel oil and heating oil;
2. Trash or debris;
3. Pet wastes;
4. Chemicals;
5. Paints;
6. Steam cleaning wastes;
7. Washing of fresh concrete for cleaning and/or finishing purposes or to expose aggregates;
8. Laundry wastes;
9. Soaps;
10. Pesticides, herbicides, or fertilizers;
11. Sanitary sewage;
12. Heated water;
13. Chlorinated water or chlorine;
14. Degreasers and/or solvents;
15. Bark and other fibrous material;
16. Antifreeze or other automotive products;
17. Lawn clippings, leaves, or branches;
18. Animal carcasses;
19. Sediment;

20. Acids or alkalis;
21. Recreational vehicle wastes;
22. Dyes (without prior permission of the drainage utility);
23. Construction materials;
24. Food waste.

B. **Pavement Washing Prohibited.** In addition to the prohibitions of BCC 24.06.195(A), washing of public or private streets and parking areas is not permitted unless all of the following conditions are met:

1. No other feasible alternative exists to remove the undesirable material;
and
2. Prior written utility approval is obtained from the director; and
3. Facilities are provided to treat the wash water runoff and affected drainage facilities are cleaned.

C. **Discharge of Pollutants – Liability for Expenses Incurred by the Utility.** Any person responsible for pollutant discharge into the storm and surface water system who fails to immediately collect, remove, contain, treat or disperse such pollutant materials at the director's request shall be responsible for the necessary expenses incurred by the city in carrying out any pollutant abatement procedures, including the collection, removal, containment, treatment or disposal of such materials.

D. **Source Control BMPs.** To prevent discharge of polluting matter into the storm and surface water system, source controls shall be applied in accordance with the Surface Water Operation and Maintenance Standards for Public and Private Systems.

24.06.220 Existing private facility inspections.

A. **Inspection Program.** The director is authorized to develop and implement an inspection program for private drainage facilities within the city.

B. **Right of Entry.** An authorized representative of the utility may enter private property at all reasonable times to conduct inspections, tests or to carry out other duties imposed by the code, provided the utility shall first notify the property owner or person responsible for the premises. If entry is refused or cannot be obtained, the director shall have recourse to every remedy provided by law to secure entry.

24.06.260 Connection charges.

A. General.

1. The utility shall collect connection charges so that each developed property bears its equitable share of the cost of the public drainage system.
2. Connection charges shall be paid:
 - a. When property is changed from an undeveloped to a developed condition.
 - b. At the time of redevelopment of the property, if a direct facilities charge applies that has not yet been paid, such as a charge for a new facility that directly benefits the property.
3. Connection charges that have been paid as a result of prior development activities on the property or through participation in an LID or ULID will not be re-assessed.
4. The utility may enter into contracts with the owners of existing single-family homes and with the owners of redevelopment projects that meet criteria specified by the utility for payment of connection charges over time instead of as a lump sum. The utility will charge interest, at a rate set by the city treasurer, on any outstanding debt covered by a payment contract. A contract shall be payable in full at the time of closing upon sale of the property.

B. Direct Facilities Charges.

1. The utility shall collect direct facilities charges from property owners that directly benefit from utility-built or privately-built public drainage facilities, except property owners who previously paid their fair share through an LID or ULID.
2. The direct facilities charge is the property owner's equitable share of the established costs of the facilities he/she benefits from. The equitable share shall include interest charges applied from the date of construction acceptance of the facility until the property connects, or for a period not to exceed 10 years, whichever is less, at a rate commensurate with the rate of interest applicable at the time of construction of the facility to which the property owner is seeking to connect but not to exceed 10 percent per year; provided, that the aggregate amount of interest shall not exceed the equitable share of the cost of the facility allocated to such property owner.
3. The facilities' costs shall be allocated to benefitting property owners based on the number of single family equivalents. The director may, however, make such allocation based on front footage or other reasonably based methodology if the director determines that such alternate basis or methodology better assures equitable sharing of cost by all properties benefitting from the facilities.

4. Properties within the Meydenbauer Drainage Basin and properties within the Central Business District (CBD), lying between N.E. 2nd Street and N.E. 12th Street, are subject to a facilities charge in an amount and to the extent provided in Sections 4 and 5 of Ordinance No. 3372, as now or hereafter amended.

C. Administrative Procedures, Adjustment of Charges. The director is authorized to adopt administrative procedures for the purpose of administering the provisions of this section, and to adjust the charges established by subsections A and B, above, from time to time to reflect the actual cost of the facilities for which the charges are made.

24.06.280 Violations/Penalties

A. Civil violation: Any violation of any of the provisions of this code constitutes a civil violation as provided for in Bellevue City Code Chapter 1.18, for which a monetary penalty may be assessed and abatement may be required as provided therein. The City shall seek compliance through the civil violations code if compliance is not achieved through this code.

1. Pursuant to Bellevue City Code Chapter 1.18 and Section 24.06.195 (Discharge of Polluting Matter) of this Code, the Utility will issue a notice of civil violation without having attempted to secure voluntary correction as provided in BCC 1.18.030 under the following circumstances:

- a. When an emergency exists;
- b. When a repeat violation occurs;

(i) For discharge of polluting matter per this code, a repeat violation is defined as a violation of this regulation in any location by a "person responsible for the violation" (as defined in BCC 1.18.020) for which voluntary compliance previously has been sought two times within two years of the current violation or a notice of civil violation has been issued within two years of the current violation. This includes, but is not limited to, identification of discharge of polluting matter in response to pollutant spill reports, during routine inspection of privately maintained drainage facilities, visual observation of violations during routine work assignments, etc. Corrective action, in addition to ceasing discharge of polluting matter, can include, but is not limited to, implementing "housekeeping" or business practice changes that prevents the violation from occurring again, constructing or installing a structural facility or structural modifications to prevent the pollutant from entering the storm drainage system or surface water system, etc.

c. When the violation creates a situation or condition which cannot be corrected;

d. When the person knows or reasonably should have known that the action is in violation of a city regulation.

2. For repeat violations as defined in 24.06.280.A.1.b.(i.), a monetary penalty for the (3rd) violation (within 2 years) will be assessed per BCC 1.18.040 E (Monetary Penalty) and the "person responsible for the violation" can either pursue relief of the monetary penalty and required corrective actions pursuant to BCC 1.18 or the hearing will be cancelled if the monetary penalty is paid not less than 10 calendar days after the notice of civil violation is issued and the corrective actions are complete.

B. Destruction of Notice: It shall be unlawful for any person to remove, mutilate, destroy, or conceal any notice issued and posted by the director pursuant to this code.

Section 6. Section 24.06.125 of the Bellevue City Code (Strom and Surface Water Utility Code) is hereby repealed.

Section 7. This ordinance shall take effect and be in force five days after its passage and legal publication.

Passed by the City Council this 5th day of December, 2003, and signed in authentication of its passage this 5th day of December, 2003.

(SEAL)

Connie B. Marshall
Connie B. Marshall, Mayor

Approved as to form:

Richard L. Andrews
Richard L. Andrews, City Attorney

Attest:

Myrna L. Basich
Myrna L. Basich, City Clerk

Published December 12, 2003

Appendix D

Completed CIP

Appendix D

Completed Projects

This Appendix provides additional information on capital projects completed since 2002. These projects are listed in Section 9.4.

D.1 Sewage Pump Station Improvements

This ongoing program was initiated in 1985 to fund rehabilitation/retrofit of the 36 pump and 10 flush stations throughout the wastewater system, most of which are over 30 years old. Stations are prioritized for rehabilitation based on the risk and consequence of failure, maintenance and operations experience, pump station age, and coordination with other projects. Pump Station rehabilitation projects completed from 2002-2012 under CIP Plan No. S-16 are shown in Table D-1.



Emerald Ridge Pump Station Construction

D.2 Bellefield Pump Station Capacity Interim Expansion (Phase I)

Bellefield Pump Station, located on 112th Avenue SE at SE 15th Street near the entrance to the Bellefield Office Park, did not have sufficient capacity to meet the ultimate modeled projected flows or practical build-out projected flows.

The Bellefield Pump Station Expansion Predesign Report, April 2001, recommended an interim expansion of the station's capacity (Phase I) followed by reconstruction of the station and its force main 10 to 20 years later (Phase II). The interim expansion (Phase I) consisted of upsizing the pumps, valve modifications, site access improvements, and other upgrades.

D.3 Upper Vasa Creek Erosion Control and Slope Stabilization

This project was proposed to address an unstable slope that constituted a threat to a nearby sewer line. Subsequent erosion occurred during a 2007 storm event, but did not damage the sewer line. Storm damage repairs commenced in 2010 and were completed in 2011, primarily funded by a FEMA hazard mitigation grant.

D.4 Sunset Creek Channel Improvements

This project was needed to address high stream flow erosion that constituted a threat to a nearby sewer line.

D.5 New Bogline Lift Station

This project was proposed to address long term soil stability problems that caused a pipe serving approximately 60 homes to settle and develop negative slopes (the pipe was constructed in 1965 and was relocated in 1987). The low spots in the pipe require frequent maintenance.

In 2006 this project was deleted in the CIP update because the apparent benefits did not justify the estimated capital costs. Piping will be replaced under CIP Plan No. S-66 instead. The pipeline is currently cleaned quarterly by O&M staff.

D.6 Auxiliary Power Upgrades at Sewage Pump Stations

This project was needed to replace non-standard emergency generator receptacles at 33 existing pump station and on 4 portable generators.

D.7 Sewer System Trunk (Pipeline) Rehabilitation Program

This program, now named the Sewer System Pipeline Rehabilitation Program, funds repair of localized defects and occasional relining or replacement of defective sewer pipes. Most defects are identified from the Utility’s infrastructure condition assessment (video) program. Pipes are selected for replacement based on risk of failure (likelihood and consequence), failure history, and to coordinate with other construction, such as planned street overlays (which reduce restoration costs).



Sewer Repair on 156th Ave SE



Sewer Service Extension on Cougar Mountain

D.8 Sewer Service Extensions Program

This ongoing program provides funds for the design and construction of new sewer pipes for development or redevelopment, or to extend sewer pipes to areas with failing septic systems throughout the service area. These facilities are constructed to serve areas that currently do not have sewer service available.

D.9 Minor Capital Improvement Projects

This ongoing program pays for small improvements to Bellevue’s sewer system to resolve deficiencies, improve efficiencies, or resolve maintenance problems, often in conjunction with other programs such as the Transportation overlay program. Projects are prioritized based on criteria including public safety/property damage, maintenance frequency, operator safety, environmental risk, reliability and efficiency gains, coordination with other city projects or development activity, and level of service impact.

D.10 West CBD Trunk Capacity Improvements

This project was located between the intersection of Bellevue Way SE and SE 3rd Street and King County's Bellevue Pump Station at 102nd Avenue SE and SE 6th Street. The previous trunk alignment ran along a stream through easements on private property. The capacity improvements project, completed in 2011, was managed by King County, but funded by the City of Bellevue.

D.11 East CBD Trunk Capacity Improvements

This project will replace approximately 1,600 feet of sewer pipe with larger diameter pipelines, to convey sewage generated from planned growth in the eastern side of downtown Bellevue, generally east of 110th Ave NE. This project (Bellevue CIP Plan #S-52) was on hold pending a decision on Sound Transit's East Link light rail alignment, which will impact sewer trunk routing.

D.12 Bellefield Pump Station Capacity Improvements (Phase II)

Phase II of the Bellefield Pump Station Expansion (capacity improvements) is currently in design. This project is discussed more in Chapter 9.

D.13 Canyon Creek Interceptor Replacement

This project was recommended in Coal Creek Utility District's Draft 1999 Comprehensive Sewer Plan, to stabilize the Canyon Creek Interceptor in areas where the creek has historically unstable slopes. On two prior occasions, the banks of the creek washed out, exposing the sewer main. The slope was stabilized on both occasions by CCUD using FEMA funding.

This project has not been completed. No capacity problems or deterioration has been observed, and the slope is not known to have washed out since Bellevue assumed ownership of the pipeline in 2003.

D.14 Newport Hills Interceptor Capacity Improvements

This potential project was identified in Coal Creek Utility District's Draft 1999 Comprehensive Sewer Plan due to flat pipeline grades in SE 52nd Street and SE 54th Street. It was anticipated

that surcharging might occur in these areas of low slopes, however no surcharging was observed during flow monitoring by CCUD.

Capacity problems are not known to have occurred in these locations since Bellevue assumed ownership of the pipeline in 2003.

D.15 Abandon Gaupholm Lift Station

Coal Creek Utility District’s Draft 1999 Comprehensive Sewer Plan identified abandonment of Gaupholm Lift Station as a future project. The pump station was rebuilt in 1987 and serves a single-family development of approximately 15 residences, but could potentially drain by gravity to the King County Metro connection where Kimberlee Park Pump Station discharges.

Gaupholm Lift Station is still in service, and is not currently scheduled for abandonment. This option will be considered as the station ages, as a potential means to improve reliability.

D.16 WSDOT I-405/S.R. 520 Braids Sewer Relocation

This project includes relocation of up to four wastewater pipes located within the state’s right-of-way, to accommodate the I-405/S.R. 520 “Bellevue Braids” highway project. Bellevue is legally obligated by State permits and agreements to relocate or modify its utilities to accommodate the State’s project.

This project commenced in 2009, and was completed in 2011. The project was managed by WSDOT, with funding from the City.



I-405 Utility Relocation at NE 12th St Overpass

D.17 WSDOT S.R. 520 Expansion Sewer Relocation

This project includes relocation of up to seven wastewater pipes located within WSDOT’s right-of-way, to accommodate the S.R. 520 highway expansion project. Bellevue has four gravity mains, one pressurized force main, one lake line, and one siphon line within the vicinity of the WSDOT project. Bellevue is legally obligated by State permits and agreements to relocate or modify its utilities to accommodate the State’s project.

This project commenced in 2010, and was completed in 2013. The project was managed by WSDOT, with funding from the City.

D.18 Upgrade Wastewater Telemetry System

This project replaced Bellevue's analog-tone telemetry system with digital technology, to improve processing speed, allow two-way communication, improve functionality, increase system safety and reliability, and reduce the chance of overflows. The system upgrade also provided redundant emergency response capabilities, by allowing the use of City Hall as a backup control room, in the event of the loss of the use of the Bellevue Service Center. The project was completed in 2011.

D.19 Design of Sewer Facilities for NE 15th Multi Modal Corridor

This project was proposed to design new sewer facilities concurrent with the design of the NE 15th Multi Modal corridor. The corridor will consist of a new street, bikeways, pathways, and the new East Link light rail. The key sewer facility proposed for this project was approximately 1.3 miles of 8 inch and 12 inch sewer pipe.

Sewer pipes were proposed in the new NE 15th Multi Modal Corridor to provide utility services to adjacent redeveloped properties. The utility investment associated with redevelopment of the Bel-Red Corridor would be recouped via connection charges collected from benefited properties when they redevelop.

This project was funded as CIP Plan No. S-62, but has been deleted following further analysis. It has been determined that due to the locations of Metro's interceptors and other existing infrastructure, parallel sewer lines located inside the multi-modal corridor will not be necessary. Service will be provided to re-developed properties through the sewer extension program and extended perpendicular to the multi-modal corridor.

**Table D-1, Sub-Projects Completed Under CIP No. S-16
Sewage Pump Station Improvements**

| Sub-Project Description | Year Initiated | Year Completed |
|--|-----------------------|-----------------------|
| Flush Station Rehabilitation Program (Lake Washington) | 2001 | 2005 |
| Lift Station No. 12 Odor Abatement | 2001 | 2005 |
| Bagley Pump Station Odor Abatement | 2001 | 2004 |
| Lift Station No. 12 Pump Replacement | 2001 | 2008 |
| Mercury Manometer Replacement at Sewer Pump Stations | 2005 | 2008 |
| 2006 Sewer Pump Station Predesign Report | 2005 | 2007 |
| Flush Station No. 5 Rehabilitation | 2005 | 2012 |
| Southridge Pump Station Rehabilitation | 2007 | 2009 |
| Kimberly Park Pump Station Rehabilitation | 2007 | 2009 |
| Misc Pump Station Improvements | 2010 | Ongoing |
| Emerald Ridge Pump Sta Replmnt | 2011 | Ongoing |
| Sewer Pump Station Generator Receptacle Additions 2011 | 2011 | Ongoing |
| Sewer Pump Station Wet Well Condition Assessment | 2011 | 2012 |
| Pump Station No. 12 Investigation | 2011 | Ongoing |
| Lake Washington Pump Station Pump Replacement | 2011 | 2011 |
| Wastewater Pump Station Condition Assessment 2013 | 2012 | Ongoing |
| Sewer Pump Station Wet Well Rehabilitation 2013 | 2012 | Ongoing |
| Lake Heights Sewer Pump Station Rehabilitation | 2012 | Ongoing |
| Wilburton Sewer Pump Staion Rehabilitation | 2012 | Ongoing |

**Table D-2, Sub-Projects CIP No. S-24
Sewer System Pipeline Rehabilitation Program**

| Sub-Project Description | Year Initiated | Year Completed |
|---|-----------------------|-----------------------|
| NE 24th St Sewer Replacement (NE 24th @ 140th Ave NE) | 2001 | 2005 |
| 3042 169th Place NE Sewer Pipeline Repair | 2001 | Cancelled |
| Utilities Infrastructure Rehabilitation (2003) - Sanitary Sewer | 2001 | 2003 |
| Utilities Infrastructure Rehabilitation (2004) - Sanitary Sewer | 2001 | 2004 |
| Utilities Infrastructure Rehabilitation (2005) - Sanitary Sewer | 2001 | 2005 |
| 2004 Sewer Internal Point Repair | 2001 | 2004 |
| Factoria Blvd & SE 38th Dig and Repair | 2001 | 2004 |
| Lakeline Cleanouts at Beaux Arts Park | 2001 | 2004 |
| 2005 Sewer Internal Point Repair | 2001 | 2005 |
| 2006 Sewer Internal Point Repair | 2001 | 2006 |
| 5325 145th Place SE | 2001 | 2003 |
| Sewer Manhole at Station 12 | 2001 | 2003 |
| Sewer Main Abandonment at 900 111th Pl SE | 2001 | 2003 |
| Miscellaneous Sewer Trunk Rehab Projects | 2001 | Ongoing |
| Pancake Corral Side Sewer Repair | 2001 | 2002 |
| NE 28th St Siphon Line Repair | 2001 | 2003 |
| I-405 at NE 8th Street Sewer Pipe Relining | 2001 | 2002 |
| 92nd Ave NE Sanitary Sewer Spot Repairs | 2002 | 2003 |
| 7620 NE 6th Street Sewer Repair | 2002 | 2003 |
| NE 8th Street and 129th Pl. NE Manhole | 2002 | 2003 |
| 147th Ln NE at NE 9th St Sewer Replacement | 2002 | Ongoing |
| 12920 NE 32nd Pl Manhole | 2002 | 2003 |
| NE 8th St 102nd to 103rd Ave NE Sewer Repair | 2002 | 2003 |
| Fairweather Place Sewer Replacement | 2002 | 2003 |
| 4658 - 171st Ave SE Side Sewer Repair | 2002 | 2003 |
| 1033 151st Ave SE Intenal Point Repair | 2002 | 2003 |
| 13433 NE 20th St Sewer Point Repair | 2002 | 2003 |
| 116th Ave NE at Northup Way Manhole Section | 2002 | 2003 |
| 140th Ave NE at NE 42nd St Sewer Stub Extension | 2002 | 2003 |
| 14008 NE 32nd Pl Cleanout | 2002 | 2003 |
| 3099 125th Ave NE Cleanout | 2002 | 2003 |
| 12813 NE 32nd Pl Cleanout | 2002 | 2003 |
| 129th Ave NE and NE 35th Pl Cleanout Cover Upgrade | 2002 | 2003 |
| NE 55th St Cleanout | 2002 | 2003 |
| 14624 SE 15th St Manhole Section | 2002 | 2003 |
| 2401 127th Ave NE Manhole Section | 2002 | 2003 |
| 130th Ave NE and NE 26th Pl Manhole Section | 2002 | 2003 |
| 140th Ave NE at NE 14th St Manhole Section | 2002 | 2003 |
| 14444 NE 11th Pl Manhole Section | 2002 | 2003 |
| 145th Pl SE and SE 13th Pl Manhole Section | 2002 | 2003 |
| 1909 145th Ave SE Mahole Section | 2002 | 2003 |

Table D-2, Sub-Projects CIP No. S-24 (Continued)
Sewer System Pipeline Rehabilitation Program

| | | |
|---|------|-----------|
| Bellevue Way at Main St Manhole Section | 2002 | 2003 |
| 114411 SE 14th St Dig and Replace | 2002 | 2003 |
| 14427 SE 14th St Dig and Repair | 2002 | 2003 |
| 14625 SE 15th St Dig and Repair | 2002 | 2003 |
| 3120 92nd Ave NE Dig and Repair | 2002 | 2003 |
| 2700 Richards Road Dig and Replace | 2002 | 2003 |
| 3200 130th Ave NE Dig and Replace | 2002 | 2003 |
| 606 106th Ave NE Internal Point Repair | 2002 | 2003 |
| 13831 NE 8th St Internal Point Repair | 2002 | 2003 |
| 14635 SE 16th St Dig and Repair | 2002 | 2003 |
| 13300 Kamber Rd Dig and Replace | 2002 | 2003 |
| 1005 99th Ave NE Dig and Repair | 2002 | 2003 |
| 420 84th Ave NE Dig and Replace | 2002 | 2003 |
| 1008 NE 16th Pl Dig and Replace | 2002 | 2003 |
| 2633 Evergreen Point Road Sewer Pipe Repair | 2002 | 2003 |
| Bellevue Way 8" Pipeline Rehabilitation | 2001 | 2001 |
| 4304 SE Newport Way Manhole Improvements | 2003 | 2003 |
| 906 Bellfair Lane Sewer Repair (100th Ave NE) | 2003 | 2003 |
| Sanitary Sewer Dig and Repair Sites (2002) | 2002 | 2003 |
| Wastewater R&R Development | 2002 | Ongoing |
| Compton Green 130th Ave NE Emergency Sewer Replacement | 2002 | 2003 |
| Bannerwood Park Sanitary Sewer Improvements | 2003 | 2003 |
| Grind and Overlay (2003) Various Sites | 2003 | 2003 |
| 3135 Hunts Point Circle Sanitary Sewer Repair | 2003 | 2007 |
| Sanitary Sewer Repairs (2004), Phase 1 | 2004 | 2004 |
| Sanitary Sewer Repairs - SE 16th St at 145th Pl SE | 2004 | 2005 |
| Sanitary Sewer Repairs - NE 8th St at 96th Ave NE | 2004 | 2005 |
| Sanitary Sewer Dig and Repair 2005 | 2004 | 2005 |
| Sanitary Sewer Manhole Cover Replacement 2005 | 2004 | 2005 |
| Mercer Slough - SE 8th St Sewer Stub Repair at 11711 | 2005 | 2006 |
| Vasa Park - SE 12th St Sewer Stub Repair at 16737 | 2005 | 2007 |
| Bellevue - 903 Belfair Rd Sanitary Sewer Repair | 2005 | 2005 |
| East Creek Culvert Replacement Sewer Repair | 2005 | 2005 |
| Sanitary Sewer Dig and Repair 2006 | 2005 | 2007 |
| Newport/119th Ave SE Sewer Repairs | 2005 | 2006 |
| Bellevue Square Sanitary Sewer Repairs | 2006 | 2006 |
| Sanitary Sewer Dig and Repair 2007, Phase 1 | 2006 | 2008 |
| Sanitary Sewer Dig and Repair 2007, Phase 2 | 2006 | 2008 |
| Meydenbauer/101st Ave SE at SE 5th St Sewer Replacement | 2007 | 2010 |
| Sanitary Sewer Dig and Repair 2008 | 2007 | 2009 |
| Sewer Lakeline Condition Assessment | 2007 | 2008 |
| San Sewer Dig and Repair | 2009 | Cancelled |

Table D-2, Sub-Projects CIP No. S-24 (Continued)
Sewer System Pipeline Rehabilitation Program

| | | |
|---|------|-----------|
| San Sewer Internal Point Rep | 2009 | Cancelled |
| San Sewer Trenchless Rehab | 2009 | Cancelled |
| Yarrow Trib/Sewer Protection | 2009 | 2011 |
| Beaux Arts/108th Ave SE Sewer Repair | 2011 | 2011 |
| Sanitary Sewer Repairs 2011, Phase 2 | 2011 | 2012 |
| Yarrow/NE 28th Pl Sewer Repair 2011 | 2011 | 2011 |
| San Sewer Trenchless Repair 2012 | 2011 | 2013 |
| Eastgate/SE 42nd Street I/I Reduction | 2011 | 2011 |
| Sanitary Sewer Repairs 2012, Phase 1 | 2011 | 2012 |
| Sanitary Sewer Repairs 2012, Phase 2 | 2011 | 2013 |
| Sewer Video Condition Assessment | 2012 | Ongoing |
| Sanitary Sewer Repairs 2013, Phase 1 | 2012 | Ongoing |
| Sanitary Sewer Repairs 2013, Phase 2 | 2012 | Ongoing |
| Crossroads/Bellevue Youth Theater Sewer Replacement | 2012 | Ongoing |

**Table D-3, Sub-Projects Completed Under CIP No. S-30
Sewer Service Extensions Program**

| Sub-Project Description | Year Initiated | Year Completed |
|--|-----------------------|-----------------------|
| Manhole at 140th Avenue and Main Street | 2001 | 2002 |
| Newport Way to SE 42nd Pl Sewer Extension (Easement line) | 2001 | 2005 |
| Leawood/164th Ave SE Sewer Extension | 2001 | 2003 |
| Leawood/161st Ave SE Sewer Extension | 2001 | 2003 |
| Horizon View C Sewer Extension | 2001 | 2002 |
| Meydenbauer 106th Ave SE Side Sewer | 2001 | 2002 |
| 184th Ave SE Sewer Extension | 2001 | 2002 |
| Factoria SE 42nd St Sewer Extension | 2002 | 2002 |
| Mockingbird Hill Sewer Extension | 2002 | 2002 |
| Cougar Mtn/SE 43rd St Sewer Extension | 2004 | 2005 |
| Cougar Mtn/SE 45th St at 167th Ave SE Sewer Extension | 2004 | 2010 |
| Miscellaneous Sewer Extension Projects | 2004 | |
| Factoria/SE 41st St Sewer Extension | 2004 | 2007 |
| Cougar Mtn/SE 59th St Sewer Extension | 2005 | 2007 |
| Horizon View C Sanitary Swr | 2005 | 2006 |
| Factoria/134th Ave SE Monthaven East Sewer Extension | 2007 | |
| Bellevue CBD/Main St 106th-107th Ave NE Sewer Capacity Imp | 2008 | 2012 |
| Bellevue CBD/NE 8th St at 106th Ave NE Sewer Capacity Imp | 2008 | 2012 |
| Bellevue CBD/NE 8th St at Bellevue Way Sewer Capacity Imp | 2008 | 2012 |
| Cougar Mtn/17630 SE Cougar Mtn Dr Sewer Extension | 2011 | 2011 |
| Factoria/134th Ave SE Monthaven East Sewer Ext Monitoring | 2011 | Ongoing |

**Table D-4, Sub-Projects Completed Under CIP No. S-32
Minor Capital Improvement Projects**

| Sub-Project Description | Year Initiated | Year Completed |
|--|-----------------------|-----------------------|
| Exposed Lake Line Projects | 2001 | 2012 |
| Miscellaneous | 2001 | Ongoing |
| Richards Road Side Sewer Upgrades | 2001 | 2003 |
| Odor Abatement at Cozy Cove Pump Station | 2003 | 2005 |
| Contaminated Soils at 164th Ave SE | 2003 | 2003 |
| Underground Storage Tank Installation/Removal at Bellefield Pump Station | 2003 | 2003 |
| 1527 146th Ave SE Side Sewer Replacement | 2003 | 2004 |
| Bellefield Pumping Station Site Access Improvements | 2003 | 2004 |
| Sunset Creek Sewer Pipe Protection | 2004 | 2004 |
| Sanitary Sewer Dig and Repair 2006 | 2006 | 2007 |
| Bellefield Dosing Chamber Rehabilitation | 2006 | 2008 |
| Lakeline Access Improvements | 2006 | On Hold |
| Vasa/Upper Creek Storm Damage Repairs | 2008 | 2011 |

Appendix E

Future CIP

S-16 Sewage Pump Station Improvements

Category: **Sewer**
 Department: **Utilities**

Status: **Ongoing**
 Location: **Pump stations throughout the Sewer Utility's service area**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 14,774,027 | 11,116,923 | 480,332 | 494,236 | 508,031 | 521,718 | 536,305 | 550,806 | 565,676 |

Description and Scope

This ongoing program funds rehabilitation/retrofit of the 36 pump and 10 flush stations throughout the wastewater system, most of which are over 30 years old. Stations are prioritized for rehabilitation based on the risk and consequence of failure, maintenance and operations experience, pump station age, and coordination with other projects. The next retrofit projects include three critical stations: Flush Station #5, Lake Heights, and Wilburton.

PROJECT NEED: System Renewal and Replacement

Rationale

Much of the sewage collected from homes and businesses passes through one or more of 36 pump stations and 10 flush stations (in-lake, low-pressure facilities that periodically 'flush' the nearly-flat sewer lakelines with lake water.) Pump stations include electrical and mechanical equipment with an estimated service life of 25 years; in-lake flush station components last 40 years, on average. Beyond service life, components fail more frequently, technology becomes obsolete, and parts replacement becomes difficult or impossible. The structures that house the pumps and equipment generally have a 100-year service life; components exposed directly to sewage deteriorate faster. State and federal laws require that we minimize pump station overflows; repeated violations can result in sanctions. Station rehabilitation improves reliability and safety, reduces the risk of system overflow and failure, and reduces the liability associated with such failures.

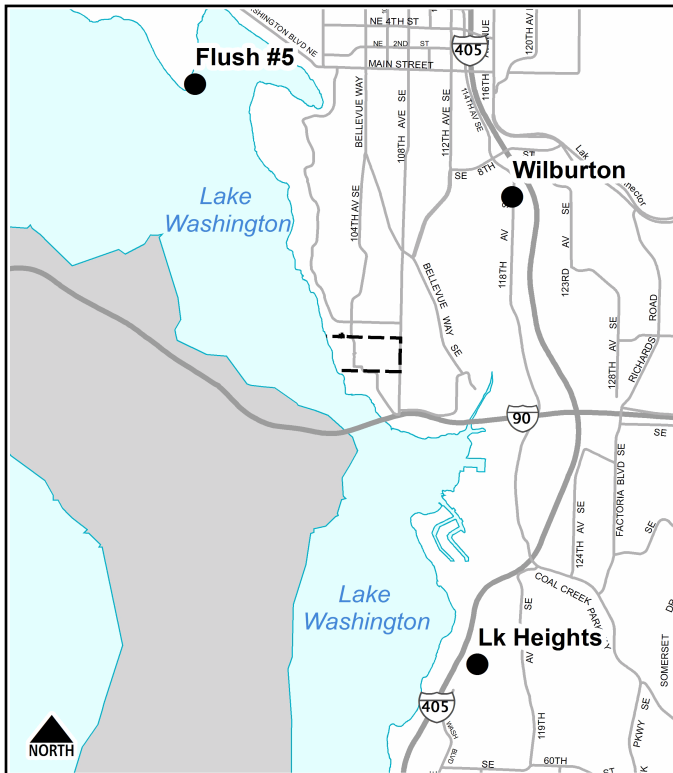
Environmental Impacts

The majority of the improvement work will be within the existing pump stations and no substantial environmental impacts are anticipated. The State Environmental Protection Act (SEPA) determinations (typically Determinations of Non-Significance) and exemptions from Shoreline regulations are obtained as required for each pump station as it is upgraded.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces existing facilities.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-------------------|
| Project Costs | 1985 - 2019 | 14,774,027 |
| Total Budgetary Cost Estimate: | | 14,774,027 |

Means of Financing

| Funding Source | Amount |
|-----------------------|------------|
| Miscellaneous Revenue | 7,000 |
| Utility Rates/Fees | 14,767,027 |

Total Programmed Funding: 14,774,027
Future Funding Requirements: 0

Comments

S-24 Sewer System Pipeline Rehabilitation

Category: **Sewer**
 Department: **Utilities**

Status: **Ongoing**
 Location: **Various locations throughout Sewer Utility's service area**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 26,830,213 | 14,495,072 | 1,175,521 | 1,736,192 | 1,784,652 | 1,832,733 | 1,883,975 | 1,934,915 | 1,987,153 |

Description and Scope

This program funds repair of localized defects and occasional relining of defective sewer pipes. Most defects are identified from the Utility's infrastructure condition assessment (video) program. Pipes are selected for repair based on risk of failure (likelihood and consequence), failure history, and to coordinate with other construction, such as planned street overlays (which reduce restoration costs).

PROJECT NEED: System Renewal and Replacement

Rationale

Bellevue's 650+ miles of sewer mains and 'stubs' that carry wastewater from homes and businesses to the mains are rapidly deteriorating. Most are 35-60 years old, and more than halfway through their expected functional life. As pipes age, cracks become wider and joints between pipes loosen, increasing the likelihood of blockages that cause sewer backups. Pipe rehabilitation reduces pipeline failures, reduces the risk of blockages or collapse that could result in property damage, and reduces the amount of ground water entering the sewer system which in turn reduces the risk of exceeding the system capacity.

In many cases, localized 'spot' repairs are the most cost effective choice and assure maximum total pipe life. Video observations and condition data indicates whether full pipe replacement or relining is more cost effective.

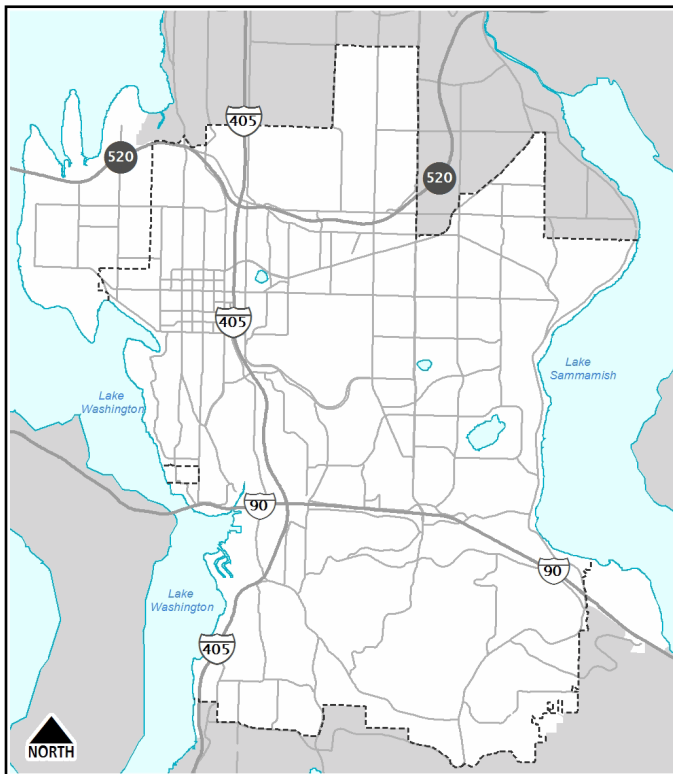
Environmental Impacts

The environmental impacts and the State Environmental Protection Act (SEPA) requirements will be determined for each replacement segment, but they are generally SEPA exempt.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces or repairs existing facilities.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|------------|
| Project Costs | 1990 - 2019 | 26,830,213 |
| Total Budgetary Cost Estimate: | | 26,830,213 |

Means of Financing

| Funding Source | Amount |
|-------------------------------------|------------|
| Judgements/Settlements | 84,000 |
| Miscellaneous Revenue | 879,000 |
| Utility Rates/Fees | 25,867,213 |
| Total Programmed Funding: | 26,830,213 |
| Future Funding Requirements: | 0 |

Comments

This project will be located throughout the service area.

S-30 Sewer Service Extension

Category: **Sewer**
 Department: **Utilities**

Status: **Ongoing**
 Location: **Various locations throughout Sewer Utility's service area**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 11,645,619 | 8,605,168 | 399,340 | 410,899 | 422,368 | 433,747 | 445,874 | 457,930 | 470,293 |

Description and Scope

This ongoing program provides funds for the design and construction of new sewer pipes for development or redevelopment, or to extend sewer pipes to areas with failing septic systems throughout the service area. These facilities are constructed to serve areas that currently do not have sewer service available.

PROJECT NEED: System Expansion

Rationale

This program facilitates orderly extension of the sewer system, which state and county policies encourage, and provides an affordable option for customers who might otherwise not be able to develop their property. Projects are typically constructed in areas where the City is approached by affected property owners or in conjunction with other Utility or roadway construction. Each project requires majority support of affected property owners, except when health or safety is at risk. The program eliminates dependence on septic systems by providing sewer service. It reduces costs and disruption to communities when constructed in conjunction with other projects.

Property owner interest fluctuates annually, resulting in some years with no construction, and other years with substantial new construction. As the sewer system approaches build-out, fewer requests for sewer system extension are anticipated. Benefited properties pay their share of the project costs through connection charges when they connect.

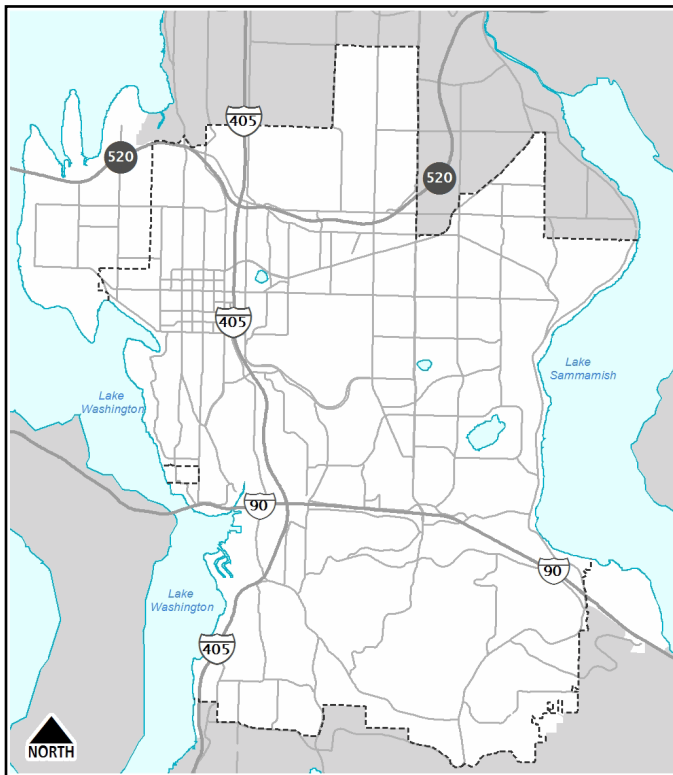
Environmental Impacts

The environmental impacts and the State Environmental Protection Act (SEPA) requirements are determined for each specific project.

Operating Budget Impacts

Operating budget costs will increase due to the addition of new sewer pipe. Additional operating costs will be incremental depending on the length and location of new sewer pipes, and can be approximated at \$0.90/LF. The existing budget allows construction of approximately 1,000 LF of sewer pipe each year, which is only constructed if requests are received.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|------------|
| Project Costs | 1990 - 2019 | 11,645,619 |
| Total Budgetary Cost Estimate: | | 11,645,619 |

Means of Financing

| Funding Source | Amount |
|-----------------------|------------|
| Miscellaneous Revenue | 828,000 |
| Utility Rates/Fees | 10,817,619 |

Total Programmed Funding: 11,645,619
Future Funding Requirements: 0

Comments

This project will be located throughout the service area.

S-32 Minor (Small) Capital Improvement Projects

Category: **Sewer**
 Department: **Utilities**

Status: **Ongoing**
 Location: **Various locations throughout Sewer Utility's service area**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 3,359,583 | 2,229,051 | 148,487 | 152,785 | 157,049 | 161,280 | 165,790 | 170,272 | 174,869 |

Description and Scope

This ongoing program pays for small improvements to Bellevue's sewer system to resolve deficiencies, improve efficiencies, or resolve maintenance problems, often in conjunction with other programs such as the Transportation overlay program. Projects are prioritized based on criteria including public safety/property damage, maintenance frequency, operator safety, environmental risk, reliability and efficiency gains, coordination with other city projects or development activity, and level of service impact.

PROJECT NEED: System Renewal and Replacement

Rationale

These improvements correct unanticipated minor deficiencies or maintenance problems of the existing system. This program allows the City to efficiently maintain and upgrade its sewer system by coordinating minor improvements with other City projects and maintenance activities. These projects are too small to justify their own CIP projects, don't fit within the scope of other sewer CIP programs, and sometimes cannot be anticipated. The budget is based on average historical need.

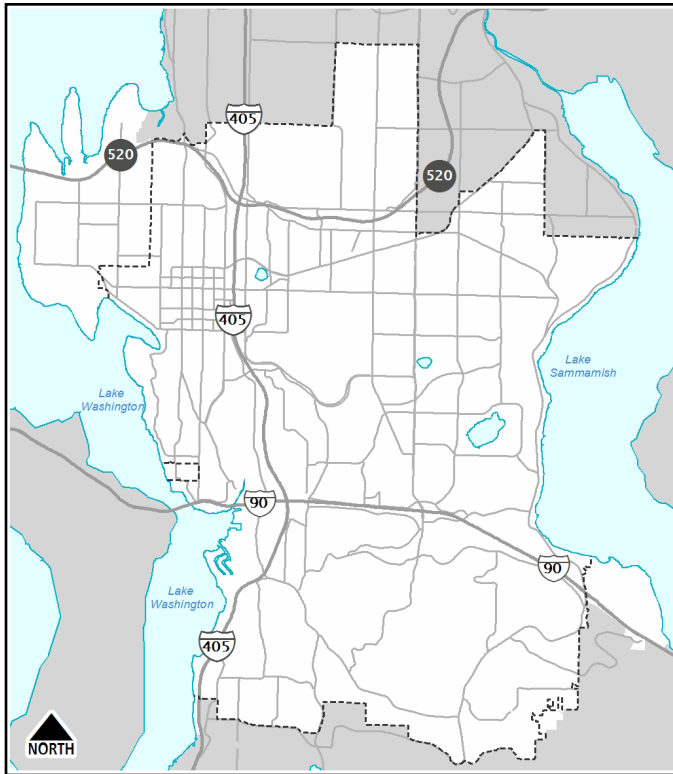
Environmental Impacts

The environmental impacts and the State Environmental Protection Act (SEPA) requirements are determined for each specific project, but are generally exempt.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|------------------|
| Project Costs | 1990 - 2019 | 3,359,583 |
| Total Budgetary Cost Estimate: | | 3,359,583 |

Means of Financing

| Funding Source | Amount | |
|-------------------------------------|-----------|------------------|
| Utility Rates/Fees | 3,359,583 | |
| Total Programmed Funding: | | 3,359,583 |
| Future Funding Requirements: | | 0 |

Comments

This project will be located throughout the service area.

S-52 East CBD Sewer Trunkline Improvements

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Begun**

Location: **112th Ave SE: Bellefield P.S. to 500 ft north of SE 8th St.**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 2,894,045 | 532,243 | 1,096,742 | 1,265,060 | - | - | - | - | - |

Description and Scope

This project will replace approximately 1,600 feet of sewer pipe with larger diameter pipelines, to convey sewage generated from planned growth in the eastern side of downtown Bellevue, generally east of 110th Ave NE. This project may be adjusted to accommodate the construction alignment and schedule of the Sound Transit EastLink Light Rail.

PROJECT NEED: System Expansion

Rationale

The project is needed to provide sufficient sewer capacity to allow planned development in the eastern part of downtown. Sufficient capacity will reduce the likelihood and occurrence of sewer overflows which pollute surface waters and create potential health and safety hazards. The capacity is required now as every new development that drains to this pipe increases the risk of sewer overflows to Sturtevant Creek and Mercer Slough. To avoid conflicts and accommodate maintenance access, the pipes and associated facilities need to be located outside of the East Link light rail right-of-way. Final design and construction will be closely coordinated with Sound Transit.

The project is consistent with City Comprehensive Plan Policy UT-5, which indicates utility system capacity should not determine land use. The current wastewater system capacity would limit downtown redevelopment.

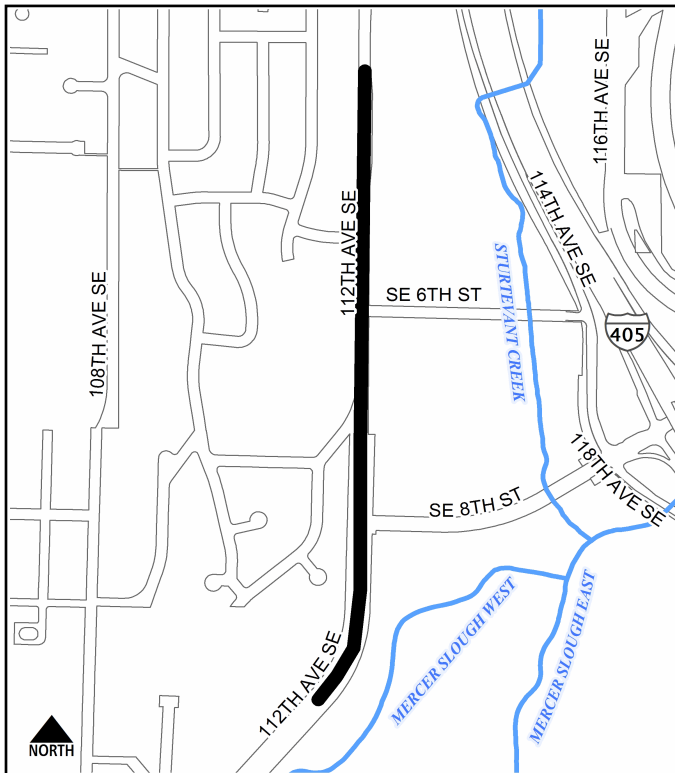
Environmental Impacts

An environmental determination will be made in conjunction with preliminary design of this project. SEPA review will be required. Construction impacts will be mitigated during construction; the additional capacity will reduce the potential for sewer overflow and consequent negative environmental impacts.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2009 - 2014 | 2,894,045 |
| Total Budgetary Cost Estimate: | | 2,894,045 |

Means of Financing

| Funding Source | Amount |
|--------------------|-----------|
| Utility Rates/Fees | 2,894,045 |

Total Programmed Funding: 2,894,045
Future Funding Requirements: 0

Comments

S-53 Bellefield Pump Station Capacity Improvement

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Begun**
 Location: **1300 Blk 112th Ave SE, and 112th south toward BelWay**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 9,983,772 | - | - | 4,629,681 | 5,354,091 | - | - | - | - |

Description and Scope

This project will replace the existing Bellefield Pump Station and pressurized discharge pipe with larger facilities of sufficient capacity to meet the needs of planned growth in the eastern side of downtown Bellevue, generally east of 110th Ave NE. This project may be adjusted to accommodate the construction schedule of the Sound Transit EastLink Light Rail.

PROJECT NEED: System Renewal & Replacement; System Expansion

Rationale

The project is needed to provide sufficient sewer capacity to allow planned development in the eastern part of downtown. Sufficient capacity will reduce the likelihood and occurrence of sewer overflows which pollute surface waters and create potential health and safety hazards. The eventual need for this project was identified in Comprehensive Wastewater Plans ever since the downtown was re-zoned for high density development in the 1980s. Interim capacity improvements were made in 2002; more capacity is needed by 2015. The current station capacity of 2800 gpm was sufficient for 30 years of early downtown growth. The required ultimate capacity of 6800 gpm is needed to serve approximately 40,000 people who will live and work downtown. Without the project, sewage would overflow from the pump station into Mercer Slough, initially just during peak sewage flows such as major rain events, and eventually because daily flows would exceed the station capacity.

Benefited properties have paid connection charges toward this project since the 1980s, when they redeveloped. The intent is that downtown growth pay for their capacity portion of this project. The capacity required to serve the large tributary basin is paid by the entire rate base.

The project is consistent with City Comprehensive Plan Policy UT-5, which indicates utility system capacity should not determine land use. The current pump station capacity would limit downtown redevelopment.

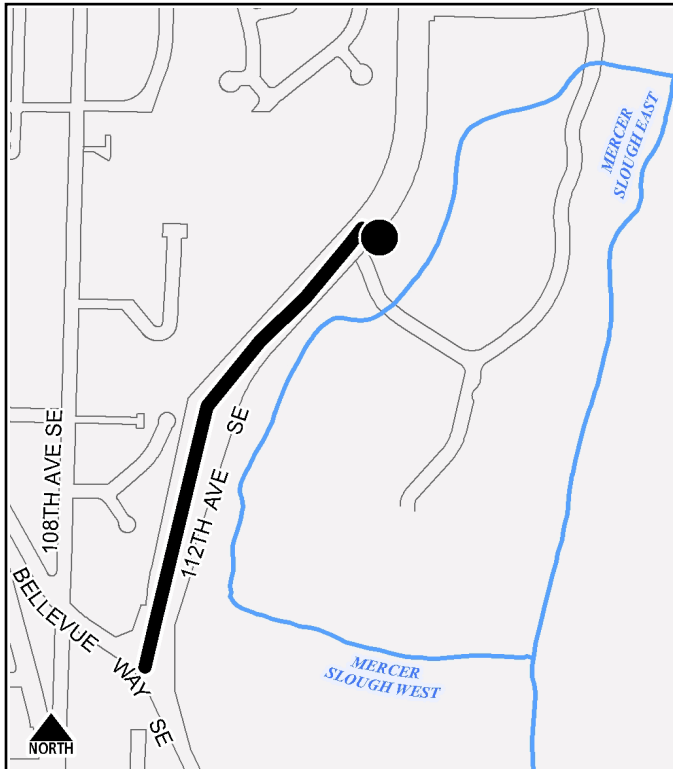
Environmental Impacts

An environmental determination will be made in conjunction with preliminary design of this project. SEPA review will be required. Construction impacts will be mitigated during construction; the additional capacity will reduce the potential for sewer overflow and consequent negative environmental impacts.

Operating Budget Impacts

This project will have no impact on operating revenues. Operating expenditures may increase marginally for increased power costs due to anticipated increased sewage flows & higher capacity pumping equipment.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2014 - 2015 | 9,983,772 |
| Total Budgetary Cost Estimate: | | 9,983,772 |
| Means of Financing | | |
| Funding Source | Amount | |
| Utility Rates/Fees | 9,983,772 | |
| Total Programmed Funding: | | 9,983,772 |
| Future Funding Requirements: | | 0 |

Comments

S-55 Relocate Sewer WSDOT I-405/SR 520 Braids

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Begun**
 Location: **Within and adjacent to the I-405 and SR 520 Rights of Way**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 291,000 | 286,000 | 5,000 | - | - | - | - | - | - |

Description and Scope

Relocate up to three wastewater pipes located within the state's right-of-way, to accommodate the state highway project.

PROJECT NEED: Regulatory Requirements (Mandate)

Rationale

Bellevue is legally obligated by State permits and agreements to relocate or modify its utilities to accommodate the State's project.

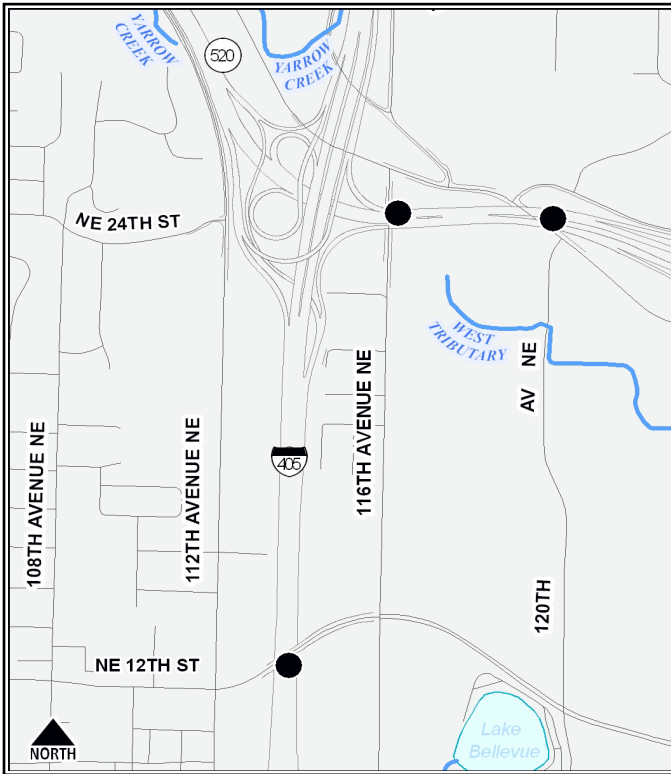
Environmental Impacts

Relocation of utilities is an incidental part of the State's highway project. Any environmental impacts will be identified and mitigation proposed as part of the environmental review for the entire WSDOT project.

Operating Budget Impacts

At this time, this project has no known impact on operating revenues and/or expenditures.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|---------------|
| Project Costs | 2009 - 2013 | 291,000 |
| Total Budgetary Cost Estimate: | | 291,000 |
| Means of Financing | | |
| Funding Source | | Amount |
| Utility Rates/Fees | | 291,000 |
| Total Programmed Funding: | | 291,000 |
| Future Funding Requirements: | | 0 |

Comments

S-56 Relocate Sewer WSDOT 520 Expansion

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Begun**
 Location: **Within and adjacent to SR 520 Right of Way**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1,575,050 | - | 1,040,000 | 535,050 | - | - | - | - | - |

Description and Scope

Relocate up to seven wastewater pipes located within the state's right-of-way, to accommodate the state highway project. Bellevue has four gravity mains, one pressurized force main, one lake line, and one siphon line within the vicinity of the WSDOT project.

PROJECT NEED: Regulatory Requirements (Mandate)

Rationale

Bellevue is legally obligated by State permits and agreements to relocate or modify its utilities to accommodate the State's project.

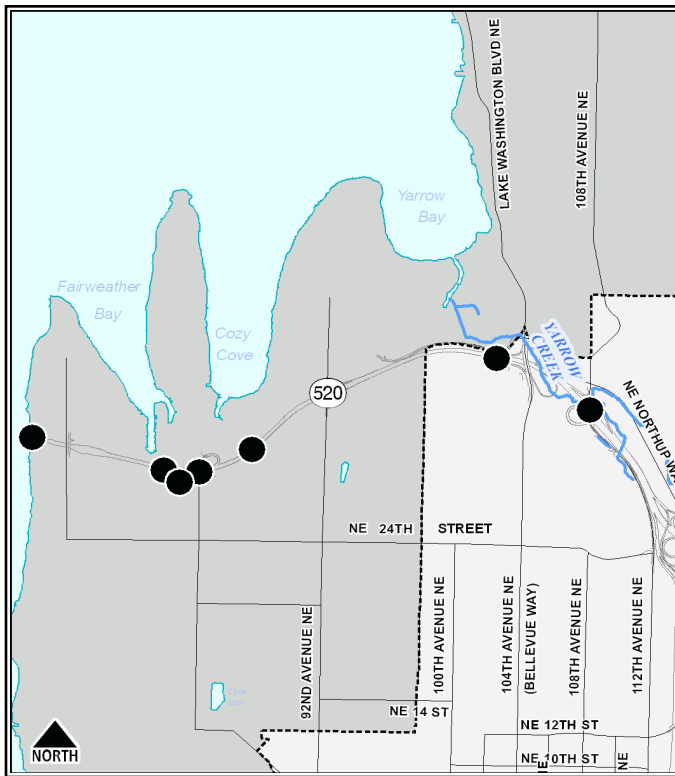
Environmental Impacts

Relocation of utilities is an incidental part of the State's highway project. Any environmental impacts will be identified and mitigation proposed as part of the environmental review for the entire WSDOT project.

Operating Budget Impacts

At this time, this project has no known impact on operating revenues and/or expenditures.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2013 - 2014 | 1,575,050 |
| Total Budgetary Cost Estimate: | | 1,575,050 |
| Means of Financing | | |
| Funding Source | Amount | |
| Utility Rates/Fees | 1,575,050 | |

Total Programmed Funding: 1,575,050
Future Funding Requirements: 0

Comments

The locations identified are potential relocation sites.

S-58 Sewer Lake Line Replacement Program

Category: **Sewer**
 Department: **Utilities**

Status: **Ongoing**
 Location: **Along shoreline from Meydenbauer Beach Park to Grange I**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 3,397,628 | 924,000 | 1,194,090 | 651,310 | 118,977 | 122,182 | 125,598 | 128,994 | 132,477 |

Description and Scope

This program has two parts. 1) One-time replacement of approximately 1,150 feet of sewer pipe currently buried under Meydenbauer Bay with an on-shore buried pipe. Pipe replacement is being coordinated with the master plan for Meydenbauer Park development. 2) Ongoing assessment of the remaining 19+ miles of lakelines to determine remaining life expectancies, recommend maintenance practices to maximize the remaining life, and to develop design strategies, priorities, and replacement schedules. Additional replacements will occur in future years based on the outcome of this assessment.

PROJECT NEED: System Renewal and Replacement

Rationale

Bellevue has 19+ miles of sewer pipes buried under water near the shorelines of Lakes Washington and Sammamish, known as "lakelines." The pipes were built in the 1950s and 1960s to convey sewage primarily from lakefront properties. Their underwater location makes them difficult to access and maintain, which is increasingly problematic as they age. Pipe failures or blockages cause sewage releases directly into the lakes, threatening sensitive shoreline habitat, closing beaches and interrupting service to homeowners.

Meydenbauer Bay was chosen for the first construction project due to the high risk of failure based on 2007 condition assessment and pipeline maintenance experience. This is some of our oldest sewer lakeline, and is constructed primarily of Asbestos Cement (AC) pipe, which is known to deteriorate more rapidly than cast iron pipe (which comprises the bulk of in-lake pipe.) Recent video inspection of an on-shore portion near Meydenbauer Bay revealed a large hole in the crown of the pipe, and that cleaning operations have thinned the AC pipe walls and/ or broken off pieces of the pipe. The opportunity to replace the pipe on city-owned land minimizes environmental impacts and simplifies construction. The estimate presumes abandoning the existing pipe in place.

The long term program will include condition assessment to determine remaining life expectancies and maintenance recommendations, and will include preliminary engineering studies to identify and evaluate replacement options.

Environmental Impacts

Specific environmental impacts have not been determined. The project will require SEPA review.

Operating Budget Impacts

At this time, this project has no known impact on operating revenues and/or expenditures, since it is replacing an existing facility.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2009 - 2019 | 3,397,628 |
| Total Budgetary Cost Estimate: | | 3,397,628 |

Means of Financing

| Funding Source | Amount | |
|-------------------------------------|-----------|-----------|
| Utility Rates/Fees | 3,397,628 | |
| Total Programmed Funding: | | 3,397,628 |
| Future Funding Requirements: | | 0 |

Comments

S-59 Add On-site Power at Sewer Pump Stations

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Not Begun**
 Location: **Various Wastewater Pumping Stations**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1,227,559 | - | - | 190,981 | 196,312 | 201,601 | 207,237 | 212,841 | 218,587 |

Description and Scope

This project will add on-site power generation capability at three high priority pumping stations which currently rely on portable generators during power outages. Specific locations would be selected based on a study evaluating the likelihood and consequence of sewage overflows, giving consideration to volume of base flow versus wet well capacity; proximity to surface water bodies; geographic distance from portable equipment.

PROJECT NEED: Improved Level of Service

Rationale

Twenty-three of Bellevue's thirty-eight pump and lift stations rely on portable power generation equipment during extended power outages. As a result, staff and equipment are stretched to capacity during large storm events with massive losses of power, such as during and following the December 2006 windstorm.

On-site generation would more easily prevent sewage overflows, comply with DOE and DOH regulations, protect the City from violations of the NPDES Municipal Stormwater Permit, minimize closures of public and private beaches, minimize public health and safety risks, and free up staff for other storm response.

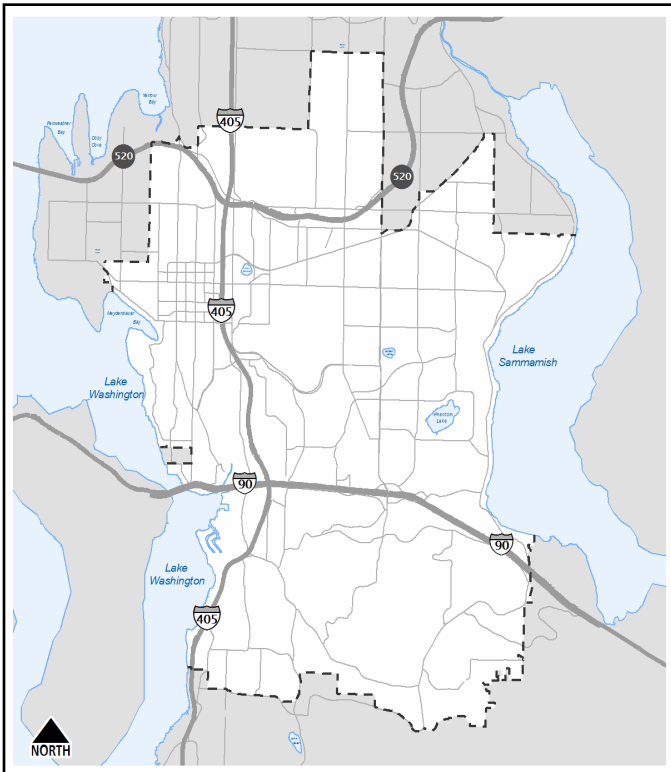
Environmental Impacts

No environmental impacts are anticipated. Equipment would be installed within existing facilities.

Operating Budget Impacts

At this time, this project has no known impact on operating revenues and/or expenditures.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2014 - 2019 | 1,227,559 |
| Total Budgetary Cost Estimate: | | 1,227,559 |

Means of Financing

| Funding Source | Amount | |
|-------------------------------------|-----------|-----------|
| Utility Rates/Fees | 1,227,559 | |
| Total Programmed Funding: | | 1,227,559 |
| Future Funding Requirements: | | 0 |

Comments

S-60 Wilburton Sewer Capacity Upgrade

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Begun**
 Location: **North & West of the intersection of 114th Ave SE and SE 8th**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 5,322,300 | - | 1,743,540 | 1,794,057 | 1,784,703 | - | - | - | - |

Description and Scope

This project will replace approximately 2,000 feet of 12-inch diameter pipe with larger diameter pipe to provide sufficient capacity for anticipated upstream development. Design alternatives which achieve similar objectives will be evaluated during pre-design.

PROJECT NEED: System Expansion

Rationale

This project is needed to provide sufficient sewer capacity to allow planned re-development within the Wilburton area. This redevelopment will occur based on land-use changes from existing uses to office, retail, multi-family residential, and hotels, that will require more sewer capacity. Portions of the existing trunk are currently at capacity. Redevelopment that would increase sewer flows to this trunk line cannot be allowed until the trunk capacity is increased. Project costs will be recovered from benefiting properties as redevelopment occurs.

The project is consistent with City Comprehensive Plan Policy UT-5, which indicates utility system capacity should not determine land use. The current wastewater system capacity would limit Wilburton redevelopment.

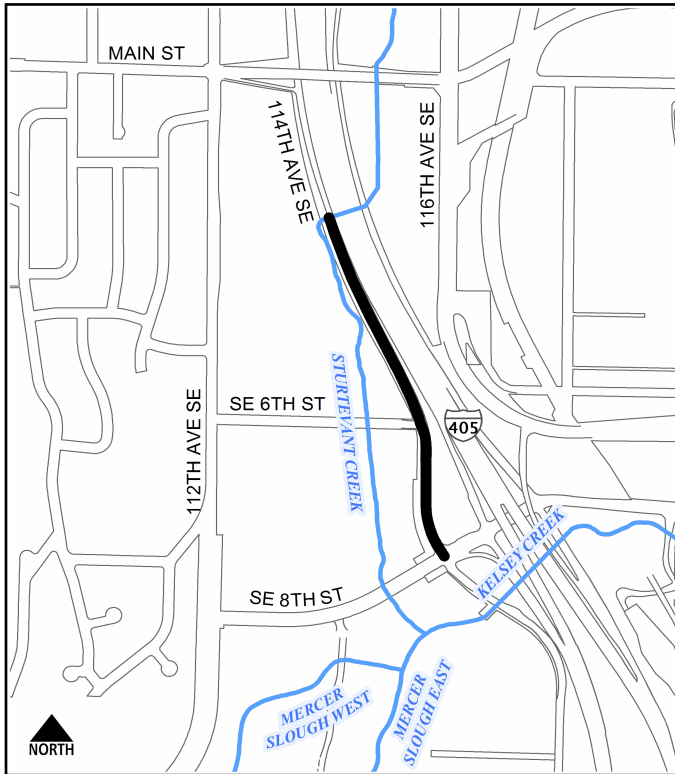
Environmental Impacts

Environmental impacts would be evaluated during SEPA review of the project, but are not expected to be significant.

Operating Budget Impacts

At this time, this project has no known impact on operating revenues and/or expenditures.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2013 - 2015 | 5,322,300 |
| Total Budgetary Cost Estimate: | | 5,322,300 |

Means of Financing

| Funding Source | Amount |
|--------------------|-----------|
| Utility Rates/Fees | 5,322,300 |

Total Programmed Funding: 5,322,300
Future Funding Requirements: 0

Comments

S-61 Midlakes Pump Station Capacity Improvements

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Not Begun**
 Location: **Just north of Bel-Red Rd and west of 130th Ave NE**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 4,001,158 | 104,000 | - | 1,041,715 | 2,855,443 | - | - | - | - |

Description and Scope

This project will replace the existing Midlakes sewer pump station with a larger one, to provide capacity for planned growth in the Bel-Red Corridor through 2030.

PROJECT NEED: System Expansion

Rationale

The existing station can pump 800 gallons of sewage/minute (gpm), just sufficient for the light industrial zoning in the area it has served since its original construction in 1968. Planned development in the Bel-Red Corridor includes residential housing and retail shops which will generate much more sewage. A very limited amount of redevelopment can occur before the pump station capacity must be increased, to avoid significant risk of sewage overflow to the West Tributary of Kelsey Creek.

This project will increase the station capacity to 1,100 gpm. Construction is proposed for 2014 and 2015, although it may need to be accelerated to accommodate development proposals. Costs for the added capacity would be recovered through connection charges. Costs for replacing the existing capacity would not be collected from connection charges to re-developing properties, since the station would require significant retrofit to replace old facilities and equipment even without expansion.

Environmental Impacts

Operating Budget Impacts

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2011 - 2015 | 4,001,158 |
| Total Budgetary Cost Estimate: | | 4,001,158 |

Means of Financing

| Funding Source | Amount |
|--------------------|-----------|
| Utility Rates/Fees | 4,001,158 |

Total Programmed Funding: 4,001,158
Future Funding Requirements: 0

Comments

S-63 Utility Facilities for 120th Ave NE Improvements (Segment 2)

Category: **Sewer**
 Department: **Utilities**

Status: **Approved and Begun**
 Location: **120th Ave NE: NE 8th St to NE 12th Street**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1,169,914 | 84,864 | - | 535,050 | 550,000 | - | - | - | - |

Description and Scope

This project will design and construct new sewer pipe in 120th Ave NE in conjunction with street improvements, and where needed to provide sewer service for redevelopment of adjacent properties consistent with the Bel-Red Corridor Final Report. The project is broken down into segments. Segment 2 is from NE 8th St to NE 12th St and will construct approximately 700 feet of 15-inch or 18-inch pipe.

PROJECT NEED: System Expansion

Rationale

Much of 120th Avenue NE is currently without sewer facilities. Commercial and residential development along the street will require sewer facilities be constructed in the street, to obtain sewer service. Collaboration with the Transportation Department will occur to ensure the design is completed in coordination with the street design. This project will ensure sewer facilities are ready for construction when resources to construct this project are secured and approved.

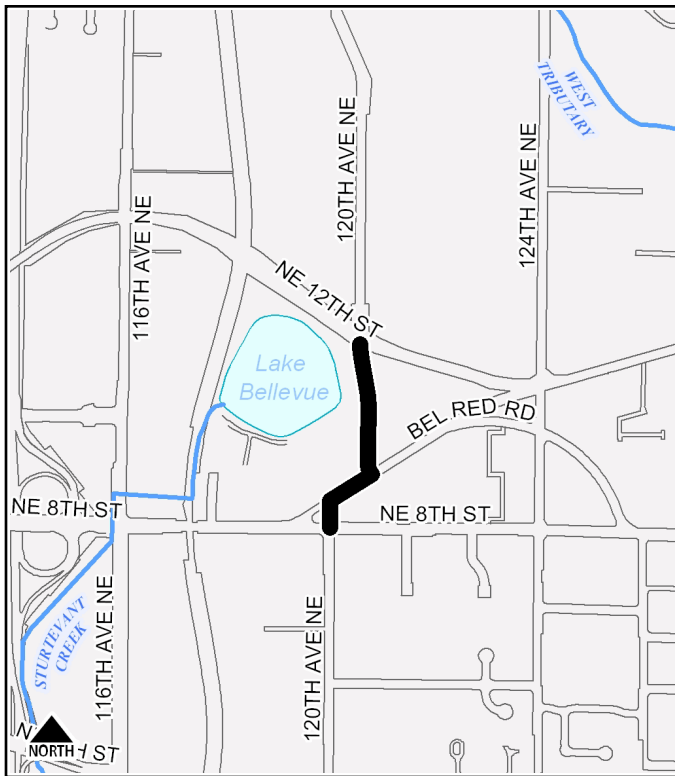
Environmental Impacts

The environmental impacts and State Environmental Protection Act (SEPA) requirements will be determined during the design process with the Transportation Department.

Operating Budget Impacts

Operating budget costs will increase due to the addition of new sewer main. Additional operating costs will be incremental depending on the length and location of new sewer main, and can be approximated at \$0.90/LF.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|--------------------|-------------|-----------|
| Project Costs | 2011 - 2015 | 1,169,914 |

Total Budgetary Cost Estimate: 1,169,914

Means of Financing

| Funding Source | Amount |
|--------------------|-----------|
| Utility Rates/Fees | 1,169,914 |

Total Programmed Funding: 1,169,914

Future Funding Requirements: 0

Comments

S-66 Sewer System Pipeline Replacement

Category: **Sewer**
 Department: **Utilities**

Status: **New**
 Location: **Various locations throughout the Sewer Utility's service area**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 7,918,700 | - | 1,040,000 | 1,070,100 | 1,100,000 | 1,129,700 | 1,161,300 | 1,192,700 | 1,224,900 |

Description and Scope

This program will replace sewer pipe throughout the service area. The current budget is estimated to replace sewer pipe at a rate of 0.5 to 0.75 miles per year. The pipes replaced would be those where life cycle cost analyses indicate replacement is a more economical solution than continuing to make point repairs. Replacement methods may include trenchless rehabilitation techniques such as cured-in-place pipe, and pipe bursting, and/or open trench replacement. This program will compliment S-24, Sewer System Pipeline Rehabilitation, which focuses on making point repairs to extend the useful life of sewer pipes. Adding this program is consistent with the Asset Management Program strategy to meet expected and required customer service levels at the lowest life cycle cost.

PROJECT NEED: System Renewal and Replacement

Rationale

Many sewer pipes are over 60 years old, approaching their useful life. Many pipes have required multiple repairs to prevent new and/or respond to reported sewage overflows. The cost to repair and maintain aged, cracked pipes and keep them free of roots and other debris eventually exceeds the cost to replace the pipeline. We have identified several miles of sewer pipe that are candidates for rehabilitation/replacement. As the system ages more will be identified. The budget for S-24 cannot support the cost of pipe replacement and keep up on the needed point repairs. As a result, the backlog of sewer defects has significantly increased.

Although this program's funding levels do not provide the resources for a long term sustainable level of pipeline replacement, it allows Bellevue Utilities to replace some pipelines that have clearly reached the end of their useful economic life. The proposed replacement rate of up to 0.75 miles of pipe per year implies that sewer pipe system-wide would need to last an average of more than 650 years, much longer than the EPA's recommendation of 100 years. While sufficient for now, the annual program budget will eventually need to increase to meet asset management program goals.

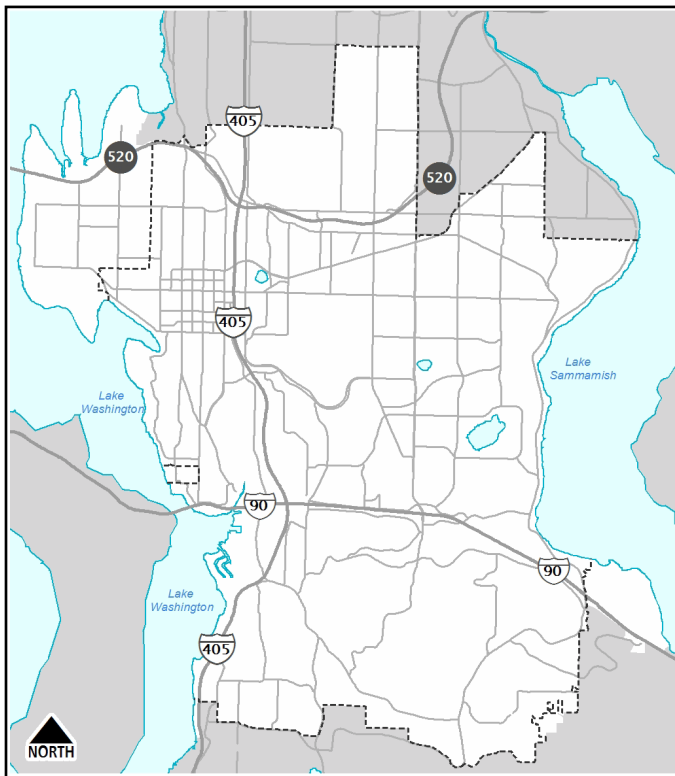
Environmental Impacts

The environmental impacts and the State Environmental Protection Act (SEPA) requirements will be determined for each replacement segment, but they are generally SEPA exempt.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces existing facilities.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|---------------------------------------|-------------|-----------|
| Project Costs | 2013 - 2019 | 7,918,700 |
| Total Budgetary Cost Estimate: | | 7,918,700 |

Means of Financing

| Funding Source | Amount |
|--------------------|-----------|
| Utility Rates/Fees | 7,918,700 |

Total Programmed Funding: 7,918,700
Future Funding Requirements: 0

Comments

Appendix F

Existing Trunk Sewers

| Name | Length (ft) | Basin 1 | | |
|------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 1142 | 488 | 8 | 0.3791 | 334 |
| 1153 | 125 | 10 | 0.152 | 383 |
| 1154 | 150 | 10 | 0.1467 | 376 |
| 1155 | 215 | 10 | 0.0558 | 232 |
| 1156 | 130 | 8 | 0.4385 | 360 |
| 1161 | 27 | 12 | 1.0001 | 1599 |
| 1170 | 330 | 8 | 6.6815 | 1404 |
| 1172 | 198 | 10 | 6.9256 | 2585 |
| 1173 | 281 | 12 | 2.6344 | 2595 |
| 1189 | 338 | 10 | 0.5 | 695 |
| 1191 | 428 | 10 | 5.1165 | 2222 |
| 1204 | 330 | 10 | 0.5 | 695 |
| 1218 | 330 | 10 | 0.4788 | 680 |
| 1228 | 330 | 10 | 6.8158 | 2565 |
| 1229 | 330 | 10 | 0.4546 | 662 |
| 1237 | 413 | 8 | 0.9201 | 521 |
| 1238 | 402 | 10 | 0.2811 | 521 |
| 1246 | 339 | 10 | 0.3392 | 572 |
| 1247 | 412 | 10 | 0.3034 | 541 |
| 1251 | 174 | 8 | 0.4598 | 368 |
| 1274 | 177 | 8 | 0.4068 | 346 |
| 1275 | 26 | 8 | 0.4231 | 353 |
| 1305 | 160 | 8 | 0.45 | 364 |

| Basin 2 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 2177 | 334 | 10 | 0.3743 | 601 |
| 2181 | 293 | 12 | 0.3072 | 886 |
| 2182 | 306 | 12 | 0.2909 | 862 |
| 2184 | 306 | 12 | 0.098 | 501 |
| 2185 | 436 | 8 | 0.5 | 384 |
| 2186 | 438 | 8 | 0.6416 | 435 |
| 2187 | 122 | 8 | 1.3362 | 628 |
| 2189 | 310 | 8 | 1.7745 | 723 |
| 2190 | 40 | 12 | 0.375 | 979 |
| 2307 | 320 | 8 | 1.3407 | 629 |

| Basin 3* | | | | |
|----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 199 | 248.7 | 6 | 0.45 | 169 |
| 434928 | 105 | 6 | 0.58 | 192 |
| 179 | 130.7 | 6 | 0.83 | 230 |
| 121 | 48.6 | 8 | 0.31 | 303 |
| 122 | 291.8 | 8 | 0.4 | 344 |
| 247 | 85.1 | 8 | 0.4 | 344 |
| 123 | 307.4 | 8 | 0.4 | 344 |
| 173 | 204.8 | 8 | 0.42 | 352 |
| 164 | 152.7 | 8 | 0.47 | 373 |
| 245 | 126.6 | 8 | 0.48 | 377 |
| 434932 | 14.7 | 6 | 2.4 | 391 |
| 255 | 187 | 8 | 0.55 | 403 |
| 197 | 199.5 | 6 | 2.68 | 413 |
| 306 | 240.3 | 8 | 0.58 | 414 |
| 208 | 102.7 | 6 | 2.77 | 420 |
| 296 | 95.8 | 6 | 2.77 | 420 |
| 176 | 293.2 | 6 | 3.05 | 441 |
| 198 | 137.8 | 6 | 3.38 | 464 |
| 163 | 100.1 | 8 | 0.8 | 486 |
| 253 | 152.8 | 8 | 0.86 | 504 |
| 252 | 238.8 | 8 | 0.89 | 513 |
| 194 | 100.9 | 6 | 4.4 | 530 |
| 195 | 101.3 | 6 | 4.4 | 530 |
| 196 | 100 | 6 | 4.4 | 530 |
| 146 | 181.7 | 6 | 4.5 | 536 |
| 172 | 244.1 | 8 | 1 | 544 |
| 157 | 202.7 | 8 | 1.3 | 620 |
| 158 | 198.5 | 8 | 1.3 | 620 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 3* | | | Capacity ¹ (gpm)** |
|------|-------------|---------------|-----------|------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 160 | 246.7 | 8 | 1.3 | 620 | |
| 192 | 108.4 | 6 | 6.19 | 628 | |
| 193 | 100.7 | 6 | 6.19 | 628 | |
| 237 | 391.1 | 8 | 1.85 | 740 | |
| 148 | 61.5 | 8 | 1.9 | 750 | |
| 205 | 158.4 | 6 | 9.15 | 764 | |
| 171 | 349.3 | 8 | 2.08 | 784 | |
| 233 | 393 | 8 | 2.53 | 865 | |
| 170 | 426.5 | 8 | 2.62 | 880 | |
| 236 | 280.3 | 8 | 2.86 | 920 | |
| 226 | 410.6 | 8 | 3.32 | 991 | |
| 224 | 405.8 | 8 | 3.47 | 1013 | |
| 191 | 221.7 | 8 | 3.56 | 1026 | |
| 174 | 189.1 | 8 | 3.77 | 1056 | |
| 246 | 358.8 | 8 | 3.8 | 1060 | |
| 125 | 414.1 | 8 | 3.8 | 1060 | |
| 124 | 353 | 8 | 3.8 | 1060 | |
| 165 | 260.2 | 8 | 4.23 | 1118 | |
| 225 | 412.2 | 8 | 4.82 | 1194 | |
| 138 | 332.7 | 8 | 5 | 1216 | |
| 238 | 169.8 | 8 | 5.1 | 1228 | |
| 130 | 383.1 | 8 | 5.36 | 1259 | |
| 129 | 124 | 8 | 5.36 | 1259 | |
| 150 | 315.3 | 8 | 5.71 | 1299 | |
| 235 | 412.3 | 8 | 5.74 | 1303 | |
| 161 | 168.8 | 8 | 6.24 | 1358 | |
| 249 | 210.3 | 8 | 6.47 | 1383 | |
| 136 | 96.5 | 8 | 6.65 | 1402 | |
| 200 | 230.4 | 8 | 7 | 1439 | |
| 127 | 117.2 | 8 | 7.01 | 1440 | |
| 159 | 343.2 | 8 | 8.4 | 1576 | |
| 241 | 172.9 | 8 | 8.8 | 1613 | |
| 232 | 228.8 | 8 | 9.57 | 1682 | |
| 128 | 189.8 | 8 | 9.84 | 1706 | |
| 248 | 312.3 | 8 | 9.95 | 1715 | |
| 137 | 301 | 8 | 10.47 | 1760 | |
| 155 | 175.4 | 8 | 10.98 | 1802 | |
| 149 | 304.7 | 8 | 11.26 | 1825 | |
| 168 | 356.6 | 8 | 11.47 | 1842 | |
| 156 | 220.7 | 8 | 13.4 | 1991 | |
| 147 | 332.6 | 8 | 13.51 | 1999 | |
| 120 | 141.2 | 8 | 13.76 | 2017 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 3* | | | Capacity ¹ (gpm)** |
|-------|-------------|---------------|-----------|---------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 145 | 277.5 | 8 | 96.4 | 5339 | |
| 204 | 210.5 | 6 | 999.99 | Unknown | |
| 183 | 408 | 8 | 999.99 | Unknown | |
| 184 | 84.5 | 8 | 0 | Unknown | |
| 242 | 451.7 | 8 | 999.99 | Unknown | |
| 240 | 34.2 | 8 | 0 | Unknown | |
| 234 | 229.9 | 8 | 0 | Unknown | |
| 78665 | 177.9 | 8 | 999.99 | Unknown | |
| 254 | 241 | 8 | 999.99 | Unknown | |
| 258 | 70.2 | 6 | 0 | Unknown | |
| 243 | 391.9 | 8 | 999.99 | Unknown | |
| 221 | 390.8 | 8 | 0 | Unknown | |
| 209 | 372.8 | 8 | 0 | Unknown | |
| 213 | 295.6 | 8 | 999.99 | Unknown | |
| 223 | 361.8 | 8 | 0 | Unknown | |
| 231 | 30.1 | 6 | 999.99 | Unknown | |
| 227 | 31 | 6 | 999.99 | Unknown | |
| 228 | 104.3 | 6 | 999.99 | Unknown | |
| 229 | 95.4 | 6 | 999.99 | Unknown | |
| 230 | 115.1 | 6 | 999.99 | Unknown | |
| 219 | 353.6 | 8 | 999.99 | Unknown | |
| 214 | 96.8 | 8 | 0 | Unknown | |
| 220 | 403.7 | 8 | 999.99 | Unknown | |
| 211 | 138.1 | 8 | 0 | Unknown | |
| 212 | 155.7 | 8 | 0 | Unknown | |
| 210 | 203.8 | 8 | 0 | Unknown | |
| 188 | 99.2 | 8 | 0 | Unknown | |
| 185 | 248.3 | 8 | 0 | Unknown | |
| 189 | 290.9 | 8 | 0 | Unknown | |
| 187 | 192.7 | 8 | 0 | Unknown | |
| 190 | 153.3 | 8 | 999.99 | Unknown | |
| 201 | 145 | 6 | 999.99 | Unknown | |
| 186 | 150.2 | 8 | 0 | Unknown | |
| 275 | 284.3 | 8 | 999.99 | Unknown | |
| 143 | 150 | 6 | 999.99 | Unknown | |
| 142 | 207.2 | 6 | 999.99 | Unknown | |
| 274 | 126.6 | 6 | 999.99 | Unknown | |
| 141 | 120.2 | 8 | 999.99 | Unknown | |
| 281 | 47.4 | 8 | 999.99 | Unknown | |
| 135 | 149.6 | 8 | 999.99 | Unknown | |
| 177 | 232.2 | 8 | 0 | Unknown | |
| 180 | 43.2 | 6 | 999.99 | Unknown | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 3* | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|-------------------------------|
| | | Diameter (in) | Slope (%) | |
| 181 | 65.4 | 8 | 999.99 | Unknown |
| 182 | 311.2 | 8 | 999.99 | Unknown |
| 169 | 36.9 | 8 | 999.99 | Unknown |
| 144 | 107.6 | 6 | 999.99 | Unknown |
| 166 | 86.1 | 8 | 0 | Unknown |
| 119 | 62.1 | 8 | 999.99 | Unknown |
| 108 | 109 | 6 | 999.99 | Unknown |
| 107 | 100.7 | 6 | 999.99 | Unknown |
| 314 | 239 | 8 | 999.99 | Unknown |
| 309 | 103 | 6 | 0 | Unknown |
| 310 | 26 | 6 | 0 | Unknown |
| 103 | 205.6 | 8 | 0 | Unknown |
| 106 | 302.7 | 6 | 0 | Unknown |
| 303 | 69.7 | 6 | 0 | Unknown |
| 126 | 187.3 | 8 | 0 | Unknown |
| 140 | 112.1 | 8 | 0 | Unknown |
| 277 | 89.6 | 8 | 0 | Unknown |
| 153 | 126.2 | 8 | 0 | Unknown |
| 154 | 149.9 | 8 | 0 | Unknown |
| 293 | 45 | 6 | 0 | Unknown |
| 305 | 45.8 | 8 | 0 | Unknown |
| 215 | 334.8 | 8 | 0 | Unknown |
| 298 | 47.9 | 6 | 0 | Unknown |
| 222 | 179.3 | 8 | 0 | Unknown |
| 295 | 199 | 6 | 0 | Unknown |
| 178 | 225.7 | 8 | 0 | Unknown |
| 257 | 82.8 | 6 | 0 | Unknown |
| 78825 | 23.6 | 6 | 0 | Unknown |
| 78827 | 338.8 | 6 | 0 | Unknown |
| 81401 | 65 | 6 | 0 | Unknown |
| 239 | 108.5 | 8 | 0 | Unknown |
| 81402 | 206.9 | 8 | 0 | Unknown |
| 167 | 185.9 | 8 | 0 | Unknown |
| 84615 | 119.6 | 8 | 999.99 | Unknown |
| 85252 | 21.3 | 8 | 0 | Unknown |
| 430089 | 105 | 8 | 0 | Unknown |
| 430298 | 32 | 8 | 0 | Unknown |
| 430650 | 241.2 | 8 | 0 | Unknown |
| 434086 | 23.3 | 0 | 0 | Unknown |
| 455546 | 86 | 6 | 0 | Unknown |

*: Basin 3 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 4 | | Capacity ¹ (gpm) |
|------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 4101 | 203 | 8 | 1.074 | 563 |
| 4102 | 336 | 8 | 4.7673 | 1186 |
| 4104 | 116 | 8 | 1.0776 | 564 |
| 4105 | 301 | 8 | 1.03 | 551 |
| 4106 | 223 | 8 | 4.0616 | 1095 |
| 4107 | 351 | 8 | 3.9718 | 1082 |
| 4114 | 74 | 12 | 7.3168 | 4325 |
| 4115 | 37 | 21 | 0.1081 | 2338 |
| 4116 | 80 | 21 | 0.3125 | 3976 |
| 4117 | 62 | 10 | 5.7352 | 2353 |
| 4118 | 300 | 10 | 1.4001 | 1162 |
| 4119 | 298 | 10 | 2.6519 | 1600 |
| 4120 | 52 | 10 | 1.731 | 1292 |
| 4121 | 209 | 10 | 3.7922 | 1913 |
| 4122 | 236 | 8 | 2.7807 | 906 |
| 4123 | 410 | 8 | 6.3493 | 1368 |
| 4124 | 264 | 8 | 2.7814 | 906 |
| 4125 | 375 | 8 | 4.0032 | 1087 |
| 4126 | 288 | 8 | 10.061 | 1723 |
| 4127 | 94 | 8 | 9.7913 | 1699 |
| 4128 | 380 | 8 | 1.7898 | 727 |
| 4129 | 166 | 8 | 0.7832 | 481 |
| 4131 | 215 | 8 | 0.7907 | 483 |
| 4132 | 315 | 21 | 0.0794 | 2004 |
| 4146 | 250 | 8 | 7.5817 | 1495 |
| 4148 | 436 | 21 | 0.1009 | 2259 |
| 4159 | 436 | 21 | 0.1009 | 2259 |
| 4176 | 438 | 21 | 0.1005 | 2254 |
| 4192 | 503 | 21 | 0.1014 | 2265 |
| 4204 | 481 | 21 | 0.0998 | 2247 |
| 4219 | 169 | 8 | 0.4024 | 345 |
| 4220 | 354 | 8 | 3.0806 | 953 |
| 4221 | 288 | 8 | 0.3993 | 343 |
| 4228 | 322 | 8 | 0.4596 | 368 |
| 4230 | 340 | 21 | 0.1 | 2249 |
| 4235 | 195 | 8 | 6.2738 | 1360 |
| 4237 | 321 | 8 | 12.8781 | 1949 |
| 4238 | 155 | 8 | 8.9061 | 1621 |
| 4239 | 149 | 8 | 8.9076 | 1621 |
| 4244 | 176 | 21 | 0.0966 | 2210 |
| 4251 | 205 | 8 | 0.6342 | 432 |
| 4252 | 265 | 8 | 0.9057 | 517 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 4 | | |
|------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 4263 | 291 | 21 | 0.0997 | 2245 |
| 4264 | 275 | 8 | 3.5295 | 1020 |
| 4265 | 208 | 21 | 0.101 | 2260 |
| 4276 | 502 | 21 | 0.0996 | 2244 |
| 4281 | 275 | 8 | 3.5295 | 1020 |
| 4282 | 476 | 8 | 3.1402 | 962 |
| 4290 | 489 | 21 | 0.1022 | 2274 |
| 4306 | 176 | 8 | 3.9178 | 1075 |
| 4316 | 146 | 8 | 4.0444 | 1092 |
| 4317 | 256 | 8 | 4.1403 | 1105 |
| 4320 | 333 | 24 | 0.0811 | 2891 |
| 4326 | 146 | 8 | 3.9208 | 1075 |
| 4333 | 165 | 24 | 0.0788 | 2850 |
| 4334 | 90 | 24 | 0.0556 | 2393 |
| 4335 | 115 | 24 | 0.0957 | 3140 |
| 4336 | 83 | 24 | 0.0964 | 3152 |
| 4337 | 241 | 24 | 0.2448 | 5024 |
| 4338 | 333 | 24 | 0.1381 | 3774 |
| 4339 | 300 | 24 | 0.1233 | 3566 |
| 4341 | 194 | 24 | 0.0825 | 2916 |
| 4345 | 126 | 24 | 1.2064 | 1153 |
| 4346 | 76 | 24 | 0.0263 | 1647 |
| 4347 | 16 | 24 | 1.8753 | 3905 |
| 4355 | 269 | 8 | 3.0721 | 952 |
| 4356 | 267 | 10 | 2.6226 | 1591 |
| 4358 | 95 | 10 | 0.9264 | 945 |
| 4361 | 155 | 10 | 0.9226 | 944 |
| 4363 | 113 | 10 | 1.2921 | 1117 |
| 4364 | 157 | 8 | 2.8674 | 920 |
| 4373 | 290 | 10 | 3.4503 | 1825 |
| 4374 | 197 | 10 | 1.2641 | 1104 |
| 4375 | 180 | 10 | 1.9003 | 1354 |
| 4380 | 332 | 10 | 0.3012 | 539 |
| 4381 | 32 | 10 | 0.6563 | 796 |
| 4387 | 378 | 10 | 0.3122 | 549 |
| 4388 | 119 | 8 | 6.7379 | 1410 |
| 4389 | 270 | 8 | 8.9505 | 1625 |
| 4390 | 270 | 8 | 7.118 | 1449 |
| 4391 | 190 | 8 | 5.5189 | 1276 |
| 4439 | 190 | 8 | 2.4744 | 854 |
| 4474 | 276 | 8 | 12.1022 | 1889 |
| 4499 | 64 | 24 | 0.3906 | 6346 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 4 | | Capacity ¹ (gpm) |
|------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 4540 | 340 | 8 | 4.7406 | 1182 |
| 4544 | 275 | 8 | 6.0108 | 1332 |
| 4545 | 267 | 8 | 3.7142 | 1047 |
| 4547 | 403 | 8 | 9.9975 | 1717 |
| 4549 | 270 | 8 | 6.6815 | 1404 |
| 4560 | 178 | 8 | 4.8935 | 1201 |
| 4563 | 376 | 8 | 6.4335 | 1378 |
| 4564 | 242 | 8 | 6.4348 | 1378 |
| 4565 | 85 | 8 | 2.0004 | 768 |
| 4594 | 99 | 21 | 0.0606 | 1751 |
| 4617 | 27 | 24 | 3.4465 | 8850 |
| 4619 | 172 | 24 | 0.1047 | 3285 |
| 4579 | 400 | 12 | 0.775 | 1408 |
| 4578 | 152 | 12 | 1.3817 | 1880 |
| 4577 | 248 | 12 | 2.9852 | 2763 |
| 4576 | 250 | 12 | 4.5246 | 3401 |
| 4575 | 275 | 12 | 1.7821 | 2135 |
| 4574 | 158 | 12 | 2.5325 | 2545 |
| 4573 | 105 | 12 | 2.6676 | 2612 |
| 4572 | 215 | 12 | 2.0935 | 2314 |
| 4571 | 400 | 12 | 0.45 | 1073 |
| 4570 | 402 | 12 | 0.4478 | 1070 |
| 4569 | 117 | 12 | 0.5128 | 1145 |
| 4568 | 119 | 12 | 0.5882 | 1226 |
| 4618 | 202 | 12 | 1.5844 | 2013 |
| 4615 | 24 | 12 | 8.7415 | 4728 |
| 4406 | 61 | 8 | 3.0014 | 941 |
| 4405 | 67 | 8 | 0.8209 | 492 |
| 4404 | 268 | 8 | 0.6008 | 421 |
| 4402 | 507 | 8 | 0.3984 | 343 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 5 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 5119 | 241 | 8 | 7.1803 | 1455 |
| 5120 | 179 | 8 | 1.218 | 599 |
| 5121 | 157 | 8 | 1.2485 | 607 |
| 5122 | 430 | 8 | 8.8437 | 1615 |
| 5135 | 120 | 8 | 8.7415 | 1606 |
| 5244 | 378 | 8 | 6.4339 | 1378 |
| 5251 | 130 | 8 | 5.3538 | 1257 |
| 5252 | 206 | 8 | 10.0257 | 1720 |
| 5257 | 17 | 8 | 9.4537 | 1670 |
| 5269 | 291 | 8 | 1.3988 | 642 |
| 5581 | 235 | 8 | 6.5288 | 1388 |
| 5580 | 45 | 8 | 1.1112 | 572 |

| Basin 6 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 6110 | 400 | 8 | 0.585 | 420.39 |
| 6157 | 410 | 12 | 3.3409 | 922.84 |
| 6180 | 302 | 15 | 0.3808 | 789.16 |
| 6181 | 95 | 12 | 0.8 | 430.3 |
| 6182 | 93 | 12 | 0.6774 | 316.16 |
| 6183 | 264 | 12 | 2.1331 | 335.48 |
| 6184 | 471 | 12 | 1.0638 | 649.28 |
| 6185 | 329 | 12 | 0.7082 | 345.74 |
| 6186 | 79 | 12 | 0.9874 | 588.98 |
| 6187 | 181 | 10 | 16.2318 | 919.82 |
| 6192 | 378 | 8 | 0.5688 | 414.53 |
| 6196 | 411 | 12 | 0.691 | 329.29 |
| 6197 | 514 | 24 | 0.4261 | 627.72 |
| 6198 | 470 | 24 | 0.5192 | 315.94 |
| 6201 | 157 | 8 | 16.0764 | 203.78 |
| 6205 | 158 | 8 | 19.1386 | 404.53 |
| 6213 | 230 | 10 | 0.3783 | 598.38 |
| 6226 | 433 | 10 | 0.291 | 524.84 |
| 6231 | 276 | 10 | 1.9098 | 344.54 |
| 6262 | 51 | 10 | 2.1377 | 422.53 |
| 6280 | 81 | 10 | 6.6691 | 512.56 |
| 6281 | 463 | 12 | 0.2203 | 750.56 |
| 6282 | 350 | 12 | 0.2257 | 759.72 |
| 6376 | 350 | 8 | 0.4 | 347.62 |
| 6387 | 190 | 10 | 5.4502 | 271.37 |
| 6389 | 261 | 10 | 3.5808 | 841.09 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 6 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 6390 | 169 | 10 | 2.1603 | 430 |
| 6391 | 124 | 10 | 1.5002 | 191.66 |
| 6392 | 110 | 10 | 1.5547 | 213.14 |
| 6396 | 319 | 10 | 6.9193 | 559.26 |
| 6462 | 80 | 12 | 0.3375 | 928.99 |

| Basin 7 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 7169 | 337 | 8 | 3.2599 | 981 |
| 7179 | 330 | 8 | 2.2733 | 819 |
| 7749 | 157 | 8 | 0.6306 | 431 |
| 7191 | 316 | 8 | 3.9176 | 1075 |
| 7199 | 140 | 8 | 0.95 | 529 |
| 7207 | 150 | 8 | 8.814 | 1612 |
| 7208 | 320 | 8 | 0.9125 | 519 |
| 7245 | 230 | 8 | 1.0348 | 552 |
| 7222 | 248 | 8 | 1.4437 | 653 |
| 7244 | 272 | 8 | 1.4193 | 647 |
| 7228 | 432 | 8 | 3.0106 | 942 |
| 7234 | 473 | 8 | 3.9566 | 1080 |
| 7242 | 472 | 8 | 3.914 | 1074 |
| 7251 | 420 | 8 | 0.9691 | 535 |
| 7253 | 372 | 8 | 5.9757 | 1328 |
| 7741 | 16 | 8 | 1.0001 | 543 |
| 7392 | 168 | 8 | 0.6488 | 437 |
| 7659 | 212 | 8 | 0.901 | 516 |
| 7391 | 282 | 8 | 3.1576 | 965 |
| 7402 | 132 | 8 | 6.3766 | 1371 |
| 7648 | 265 | 10 | 0.551 | 729 |
| 7424 | 390 | 8 | 3.5689 | 1026 |
| 7410 | 109 | 18 | 0.2844 | 2514 |
| 7672 | 196 | 18 | 0.0408 | 953 |
| 7431 | 117 | 8 | 3.2496 | 979 |
| 7423 | 400 | 8 | 4.1636 | 1108 |
| 7407 | 337 | 18 | 0.1424 | 1779 |
| 7406 | 489 | 18 | 0.1063 | 1537 |
| 7422 | 315 | 18 | 0.1397 | 1762 |
| 7438 | 500 | 18 | 0.162 | 1898 |
| 7448 | 307 | 18 | 0.1368 | 1744 |
| 7447 | 336 | 18 | 0.1696 | 1942 |
| 7217 | 500 | 18 | 0.164 | 1909 |
| 7223 | 466 | 18 | 0.1567 | 1866 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 7 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 7229 | 446 | 12 | 1.2109 | 1760 |
| 7243 | 461 | 12 | 4.0815 | 3231 |
| 7252 | 447 | 12 | 3.779 | 3109 |
| 7254 | 312 | 12 | 7.6279 | 4416 |
| 7258 | 308 | 18 | 1.091 | 4924 |
| 7809 | 124 | 18 | 1.1372 | 5028 |
| 7541 | 221 | 14 | 3.7674 | 4685 |
| 7754 | 315 | 14 | 3.9141 | 4776 |
| 7770 | 309 | 14 | 4.8211 | 5300 |
| S-9 | 307.4 | 18 | 1.4933 | 5761 |
| 7789 | 214 | 8 | 0.958 | 532 |
| 7788 | 36 | 8 | 1.2501 | 607 |
| 7471 | 249 | 8 | 1.1165 | 574 |
| 7477 | 13 | 8 | 1.1539 | 583 |
| 7478 | 92 | 8 | 1.9025 | 749 |
| 7479 | 136 | 8 | 0.5441 | 401 |
| 7480 | 33 | 8 | 1.2728 | 613 |
| 7481 | 58 | 8 | 0.7759 | 478 |
| 7483 | 209 | 8 | 0.5742 | 412 |
| 7492 | 390 | 8 | 1.7875 | 726 |
| 7493 | 221 | 8 | 2.0638 | 780 |
| 7494 | 102 | 8 | 1.765 | 722 |
| 7689 | 256 | 8 | 1.1329 | 578 |
| 7690 | 118 | 8 | 1.4408 | 652 |
| 7691 | 81 | 8 | 2.2228 | 810 |
| 7692 | 123 | 8 | 6.7634 | 1412 |
| 7693 | 25 | 8 | 0.4 | 343 |
| 7694 | 26 | 8 | 0.3846 | 337 |
| 7695 | 49 | 8 | 0.2041 | 245 |
| 7696 | 25 | 8 | 3.2016 | 972 |
| 7697 | 369 | 8 | 0.6504 | 438 |
| 7698 | 282 | 8 | 0.993 | 541 |
| 7699 | 42 | 8 | 0.9524 | 530 |
| 7700 | 62 | 8 | 17.1837 | 2251 |
| 7701 | 186 | 8 | 0.4301 | 356 |
| 7702 | 197 | 8 | 0.5076 | 387 |
| 7703 | 34 | 8 | 0.2941 | 295 |
| 7704 | 63 | 8 | 1.0636 | 560 |
| 7496 | 171 | 8 | 1.234 | 603 |
| 7705 | 300 | 8 | 1.1701 | 587 |
| 7495 | 325 | 8 | 3.3835 | 999 |
| 7507 | 311 | 8 | 3.4619 | 1010 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 7 | | | Capacity ¹ (gpm) |
|--------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 7525 | 311 | 8 | 3.5779 | 1027 | |
| 7524 | 488 | 8 | 1.0021 | 544 | |
| 7537 | 97 | 12 | 2.0107 | 2268 | |
| 7829 | 155 | 12 | 6.4391 | 4058 | |
| 7544 | 200 | 8 | 0.4 | 343 | |
| 7828 | 122 | 12 | 2.5418 | 2549 | |
| 7540 | 300 | 15 | 0.4733 | 1995 | |
| 7542 | 98 | 15 | 2.1433 | 4245 | |
| 7769 | 77 | 15 | 1.5586 | 3620 | |
| 7570 | 242 | 8 | 0.3884 | 338 | |
| 7569 | 245 | 8 | 0.5306 | 396 | |
| 7568 | 212 | 15 | 1.1605 | 3123 | |
| 7832 | 138 | 15 | 1.2682 | 3265 | |
| 7581 | 307 | 12 | 5.4707 | 3740 | |
| 7593 | 7.7 | 12 | 1.4287 | 1911 | |
| 7751 | 307 | 8 | 1.176 | 589 | |
| 7433 | 324 | 8 | 2.8036 | 909 | |
| 7451 | 318 | 8 | 2.9636 | 935 | |
| 7458 | 38 | 8 | 0.7632 | 474 | |
| 7750 | 289 | 8 | 1.2181 | 599 | |
| 7782 | 32 | 8 | 1.719 | 712 | |
| 7786 | 9 | 8 | 3.3352 | 992 | |
| 7430 | 162 | 8 | 1.0247 | 550 | |
| 7429 | 324 | 8 | 1.9201 | 753 | |
| 7449 | 356 | 8 | 1.8964 | 748 | |
| 7646 | 271 | 8 | 1.5205 | 670 | |
| 7647 | 331 | 8 | 1.4261 | 649 | |
| 7450 | 370 | 8 | 1.4055 | 644 | |
| 7464 | 320 | 8 | 2.6916 | 891 | |
| 7465 | 34 | 15 | 0.7647 | 2535 | |
| 7826 | 140 | 15 | 3.5666 | 5476 | |
| 7825 | 98 | 15 | 3.032 | 5049 | |
| 781863 | 259 | 15 | 2.8081 | 4859 | |
| 7824 | 42 | 15 | 1.9528 | 4052 | |
| 781861 | 247 | 15 | 2.1665 | 4268 | |
| 7823 | 424 | 15 | 1.7762 | 3864 | |
| 7530 | 190 | 8 | 2.0215 | 772 | |
| 7487 | 30 | 8 | 1.3335 | 627 | |
| 7486 | 288 | 8 | 1.0035 | 544 | |
| 7497 | 400 | 8 | 1.2351 | 604 | |
| 782601 | 400 | 8 | 0.34 | 317 | |
| 7821 | 165 | 15 | 2.8436 | 4889 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 7 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 7820 | 125 | 15 | 5.8982 | 7041 |
| 7819 | 247 | 15 | 2.9203 | 4955 |
| 7818 | 215 | 15 | 3.8447 | 5685 |
| 7512 | 331 | 8 | 3.5037 | 1017 |
| 7528 | 192 | 10 | 0.875 | 919 |
| 7527 | 22 | 10 | 21.771 | 4584 |
| 7817 | 298 | 18 | 4.5853 | 96 |
| 7816 | 215 | 18 | 1.5956 | 5955 |
| 7815 | 164 | 18 | 0.9452 | 4584 |
| 7814 | 32 | 18 | 7.4582 | 2876 |
| 7571 | 198 | 8 | 10.1735 | 1732 |
| 7558 | 300 | 10 | 3.1215 | 1736 |
| 7556 | 400 | 15 | 0.205 | 1313 |
| 7585 | 391 | 15 | 0.2455 | 1437 |
| 7599 | 39 | 12 | 8.8031 | 4745 |
| 7505 | 220 | 8 | 0.7909 | 483 |
| 7518 | 237 | 8 | 0.6118 | 425 |
| 7634 | 255 | 8 | 0.4118 | 349 |
| 7846 | 80 | 8 | 1.0626 | 560 |
| 7633 | 275 | 8 | 2.6191 | 879 |
| 7536 | 300 | 8 | 3.9431 | 1078 |
| 7553 | 253 | 8 | 2.6215 | 879 |
| 7635 | 425 | 8 | 1.7791 | 724 |
| 7564 | 295 | 8 | 6.2051 | 1353 |
| 7850 | 68 | 8 | 1.8827 | 745 |
| 7535 | 127 | 8 | 2.5914 | 874 |
| 7720 | 193 | 8 | 2.6071 | 877 |
| 7552 | 112 | 8 | 2.2952 | 823 |
| 7831 | 153 | 8 | 2.5498 | 867 |
| 7204828 | 67 | 8 | 2.1796 | 802 |
| 7426130 | 11 | 12 | 1.3638 | 1867 |
| 7426125 | 40 | 18 | 3.3268 | 8599 |
| 7426134 | 306 | 18 | 1.425 | 5628 |
| 7310 | 401 | 12 | 2.517 | 2537 |
| 7325 | 30 | 8 | 1.0001 | 543 |
| 7326 | 167 | 12 | 1.2696 | 1802 |
| 7327 | 217 | 12 | 1.461 | 1933 |
| 7735 | 57 | 12 | 1.1404 | 1708 |
| 7338 | 324 | 12 | 1.3952 | 1889 |
| 7339 | 107 | 12 | 1.159 | 1722 |
| 7352 | 188 | 12 | 1.1809 | 1738 |
| 7354 | 244 | 12 | 1.3116 | 1831 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 7 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 7365 | 295 | 12 | 0.2373 | 779 |
| 7375 | 210 | 12 | 1.3287 | 1843 |
| 7382 | 111 | 18 | 0.1171 | 1613 |
| 7801 | 390 | 18 | 0.1231 | 1654 |
| 7395 | 275 | 18 | 0.1782 | 1990 |
| 7412 | 220 | 18 | 0.05 | 1054 |
| 7411 | 292 | 18 | 0.2295 | 2258 |
| 7413 | 316 | 18 | 0.2152 | 2187 |
| 7414 | 27 | 18 | 0.2222 | 2223 |
| 7427 | 229 | 8 | 0.4454 | 362 |
| 7417 | 48 | 8 | 0.3958 | 342 |
| 7418 | 156 | 8 | 10.6627 | 1773 |
| 7415 | 41 | 18 | 2.0248 | 6709 |
| 7774 | 352 | 18 | 0.3466 | 2776 |
| 7425 | 237 | 18 | 1.9244 | 6540 |
| 7434 | 163 | 8 | 5.7642 | 1304 |
| 7435 | 34 | 8 | 0.7647 | 475 |
| 7734 | 54 | 8 | 0.5926 | 418 |
| 7733 | 43 | 8 | 0.7907 | 483 |
| 7732 | 194 | 8 | 0.5412 | 400 |
| 7753 | 250 | 8 | 6.1395 | 1346 |
| 7752 | 160 | 8 | 3.3456 | 993 |
| 7731 | 152 | 18 | 1.7437 | 6226 |
| 7797 | 179 | 8 | 1.1006 | 570 |
| 7842 | 137 | 8 | 0.1022 | 174 |
| 7426 | 310 | 8 | 0.3936 | 341 |
| 7436 | 141 | 8 | 4.7429 | 1183 |
| 7442 | 23 | 8 | 6.1857 | 1351 |
| 7441 | 257 | 18 | 1.2608 | 5294 |
| 7455 | 265 | 18 | 1.7776 | 6286 |
| 7459 | 218 | 8 | 8.4474 | 1578 |
| 7460 | 272 | 18 | 0.6397 | 3771 |
| 7467 | 407 | 18 | 1.8676 | 6443 |
| 7474 | 315 | 18 | 1.7463 | 6230 |
| 7488 | 299 | 18 | 1.6424 | 6042 |
| 7428 | 293 | 6 | 0.669 | 206 |
| 7437 | 216 | 8 | 1.4261 | 649 |
| 7443 | 65 | 8 | 0.4462 | 363 |
| 7444 | 154 | 8 | 0.526 | 394 |
| 7445 | 224 | 8 | 0.6607 | 441 |
| 785161 | 409 | 8 | 0.5819 | 414 |
| 7629 | 205 | 8 | 0.6634 | 442 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 7 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 7630 | 31 | 8 | 0.8065 | 488 |
| 7628 | 260 | 8 | 0.4808 | 377 |
| 7627 | 70 | 8 | 6.2263 | 1355 |
| 7463 | 301 | 8 | 2.1035 | 788 |
| 7462 | 351 | 8 | 4.0318 | 1091 |
| 7461 | 268 | 8 | 0.6567 | 440 |
| 7468 | 100 | 8 | 0.66 | 441 |
| 7469 | 320 | 8 | 1.5689 | 680 |
| 7475 | 320 | 8 | 2.1505 | 796 |
| 7489 | 320 | 8 | 1.5814 | 683 |
| 7470 | 350 | 8 | 2.2263 | 810 |
| 7476 | 16 | 12 | 2.4382 | 2497 |
| 7719 | 344 | 12 | 0.6715 | 1310 |
| 7490 | 343 | 12 | 1.1079 | 1683 |
| 7504 | 217 | 12 | 4.2388 | 3292 |
| 7503 | 112 | 12 | 10.74 | 5241 |
| 7502 | 320 | 12 | 4.8651 | 3527 |
| 7500 | 7 | 12 | 1.7145 | 2094 |
| 7501 | 329 | 18 | 3.3971 | 8690 |
| 7515 | 330 | 18 | 4.6748 | 194 |
| 7516 | 262 | 8 | 3.1619 | 966 |
| 7520 | 230 | 8 | 2.8359 | 915 |
| 7521 | 294 | 8 | 2.5008 | 859 |
| 7522 | 142 | 8 | 5.8905 | 1318 |
| 7533 | 29 | 8 | 3.9341 | 1077 |
| 7519 | 160 | 18 | 1.9379 | 6563 |
| 7790 | 300 | 18 | 1.8336 | 6384 |
| 7551 | 165 | 8 | 9.1287 | 1641 |
| 7550 | 12 | 8 | 3.5021 | 1016 |
| 7549 | 218 | 24 | 0.2248 | 4814 |
| 7561 | 305 | 24 | 2.9291 | 7378 |
| 7559 | 61 | 24 | 1.1804 | 1032 |
| 7575 | 223 | 10 | 0.3812 | 606 |
| 7562 | 256 | 12 | 0.3984 | 1009 |
| 7827 | 92 | 12 | 0.4783 | 1106 |
| 7560 | 225 | 12 | 6.0645 | 3938 |
| 7532 | 92 | 8 | 2.8163 | 911 |
| 7499 | 340 | 8 | 2.804 | 909 |
| 7513 | 169 | 8 | 9.1385 | 1642 |
| 7514 | 150 | 8 | 1.0001 | 543 |
| 7531 | 150 | 8 | 3.609 | 1032 |
| 7529 | 181 | 8 | 2.0999 | 787 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 7 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 7539 | 274 | 10 | 0.5365 | 720 |
| 7548 | 235 | 10 | 0.9362 | 950 |
| 7557 | 40 | 12 | 1.2751 | 1806 |
| 7812 | 12 | 12 | 12.0873 | 5560 |
| 7813 | 308 | 24 | 1.4872 | 2382 |
| 7508 | 138 | 8 | 2.537 | 865 |
| 7509 | 331 | 8 | 4.2001 | 1113 |
| 7510 | 426 | 8 | 3.7538 | 1052 |
| 7538 | 428 | 8 | 4.6663 | 1173 |
| 7526 | 176 | 8 | 4.9777 | 1212 |
| 7840 | 175 | 8 | 4.5361 | 1157 |
| 7545 | 116 | 8 | 6.8088 | 1417 |
| 7546 | 311 | 8 | 2.2192 | 809 |
| 7554 | 10 | 8 | 24.9414 | 2712 |
| 7555 | 375 | 24 | 0.2027 | 4571 |
| 7583 | 123 | 24 | 0.561 | 7605 |
| 7584 | 312 | 24 | 0.2019 | 4563 |
| S-21 | 104.4 | 18 | 4.3047 | 9782 |
| S-20 | 388.1 | 24 | 0.9534 | 9914 |
| 7594 | 60 | 12 | 5.2238 | 3655 |
| 7596 | 20 | 18 | 1.5002 | 5775 |
| 7595 | 404 | 18 | 1.3764 | 5531 |
| 7608 | 389 | 24 | 0.09 | 3046 |
| 7623 | 293.4 | 24 | 1.9909 | 4327 |
| S-30 | 18.6 | 24 | 7.6568 | 8096 |
| S-10 | 384.6 | 24 | 3.3508 | 8586 |
| S-11 | 272.9 | 24 | 1.9718 | 4258 |
| S-12 | 46 | 42 | 0.1522 | 7615 |
| S-13 | 74.9 | 42 | 0.0935 | 3805 |
| S-14 | 78.2 | 42 | 0.1023 | 4443 |
| S-15 | 377.7 | 42 | 0.1006 | 4323 |
| S-15a | 10.5 | 30 | 2.0004 | 6038 |
| S-16 | 12.8 | 42 | 0.1563 | 7850 |
| 7621 | 55 | 24 | 2.2187 | 5124 |
| S-20a | 10 | 8 | 130.1661 | 6196 |
| 7598 | 55.4 | 18 | 6.4756 | 1998 |
| S-22 | 86 | 18 | 18.5678 | 316 |
| 7564a | 13 | 12 | 6.2429 | 3995 |
| 7461a | 10 | 8 | 4.0032 | 1087 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 8 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 8118 | 256 | 8 | 2.1919 | 804 |
| 8119 | 109 | 8 | 0.1284 | 195 |
| 8120 | 97 | 8 | 3.6106 | 1032 |
| 8143 | 360 | 8 | 9.3349 | 1659 |
| 8153 | 450 | 8 | 12.1827 | 1843 |
| 8177 | 257 | 8 | 0.3385 | 316 |
| 8178 | 290 | 8 | 0.5931 | 418 |
| 8179 | 10 | 8 | 19.7757 | 2415 |
| 8180 | 81 | 15 | 2.3463 | 4441 |
| 8181 | 45 | 14 | 0.6667 | 1971 |
| 8187 | 231 | 12 | 5.976 | 3909 |
| 8188 | 75 | 15 | 1.3335 | 3348 |
| 8195 | 144 | 15 | 1.3473 | 3365 |
| 8196 | 244 | 15 | 1.2255 | 3210 |
| 8197 | 50 | 15 | 1.5402 | 3598 |
| 8210 | 501 | 15 | 1.1877 | 3160 |
| 8272 | 21 | 12 | 3.3352 | 2920 |
| 8273 | 157 | 12 | 3.3713 | 2936 |
| 8777 | 291 | 14 | 0.6495 | 1945 |

| Basin 9 | | | | |
|---------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 9230 | 218 | 8 | 0.2523 | 273 |
| 9233 | 247 | 8 | 4.4944 | 1151 |
| 9237 | 58 | 8 | 6.8783 | 1424 |
| 9238 | 288 | 8 | 3.5021 | 1016 |
| 9240 | 355 | 8 | 5.0063 | 1215 |
| 9251 | 176 | 10 | 8.3356 | 2836 |
| 9252 | 35 | 10 | 5.4366 | 2290 |
| 9256 | 300 | 8 | 0.7 | 454 |
| 9257 | 158 | 8 | 0.7152 | 459 |
| 9258 | 266 | 10 | 7.8512 | 2753 |
| 9259 | 158 | 10 | 3.0014 | 1702 |
| 9260 | 25 | 10 | 0.004 | 62 |
| 9303 | 362 | 10 | 2.9239 | 1680 |
| 9304 | 319 | 10 | 2.7628 | 1633 |
| 9305 | 320 | 10 | 3.5335 | 1847 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 10 | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 10119 | 152 | 10 | 0.1974 | 436 |
| 10122 | 140 | 10 | 0.4429 | 654 |
| 10189 | 39 | 10 | 0.359 | 589 |
| 10190 | 298 | 10 | 0.3893 | 613 |
| 10194 | 58 | 8 | 1.7071 | 710 |
| 10195 | 324 | 8 | 1.7009 | 708 |
| 10197 | 340 | 6 | 2.7628 | 419 |
| 10201 | 301 | 8 | 2.3395 | 831 |
| 10205 | 243 | 8 | 0.4033 | 345 |
| 10206 | 443 | 8 | 0.4402 | 360 |
| 10218 | 304 | 10 | 0.5 | 695 |
| 10222 | 206 | 6 | 1.2282 | 279 |
| 10223 | 272 | 6 | 2.832 | 424 |
| 10224 | 290 | 8 | 2.594 | 875 |
| 10225 | 100 | 6 | 1.0201 | 254 |
| 10226 | 157 | 8 | 4.8912 | 1201 |
| 10228 | 342 | 8 | 2.4949 | 858 |
| 10229 | 153 | 10 | 0.451 | 660 |
| 10230 | 160 | 10 | 0.425 | 640 |
| 10235 | 264 | 10 | 2.5614 | 1572 |
| 10236 | 290 | 8 | 3.858 | 1067 |
| 10238 | 264 | 10 | 2.6752 | 1607 |
| 10241 | 7 | 8 | 0.4 | 343 |
| 10243 | 353 | 8 | 0.4646 | 370 |
| 10244 | 347 | 8 | 2.0062 | 769 |
| 10537 | 236 | 10 | 0.3644 | 593 |
| 10556 | 20 | 10 | 1.1501 | 1053 |
| 10557 | 25 | 10 | 2.0404 | 1403 |
| 10558 | 13 | 8 | 1.5386 | 674 |
| 10561 | 230 | 8 | 1.2349 | 604 |
| 10562 | 263 | 15 | 3.0318 | 5048 |
| 10563 | 254 | 15 | 0.7481 | 2508 |
| 10575 | 61 | 8 | 1.82 | 733 |
| 10576 | 311 | 10 | 1.2831 | 1113 |
| 10577 | 264 | 8 | 1.5191 | 669 |
| 10578 | 247 | 8 | 2.438 | 848 |
| 10579 | 231 | 8 | 2.0177 | 771 |
| 10580 | 278 | 15 | 0.6079 | 2261 |
| 10581 | 211 | 15 | 0.4645 | 1976 |
| 10582 | 179 | 10 | 0.3296 | 564 |
| 10583 | 133 | 15 | 0.7594 | 2527 |
| 10584 | 265 | 15 | 2.8804 | 4921 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 10 | | Capacity ¹ (gpm) |
|---------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 10591 | 25 | 8 | 1.5202 | 670 |
| 10611 | 116 | 15 | 1.4484 | 3489 |
| 10612 | 33 | 15 | 4.8542 | 6388 |
| 10614 | 111 | 10 | 2.0635 | 1411 |
| 10615 | 46 | 8 | 2.4573 | 851 |
| 10616 | 16 | 8 | 2.6259 | 880 |
| 10617 | 317 | 15 | 1.7069 | 3788 |
| 10621 | 259 | 10 | 0.112 | 329 |
| 10628 | 171 | 10 | 2.5681 | 1574 |
| 10629 | 14 | 10 | 6.1545 | 2437 |
| 10630 | 70 | 10 | 2.4293 | 1531 |
| 10636 | 262 | 8 | 1.588 | 684 |
| 10641 | 49 | 8 | 3.676 | 1041 |
| 10650 | 12 | 12 | 0.75 | 1385 |
| 10652 | 104 | 6 | 1.4328 | 301 |
| 10653 | 273 | 8 | 1.0074 | 545 |
| 10661 | 53 | 8 | 0.9812 | 538 |
| 10657 | 69 | 8 | 2.7692 | 904 |
| 10676 | 197 | 8 | 3.8709 | 1069 |
| 10637 | 84 | 8 | 0.5 | 384 |
| 10638 | 26 | 8 | 0.5 | 384 |
| 10247 | 149 | 8 | 3.6064 | 1031 |
| 10586 | 266 | 8 | 3.6151 | 1033 |
| 10249 | 415 | 8 | 3.3561 | 995 |
| 10240 | 179 | 15 | 5.0623 | 6523 |
| 10187 | 108 | 8 | 5.0063 | 1215 |
| 10188 | 91 | 8 | 7.2497 | 1462 |
| 10552 | 59 | 8 | 0.4915 | 381 |
| 10672 | 109 | 12 | 0.5046 | 1136 |
| 10671 | 306 | 12 | 0.6798 | 1318 |
| 10670 | 159 | 12 | 0.4277 | 1046 |
| 10669 | 93 | 10 | 0.2151 | 456 |
| 10539 | 89 | 10 | 2.0004 | 1389 |
| 1081825 | 204 | 10 | 2.0004 | 1389 |
| 10212 | 45 | 12 | 2.0004 | 2262 |
| 108469 | 194 | 12 | 0.3918 | 1001 |
| 10213 | 194 | 8 | 4.5201 | 1169 |
| 10215 | 72 | 8 | 2.4174 | 855 |
| 10216 | 139 | 8 | 3.8446 | 1078 |
| 10627 | 225 | 8 | 1.8981 | 757 |
| 10217 | 78 | 8 | 1.8465 | 747 |
| 10675 | 151 | 8 | 1.8944 | 757 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 10 | | | Capacity ¹ (gpm) |
|---------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 10245 | 31 | 8 | 3.1629 | 978 | |
| 10246 | 79 | 15 | 3.3817 | 5332 | |
| 10255 | 260 | 15 | 0.7962 | 2587 | |
| 10254 | 267 | 18 | 0.2996 | 2581 | |
| 10253 | 400 | 21 | 0.3 | 3895 | |
| 10252 | 133 | 18 | 0.3008 | 2586 | |
| 10251 | 216 | 18 | 0.2269 | 2246 | |
| 10250 | 399 | 18 | 0.4962 | 3321 | |
| 10574 | 56 | 8 | 1.0715 | 562 | |
| 10573 | 100 | 8 | 2.8712 | 920 | |
| 10572 | 292 | 8 | 6.3311 | 1367 | |
| 10571 | 192 | 8 | 4.6247 | 1168 | |
| 10261 | 18 | 8 | 4.616 | 1167 | |
| 10262 | 400 | 18 | 2.1955 | 6986 | |
| 10274 | 341 | 18 | 2.2733 | 7109 | |
| 10679 | 84 | 8 | 2.2625 | 817 | |
| 10258 | 248 | 8 | 2.5775 | 872 | |
| 10272 | 231 | 8 | 2.0004 | 768 | |
| 10268 | 266 | 8 | 4.2859 | 1124 | |
| 10270 | 135 | 8 | 3.7062 | 1046 | |
| 10271 | 275 | 8 | 7.3287 | 1470 | |
| 10273 | 14 | 8 | 5.0063 | 1215 | |
| 10279 | 400 | 6 | 8.0257 | 713 | |
| 10280 | 400 | 8 | 8.5561 | 1589 | |
| 10281 | 295 | 18 | 1.8206 | 6362 | |
| 10286 | 100 | 6 | 4.4945 | 534 | |
| 10649 | 216 | 6 | 8.6011 | 739 | |
| 10287 | 40 | 6 | 4.9059 | 558 | |
| 10288 | 304 | 8 | 7.9029 | 1527 | |
| 10290 | 45 | 8 | 8.4298 | 1577 | |
| 10289 | 198 | 18 | 1.7225 | 6188 | |
| 1081019 | 133 | 18 | 1.8123 | 6347 | |
| 10293 | 440 | 6 | 6.4909 | 642 | |
| 10294 | 147 | 8 | 0.6803 | 448 | |
| 10295 | 216 | 8 | 7.7033 | 1507 | |
| 10643 | 39 | 8 | 1.0257 | 550 | |
| 10642 | 133 | 8 | 7.2066 | 1458 | |
| 10296 | 204 | 18 | 4.0671 | 9508 | |
| 10302 | 318 | 18 | 1.1951 | 5154 | |
| 10648 | 120 | 18 | 0.7834 | 4173 | |
| 10301 | 105 | 8 | 2.6581 | 885 | |
| 10305 | 99 | 6 | 5.3409 | 582 | |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 10 | | |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 10306 | 289 | 6 | 7.2578 | 678 |
| 10307 | 388 | 6 | 7.1782 | 675 |
| 10308 | 243 | 18 | 0.9795 | 4666 |
| 10317 | 166 | 18 | 0.9699 | 4643 |
| 10323 | 568 | 24 | 0.3979 | 6405 |
| 10341 | 42 | 24 | 0.0476 | 2216 |
| 10342 | 315 | 24 | 0.3524 | 6027 |
| 10343 | 217 | 24 | 0.3226 | 5767 |
| 10365 | 74 | 24 | 0.2297 | 4867 |
| 10366 | 406 | 24 | 0.298 | 5543 |
| 10385 | 85 | 24 | 0.3882 | 6327 |
| 10386 | 370 | 24 | 1.5434 | 2614 |
| 9 | 24.6 | 24 | 2.9676 | 7491 |
| 8 | 271.2 | 24 | 3.0033 | 7596 |
| 7 | 412.3 | 24 | 1.1981 | 1114 |
| 6 | 157.5 | 36 | 0.2222 | 4111 |
| 5 | 339.9 | 36 | 0.2177 | 3968 |
| 4 | 181.3 | 36 | 0.2207 | 4063 |
| 3 | 112.5 | 36 | 0.2222 | 4110 |
| 2 | 96.7 | 36 | 0.2172 | 3951 |
| 1 | 98.6 | 36 | 0.2231 | 4139 |
| 10513 | 99.3 | 6 | 1.0172 | 254 |
| 10512 | 227.3 | 8 | 7.9884 | 1535 |
| 10511 | 153.2 | 8 | 8.1734 | 1553 |
| 10510 | 189.4 | 8 | 1.7004 | 708 |
| 10509 | 149.6 | 8 | 0.3342 | 314 |
| 10347 | 360.2 | 8 | 0.4997 | 384 |
| 10333 | 368.6 | 8 | 0.4612 | 369 |
| 10327 | 388.1 | 8 | 3.3515 | 994 |
| 10312 | 180.2 | 8 | 0.4773 | 375 |
| 10315 | 393.3 | 8 | 4.6809 | 1175 |
| 10314 | 99.2 | 8 | 1.0384 | 553 |
| 10633 | 93 | 8 | 0.6237 | 429 |
| 10263 | 64.5 | 8 | 1.7212 | 713 |
| 10264 | 105.1 | 8 | 1.7129 | 711 |
| 10276 | 217.3 | 8 | 2.3016 | 824 |
| 10277 | 96.3 | 8 | 12.5589 | 1925 |
| 10284 | 300.6 | 8 | 1.0613 | 559 |
| 10565 | 226.8 | 8 | 1.0583 | 559 |
| 10566 | 83.1 | 8 | 1.0831 | 565 |
| 10567 | 63.9 | 8 | 1.0955 | 568 |
| 10568 | 79.8 | 8 | 1.1279 | 577 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 10 | | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 10569 | 129 | 8 | 1.0543 | 558 | |
| 10256 | 107.8 | 6 | 6.4326 | 639 | |
| 10265 | 393.6 | 8 | 3.2029 | 972 | |
| 10266 | 402.3 | 8 | 2.9095 | 926 | |
| 10278 | 397.7 | 8 | 2.6411 | 883 | |
| 10285 | 389.5 | 8 | 2.6042 | 876 | |
| 10300 | 143.7 | 8 | 0.4315 | 357 | |
| 10299 | 251.3 | 8 | 0.4377 | 359 | |
| 10297 | 306.4 | 8 | 1.7659 | 722 | |
| 10291 | 123 | 8 | 1.6588 | 699 | |
| 10570 | 107 | 8 | 1.4581 | 656 | |
| 10304 | 37 | 8 | 2.2709 | 818 | |
| 10310 | 277 | 8 | 2.2497 | 815 | |
| 10311 | 213 | 8 | 2.0568 | 779 | |
| 10632 | 41 | 8 | 1.4636 | 657 | |
| 10631 | 159 | 8 | 2.2773 | 820 | |
| 10319 | 392 | 8 | 0.9873 | 540 | |
| 10325 | 280 | 8 | 0.7357 | 466 | |
| 10332 | 268 | 10 | 1.7279 | 1291 | |
| 79661 | 103.2 | 8 | 2.2292 | 811 | |
| 79662 | 135.4 | 8 | 2.2162 | 809 | |
| 79663 | 339.6 | 8 | 3.3588 | 995 | |
| 79664 | 333.3 | 8 | 1.7404 | 716 | |
| 79665 | 165.1 | 8 | 1.9386 | 756 | |
| 79666 | 76 | 8 | 2.6325 | 881 | |
| 79701 | 73.7 | 8 | 2.7147 | 895 | |
| 79702 | 98.7 | 8 | 2.6352 | 882 | |
| 79667 | 175.1 | 10 | 2.7137 | 1618 | |
| 79668 | 200.6 | 10 | 3.4417 | 1822 | |
| 79669 | 15.9 | 8 | 3.3352 | 992 | |
| 10275 | 406 | 8 | 2.2518 | 815 | |
| 10282 | 217 | 8 | 5.4273 | 1265 | |
| 10601 | 400 | 8 | 1.9904 | 766 | |
| 10602 | 400 | 8 | 2.711 | 894 | |
| 10603 | 252 | 8 | 3.4385 | 1007 | |
| 10604 | 185 | 8 | 1.1244 | 576 | |
| 10605 | 47 | 8 | 1.2341 | 603 | |
| 10318 | 388 | 8 | 1.9256 | 754 | |
| 10324 | 438 | 8 | 1.7194 | 712 | |
| 10331 | 399 | 10 | 0.9574 | 961 | |
| 10348 | 81 | 10 | 0.8889 | 926 | |
| 10349 | 20 | 10 | 0.35 | 581 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 10 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 10350 | 296 | 12 | 0.2432 | 789 |
| 10351 | 56 | 12 | 0.5536 | 1190 |
| 10352 | 344 | 12 | 0.2413 | 785 |
| 10353 | 161 | 12 | 0.2422 | 787 |
| 10354 | 95 | 12 | 0.4 | 1011 |
| 10435432 | 240 | 12 | 0.2375 | 779 |
| 10435435 | 41 | 12 | 1.2196 | 1766 |
| 10355 | 275 | 12 | 0.1345 | 587 |
| 10395 | 75 | 12 | 1.3134 | 1833 |
| 10394 | 316 | 16 | 0.1487 | 1327 |
| 10422 | 69 | 12 | 1.5509 | 1991 |
| 10418 | 379 | 16 | 0.1346 | 1262 |
| 10417 | 184 | 16 | 0.1576 | 1366 |
| 10417a | 110 | 16 | 0.0182 | 464 |
| 10417b | 36 | 16 | 0.1389 | 1283 |
| 10417c | 115 | 16 | 0.0348 | 642 |
| 10392 | 421 | 12 | 4.6702 | 3456 |
| 10416 | 35 | 20 | 0.1 | 1976 |
| 10415 | 185 | 20 | 0.1243 | 2203 |
| 10430 | 23 | 24 | 0.8261 | 9229 |
| 10431 | 98 | 8 | 0.6123 | 425 |
| 10409 | 165 | 8 | 1.0485 | 556 |
| 10432 | 367 | 8 | 0.4469 | 363 |
| 10433 | 132 | 8 | 0.4015 | 344 |
| 10434 | 216 | 8 | 4.3467 | 1132 |
| 10436 | 89 | 8 | 1.798 | 728 |
| 10438 | 455 | 20 | 0.1253 | 2211 |
| 10439 | 55 | 20 | 0.1273 | 2229 |
| 10440 | 369 | 20 | 0.1355 | 2300 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 11 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 11126 | 457 | 8 | 0.2998 | 301 |
| 11129 | 400 | 10 | 0.28 | 515 |
| 11130 | 240 | 10 | 0.3625 | 586 |
| 11131 | 62 | 10 | 4.812 | 2134 |
| 11134 | 172 | 8 | 0.4186 | 356 |
| 11178 | 250 | 8 | 4.633 | 1183 |
| 11179 | 481 | 10 | 3.0534 | 1700 |
| 11180 | 586 | 10 | 0.3942 | 611 |
| 11181 | 412 | 8 | 11.0672 | 1828 |
| 11182 | 307 | 10 | 0.5603 | 728 |
| 11184 | 234 | 8 | 0.4957 | 387 |

| Basin 12 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 12117 | 147 | 12 | 4.085 | 3232 |
| 12118 | 400 | 12 | 2.1255 | 2331 |
| 12119 | 400 | 12 | 4.2538 | 3298 |
| 12120 | 250 | 12 | 0.0004 | 32 |
| 12121 | 400 | 12 | 3.5021 | 2993 |
| 12122 | 340 | 12 | 4.3423 | 3332 |
| 12132 | 260 | 12 | 4.5431 | 3408 |
| 12133 | 30 | 15 | 1.6336 | 3706 |
| 12134 | 100 | 12 | 21.7467 | 7457 |
| 12154 | 160 | 15 | 0.9125 | 2770 |
| 12103 | 10 | 12 | 13.1113 | 5790 |

| Basin 13 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 13123 | 274 | 15 | 0.3577 | 1734 |
| 13124 | 117 | 15 | 1.5814 | 3646 |
| 13125 | 243 | 15 | 0.3992 | 1832 |
| 13128 | 62 | 15 | 8.1072 | 8255 |
| 13129 | 210 | 8 | 0.7238 | 462 |
| 13130 | 200 | 8 | 0.37 | 330 |
| 13131 | 156 | 8 | 0.4167 | 351 |
| 13132 | 210 | 8 | 0.4 | 343 |
| 13133 | 187 | 8 | 0.3957 | 342 |
| 13136 | 194 | 8 | 0.8351 | 496 |
| 13168 | 124 | 8 | 0.3952 | 341 |
| 13126 | 210 | 15 | 0.4 | 1834 |
| 13107 | 80 | 15 | 0.4 | 1834 |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 13 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 13108 | 259 | 15 | 0.3629 | 1747 |
| 13109 | 340 | 15 | 3.0014 | 5023 |
| 1385520 | 154 | 8 | 5.7041 | 1297 |
| 13110 | 30 | 15 | 3.0014 | 5023 |
| 13112 | 319 | 15 | 1.5801 | 3645 |
| 13115 | 300 | 15 | 0.2667 | 1497 |
| 13116 | 300 | 15 | 0.2167 | 1350 |
| 13104 | 31 | 8 | 3.3567 | 995 |
| 13137 | 76 | 8 | 4.5046 | 1167 |
| 13138 | 276 | 8 | 0.4493 | 368 |

| Basin 14 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 14101 | 120 | 8 | 2.0421 | 785 |
| 14102 | 85 | 8 | 0.4 | 348 |
| 14103 | 110 | 8 | 0.8 | 492 |
| 14104 | 229 | 10 | 0.2402 | 477 |
| 14105 | 145 | 8 | 25.9415 | 2799 |
| 14106 | 182 | 10 | 0.2802 | 515 |
| 14107 | 192 | 10 | 0.2813 | 516 |
| 14108 | 296 | 10 | 0.2804 | 515 |
| 14109 | 111 | 8 | 7.3713 | 1492 |
| 14110 | 186 | 8 | 8.5635 | 1608 |
| 14113 | 170 | 8 | 7.8476 | 1540 |
| 14117 | 208 | 8 | 8.6232 | 1614 |
| 14118 | 156 | 8 | 16.6157 | 2240 |
| 14119 | 361 | 8 | 5.1203 | 1244 |
| 14120 | 306 | 8 | 1.5034 | 674 |
| 14121 | 99 | 8 | 3.0317 | 957 |
| 14122 | 158 | 8 | 5.3621 | 1273 |
| 14123 | 332 | 8 | 0.4548 | 371 |
| 14173 | 202 | 10 | 0.2822 | 517 |
| 14176 | 193 | 10 | 0.2798 | 515 |
| 14177 | 157 | 10 | 0.2803 | 515 |
| 14178 | 350 | 10 | 0.28 | 515 |
| 14179 | 399 | 10 | 0.2807 | 515 |
| 14180 | 156 | 10 | 0.2821 | 517 |
| 14181 | 34 | 10 | 13.4736 | 3571 |
| 14182 | 25 | 10 | 33.776 | 5654 |
| 14183 | 99 | 10 | 11.1803 | 3253 |
| 14184 | 116 | 8 | 18.4076 | 2358 |
| 14185 | 113 | 8 | 15.2174 | 2144 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 14 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 14187 | 152 | 8 | 11.5902 | 1871 |
| 14188 | 179 | 8 | 0.5587 | 411 |
| 14191 | 305 | 8 | 0.4918 | 385 |
| 14193 | 285 | 8 | 0.5263 | 399 |
| 14253 | 43 | 8 | 9.8616 | 1726 |
| 14127 | 276 | 8 | 0.4312 | 361 |
| 14131 | 215 | 8 | 0.3116 | 307 |
| 14132 | 262 | 8 | 10.1821 | 1754 |
| 14136 | 282 | 8 | 0.4326 | 362 |
| 14137 | 259 | 8 | 0.332 | 317 |
| 14145 | 268 | 8 | 0.3619 | 331 |
| 14154 | 302 | 8 | 0.4371 | 363 |
| 14155 | 124 | 8 | 0.2339 | 266 |
| 213220 | 138 | 8 | 6.9004 | 1427 |

| Basin 15 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 15115 | 89 | 8 | 7.8102 | 1536 |
| 15116 | 310 | 8 | 0.6161 | 431 |
| 15117 | 259 | 8 | 1.5484 | 684 |
| 15144 | 370 | 8 | 12.6486 | 1955 |
| 15158 | 381 | 8 | 0.4751 | 379 |
| 15160 | 309 | 8 | 0.3916 | 344 |
| 15162 | 312 | 8 | 0.4006 | 348 |
| 15164 | 363 | 8 | 9.6339 | 1706 |
| 15167 | 52 | 8 | 10.6366 | 1793 |
| 15168 | 110 | 8 | 13.6341 | 2029 |
| 15169 | 101 | 8 | 27.0691 | 2860 |
| 15170 | 381 | 8 | 5.9317 | 1339 |
| 15182 | 140 | 8 | 0.3714 | 335 |
| 15184 | 117 | 8 | 0.4017 | 348 |
| 15185 | 325 | 8 | 3.1431 | 974 |
| 15188 | 60 | 8 | 3.2684 | 994 |
| 15189 | 272 | 8 | 2.9277 | 940 |
| 15192 | 141 | 8 | 6.6887 | 1421 |
| 15193 | 330 | 8 | 4.1794 | 1124 |
| 15196 | 301 | 8 | 0.4618 | 374 |
| 15204 | 201 | 8 | 20.3754 | 2481 |
| 15205 | 73 | 8 | 10.8022 | 1806 |
| 15206 | 25 | 8 | 12.8242 | 1968 |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 16 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 16108 | 195 | 8 | 9.7902 | 1720 |
| 16109 | 100 | 8 | 17.7743 | 2317 |
| 16110 | 252 | 8 | 9.9698 | 1735 |
| 16111 | 35 | 8 | 0.3714 | 335 |
| 16112 | 80 | 10 | 5.1694 | 2212 |
| 16113 | 625 | 12 | 9.6445 | 4966 |
| 16122 | 345 | 8 | 7.8502 | 1540 |
| 16123 | 261 | 8 | 7.0558 | 1460 |
| 16124 | 90 | 10 | 0.5 | 688 |
| 16125 | 10 | 10 | 28.828 | 5224 |

| Basin 17 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 17105 | 431 | 8 | 1.8309 | 743.72 |
| 17107 | 340 | 8 | 3.4108 | 1015.09 |
| 17113 | 487 | 10 | 1.0863 | 1014.05 |

| Basin 18 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 18160 | 306 | 8 | 0.5 | 389 |
| 18172 | 100 | 8 | 10.5177 | 1783 |
| 18173 | 129 | 8 | 0.814 | 496 |
| 18174 | 184 | 8 | 0.5 | 389 |
| 18175 | 350 | 8 | 0.3771 | 338 |
| 18179 | 277 | 8 | 5.6081 | 1302 |
| 18180 | 182 | 8 | 5.0338 | 1233 |
| 18181 | 163 | 8 | 0.5031 | 390 |
| 18194 | 306 | 8 | 2.1345 | 803 |
| 18195 | 270 | 8 | 0.5 | 389 |
| 18201 | 19 | 8 | 0.5263 | 399 |
| 18202 | 269 | 8 | 0.5093 | 392 |
| 18203 | 115 | 8 | 0.5217 | 397 |
| 18211 | 98 | 8 | 3.6657 | 1052 |
| 18216 | 163 | 8 | 2.0004 | 777 |
| 18217 | 205 | 8 | 1.9516 | 768 |
| 18218 | 118 | 8 | 0.3898 | 343 |
| 18224 | 340 | 8 | 3.237 | 989 |
| 18229 | 165 | 8 | 1.2122 | 605 |
| 18240 | 165 | 8 | 6.0718 | 1354 |
| 18242 | 343 | 8 | 7.7491 | 1530 |
| 18248 | 197 | 8 | 6.8689 | 1441 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 18 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 18253 | 40 | 8 | 10.5584 | 1786 |
| 18255 | 300 | 8 | 5.6088 | 1302 |
| 18260 | 210 | 8 | 6.6815 | 1421 |
| 18261 | 340 | 8 | 5.3016 | 1266 |
| 18262 | 169 | 8 | 2.9599 | 946 |
| 18267 | 395 | 8 | 5.1206 | 1244 |
| 18268 | 380 | 8 | 2.3164 | 837 |
| 18269 | 395 | 8 | 2.7859 | 917 |
| 18280 | 395 | 8 | 3.0394 | 958 |
| 18281 | 395 | 8 | 2.5325 | 875 |
| 18282 | 340 | 8 | 4.422 | 1156 |
| 18283 | 25 | 12 | 0.32 | 905 |
| 18287 | 270 | 8 | 0.5 | 389 |
| 18288 | 118 | 8 | 0.5 | 389 |
| 18289 | 25 | 12 | 0.24 | 783 |
| 18290 | 1 | 12 | 253.0202 | 5436 |

| Basin 19 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 19132 | 121 | 8 | 0.3967 | 346 |
| 19135 | 75 | 8 | 0.4933 | 386 |
| 19136 | 200 | 8 | 0.44 | 365 |
| 19167 | 53 | 8 | 0.4528 | 370 |
| 19168 | 142 | 8 | 0.4437 | 366 |
| 19171 | 56 | 8 | 0.5 | 389 |
| 19172 | 348 | 8 | 0.5546 | 409 |
| 19176 | 373 | 8 | 0.3995 | 347 |
| 19207 | 387 | 8 | 0.4005 | 348 |
| 19208 | 181 | 8 | 9.1541 | 1663 |
| 19209 | 203 | 8 | 3.6971 | 1057 |
| 19210 | 135 | 8 | 1.2594 | 617 |
| 19211 | 150 | 8 | 1.0001 | 550 |
| 19214 | 363 | 8 | 1.0193 | 555 |
| 19215 | 85 | 8 | 1.5296 | 680 |
| 19216 | 334 | 8 | 2.6956 | 902 |
| 19217 | 118 | 8 | 0.8475 | 506 |
| 19254 | 305 | 10 | 1.0263 | 986 |
| 19255 | 157 | 10 | 0.2832 | 518 |
| 19256 | 302 | 10 | 0.2219 | 458 |
| 19257 | 242 | 10 | 0.1818 | 415 |
| 19258 | 116 | 10 | 0.0776 | 271 |
| 19259 | 118 | 10 | 0.7458 | 840 |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 19 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 19260 | 110 | 8 | 1.2728 | 620 |
| 19261 | 177 | 8 | 1.13 | 584 |
| 19262 | 275 | 8 | 2.5463 | 877 |
| 19263 | 170 | 8 | 0.5882 | 422 |
| 19265 | 118 | 8 | 5.0913 | 1240 |
| 19266 | 317 | 10 | 0.2776 | 513 |
| 19267 | 150 | 8 | 4.0767 | 1110 |
| 19289 | 388 | 10 | 1.4538 | 1173 |
| 19294 | 120 | 10 | 4.63 | 2093 |
| 19295 | 388 | 12 | 0.3918 | 1001 |
| 19313 | 93 | 12 | 0.3871 | 995 |
| 19314 | 399 | 12 | 0.3885 | 997 |
| 19315 | 165 | 12 | 0.3842 | 991 |
| 19316 | 240 | 12 | 0.375 | 979 |
| 19317 | 302 | 12 | 0.3841 | 991 |
| 19318 | 403 | 15 | 0.1985 | 1292 |
| 19319 | 340 | 15 | 1.6443 | 3718 |
| 19320 | 210 | 15 | 0.4762 | 2001 |
| 19321 | 399 | 15 | 0.2506 | 1452 |
| 19322 | 404 | 8 | 0.5099 | 392 |
| 19352 | 300 | 8 | 4.8356 | 1209 |
| 19353 | 345 | 8 | 1.4291 | 657 |
| 19354 | 253 | 8 | 8.7287 | 1624 |
| 19355 | 230 | 8 | 8.5089 | 1603 |
| 19356 | 368 | 8 | 0.6794 | 453 |
| 19357 | 310 | 8 | 0.6452 | 441 |
| 19358 | 50 | 8 | 5.0063 | 1230 |
| 19359 | 167 | 8 | 12.9823 | 1980 |
| 19364 | 340 | 8 | 6.4842 | 1400 |
| 19166 | 65 | 8 | 2.3699 | 846 |
| 19165 | 301 | 8 | 2.8117 | 922 |
| 19164 | 342 | 8 | 2.7291 | 908 |
| 19163 | 149 | 8 | 0.4161 | 355 |
| 19450 | 154 | 8 | 0.4026 | 349 |
| 19180 | 200 | 8 | 4.5046 | 1167 |
| 19161 | 250 | 8 | 2.5929 | 885 |
| 19162 | 158 | 8 | 2.4184 | 855 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 20 | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 20546 | 360 | 8 | 1.3084 | 629 |
| 20449 | 232 | 8 | 1.1294 | 584 |
| 20474 | 87 | 8 | 1.1265 | 583 |
| 20453 | 400 | 8 | 2.6659 | 897 |
| 20454 | 375 | 8 | 1.6776 | 712 |
| 20455 | 25 | 8 | 0.48 | 381 |
| 20173 | 159 | 8 | 2.3277 | 839 |
| 20175 | 389 | 8 | 3.3206 | 1002 |
| 20176 | 400 | 8 | 2.7711 | 915 |
| 20177 | 120 | 8 | 0.525 | 398 |
| 20494 | 160 | 8 | 0.4 | 348 |
| 20183 | 160 | 8 | 7.8806 | 1543 |
| 20178 | 241 | 8 | 0.9088 | 524 |
| 20179 | 186 | 8 | 0.7097 | 463 |
| 20180 | 299 | 8 | 0.6154 | 431 |
| 20181 | 400 | 8 | 0.555 | 409 |
| 20194 | 170 | 8 | 0.5588 | 411 |
| 20195 | 365 | 8 | 0.5589 | 411 |
| 20221 | 145 | 8 | 0.5586 | 411 |
| 20222 | 245 | 10 | 0.5633 | 730 |
| 20232 | 115 | 10 | 0.5565 | 726 |
| 20233 | 300 | 10 | 0.56 | 728 |
| 20237 | 52 | 10 | 0.2115 | 447 |
| 20236 | 197 | 10 | 0.2538 | 490 |
| 20267 | 282 | 10 | 0.4007 | 616 |
| 20274 | 121 | 10 | 2.902 | 1657 |
| 20273 | 403 | 10 | 2.3903 | 1504 |
| 20613 | 254 | 10 | 1.8704 | 1331 |
| 20278 | 378 | 10 | 2.3207 | 1482 |
| 20279 | 222 | 10 | 1.9734 | 1367 |
| 20280 | 110 | 10 | 1.8185 | 1312 |
| 20281 | 313 | 10 | 1.9493 | 1358 |
| 20337 | 332 | 10 | 2.0185 | 1382 |
| 20441 | 85 | 10 | 2.3418 | 1489 |
| 20470 | 261 | 10 | 2.1844 | 1438 |
| 20120 | 180 | 8 | 1.5002 | 673 |
| 20338 | 172 | 8 | 8.0199 | 1557 |
| 20339 | 20 | 8 | 26.0956 | 2808 |
| 20340 | 348 | 12 | 1.6353 | 2045 |
| 20283 | 330 | 8 | 3.7602 | 1066 |
| 20284 | 332 | 8 | 0.3946 | 345 |
| 20344 | 326 | 8 | 2.3289 | 839 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 20 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 20345 | 299 | 8 | 3.9362 | 1090 |
| 20346 | 278 | 8 | 4.5443 | 1172 |
| 20347 | 262 | 8 | 2.1341 | 803 |
| 20341 | 312 | 12 | 1.0193 | 1614 |
| 20342 | 108 | 12 | 1.7595 | 2121 |
| 20343 | 224 | 12 | 1.5538 | 1993 |
| 20384 | 139 | 12 | 0.6763 | 1315 |
| 20388 | 217 | 12 | 1.166 | 1727 |
| 20389 | 205 | 12 | 1.7808 | 2134 |
| 20487 | 108 | 12 | 0.8426 | 1468 |
| 20390 | 228 | 12 | 1.294 | 1819 |
| 20391 | 227 | 12 | 2.2869 | 2418 |
| 20569 | 27 | 12 | 2.4452 | 2501 |
| 20392 | 320 | 24 | 0.475 | 6998 |
| 20396 | 320 | 24 | 0.6156 | 7967 |
| 20357 | 185 | 8 | 1.9355 | 765 |
| 20358 | 165 | 8 | 1.9337 | 764 |
| 20372 | 393 | 10 | 0.3715 | 593 |
| 20370 | 428 | 10 | 0.3318 | 560 |
| 20366 | 431 | 8 | 3.5754 | 1039 |
| 20359 | 332 | 10 | 4.4955 | 2063 |
| 20360 | 321 | 10 | 2.967 | 1676 |
| 20407 | 201 | 10 | 9.46 | 2992 |
| 20408 | 203 | 12 | 1.0592 | 1646 |
| 20409 | 250 | 10 | 4.7453 | 2119 |
| 20464 | 152 | 10 | 5.0327 | 2183 |
| 20410 | 189 | 10 | 4.3374 | 2026 |
| 20411 | 189 | 10 | 4.3003 | 2018 |
| 20412 | 257 | 10 | 13.7908 | 3613 |
| 20404 | 270 | 15 | 5.8061 | 6986 |
| 20403 | 208 | 18 | 0.75 | 4083 |
| 20560 | 238 | 18 | 0.8698 | 4397 |
| 20397 | 55 | 24 | 1.091 | 605 |
| 20418 | 381 | 24 | 0.5066 | 7227 |
| 20130 | 65 | 10 | 14.4723 | 3701 |
| 20138 | 458 | 24 | 0.428 | 6642 |
| 20140 | 36 | 24 | 1.3612 | 1846 |
| 20139 | 404 | 24 | 0.5124 | 7268 |
| 20155 | 209 | 24 | 0.3876 | 6321 |
| 20420 | 195 | 24 | 1.4412 | 2189 |
| 20159 | 49 | 24 | 0.2449 | 5025 |
| 20158 | 44 | 21 | 1.773 | 9470 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 20 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 20161 | 406 | 21 | 0.3793 | 4380 |
| 20162 | 410 | 21 | 0.3805 | 4387 |
| 20166 | 377 | 21 | 0.3793 | 4380 |
| 20167 | 39 | 21 | 1.7695 | 9460 |
| 20119 | 273 | 8 | 3.2251 | 987 |
| 20118 | 301 | 8 | 1.03 | 558 |
| 20115 | 288 | 8 | 0.4757 | 379 |
| 20107 | 445 | 8 | 1.6092 | 697 |
| 20530 | 107 | 8 | 1.9349 | 765 |
| 20531 | 400 | 8 | 3.427 | 1017 |
| 20595 | 20 | 8 | 5.5586 | 1296 |
| 20596 | 327 | 8 | 3.4271 | 1018 |
| 20597 | 317 | 8 | 2.8087 | 921 |

| Basin 21 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 21112 | 44 | 8 | 0.8182 | 497 |
| 21113 | 90 | 10 | 0.5667 | 732 |
| 21114 | 295 | 10 | 0.5492 | 721 |
| 21115 | 305 | 10 | 1.7708 | 1295 |
| 21138 | 200 | 10 | 0.355 | 580 |
| 21139 | 340 | 10 | 0.6382 | 777 |
| 21163 | 306 | 8 | 2.262 | 827 |
| 21164 | 365 | 8 | 3.166 | 978 |
| 21165 | 313 | 8 | 1.294 | 625 |
| 21167 | 354 | 8 | 2.0795 | 793 |
| 21168 | 271 | 8 | 1.897 | 757 |
| 21170 | 92 | 8 | 1.0979 | 576 |
| 21201 | 318 | 8 | 2.8786 | 933 |

| Basin 22 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 22142 | 324 | 8 | 0.4383 | 364 |
| 22143 | 110 | 8 | 0.4909 | 385 |
| 22144 | 381 | 8 | 0.399 | 347 |
| 22153 | 162 | 8 | 0.4012 | 348 |
| 22154 | 245 | 8 | 0.4816 | 381 |
| 22155 | 387 | 8 | 0.4419 | 365 |
| 22156 | 218 | 8 | 0.3991 | 347 |
| 22160 | 400 | 8 | 0.35 | 325 |
| 22162 | 50 | 8 | 1.9003 | 758 |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 22 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 22163 | 309 | 8 | 0.4013 | 348 |
| 22172 | 402 | 8 | 0.3881 | 342 |
| 22174 | 19 | 12 | 0.4474 | 1070 |
| 22176 | 27 | 10 | 10.2384 | 3113 |
| 22177 | 295 | 10 | 0.6204 | 766 |
| 22180 | 338 | 8 | 0.3994 | 347 |
| 22191 | 86 | 8 | 1.0001 | 550 |
| 22192 | 408 | 8 | 0.3995 | 347 |
| 22193 | 399 | 8 | 0.3283 | 315 |
| 22196 | 180 | 8 | 1.0001 | 550 |
| 22200 | 73 | 8 | 0.8 | 492 |
| 22204 | 224 | 8 | 0.4375 | 364 |
| 22210 | 192 | 10 | 0.6823 | 804 |
| 22212 | 114 | 8 | 0.4474 | 368 |
| 22227 | 183 | 8 | 0.3989 | 347 |
| 22242 | 275 | 12 | 0.3455 | 940 |
| 22243 | 49 | 10 | 0.102 | 311 |
| 22211 | 39 | 10 | 0.6923 | 810 |
| 22225 | 56 | 8 | 7.3591 | 1491 |
| 22224 | 159 | 8 | 0.5032 | 390 |
| 22223 | 144 | 8 | 7.0452 | 1459 |
| 22222 | 99 | 8 | 0.495 | 387 |
| 22229 | 53 | 8 | 0.4906 | 385 |
| 22228 | 214 | 8 | 0.7711 | 483 |
| 22226 | 197 | 8 | 1.4621 | 665 |
| 22221 | 83 | 8 | 0.494 | 386 |
| 22159 | 121 | 8 | 7.2171 | 1477 |
| 22158 | 171 | 8 | 0.7135 | 464 |
| 22157 | 33 | 8 | 0.3939 | 345 |
| 22145 | 242 | 8 | 0.4008 | 348 |
| 22141 | 230 | 8 | 2.7793 | 916 |
| 22152 | 400 | 8 | 0.4 | 348 |
| 22149 | 340 | 8 | 0.5882 | 422 |
| 22150 | 45 | 8 | 0.2444 | 272 |

| Basin 23 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 23111 | 173 | 10 | 0.1965 | 431 |
| 23115 | 176 | 10 | 0.3636 | 587 |
| 23116 | 202 | 12 | 0.2178 | 746 |
| 23117 | 396 | 12 | 0.2727 | 835 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 23 | | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 23118 | 273 | 12 | 3.8049 | 3119 | |
| 23119 | 12 | 18 | 6.9333 | 2414 | |
| 23120 | 261 | 18 | 0.092 | 1430 | |
| 23149 | 275 | 8 | 2.5026 | 870 | |
| 23150 | 299 | 8 | 0.3345 | 318 | |
| 23151 | 172 | 8 | 2.7045 | 904 | |
| 23154 | 427 | 8 | 0.5878 | 421 | |
| 23156 | 110 | 8 | 0.7728 | 483 | |
| 23161 | 340 | 8 | 0.3059 | 304 | |
| 23163 | 400 | 8 | 0.515 | 394 | |
| 23164 | 200 | 8 | 0.42 | 356 | |
| 23177 | 282 | 8 | 0.4184 | 356 | |
| 23193 | 276 | 18 | 0.0507 | 1062 | |
| 23210 | 209 | 8 | 0.7177 | 466 | |
| 23216 | 200 | 8 | 0.75 | 476 | |
| 23229 | 300 | 8 | 0.7167 | 465 | |
| 23230 | 250 | 8 | 1.9083 | 759 | |
| 23231 | 266 | 8 | 0.3985 | 347 | |
| 23232 | 38 | 8 | 0.3947 | 345 | |
| 23239 | 342 | 8 | 0.4386 | 364 | |
| 23241 | 160 | 8 | 0.3063 | 304 | |
| 23242 | 120 | 8 | 6.7822 | 1431 | |
| 23243 | 100 | 8 | 8.1267 | 1567 | |
| 23250 | 172 | 8 | 0.4012 | 348 | |
| 23294 | 295 | 18 | 0.122 | 1647 | |
| 23295 | 296 | 18 | 0.1791 | 1995 | |
| 23296 | 148 | 18 | 1.0271 | 4778 | |
| 23297 | 349 | 18 | 0.2178 | 2200 | |
| 23303 | 500 | 12 | 1.1641 | 1725 | |
| 23304 | 16 | 12 | 2.751 | 2652 | |
| 23313 | 209 | 10 | 0.3206 | 551 | |
| 23314 | 109 | 10 | 0.4495 | 652 | |
| 23320 | 418 | 12 | 0.2033 | 721 | |
| 23329 | 310 | 12 | 0.2 | 715 | |
| 23331 | 161 | 12 | 0.1988 | 713 | |
| 23333 | 209 | 12 | 0.201 | 717 | |
| 23334 | 105 | 12 | 0.2 | 715 | |
| 23355 | 217 | 12 | 0.2028 | 720 | |
| 23357 | 231 | 12 | 0.1991 | 714 | |
| 23360 | 345 | 8 | 9.4036 | 1685 | |
| 23365 | 340 | 8 | 2.2064 | 816 | |
| 23366 | 150 | 8 | 0.5 | 389 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 23 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 23377 | 270 | 8 | 10.0504 | 1742 |
| 23435 | 110 | 8 | 0.6818 | 454 |
| 23438 | 234 | 12 | 1.1539 | 1718 |
| 23448 | 21 | 12 | 1.4287 | 1911 |
| 23455 | 26 | 18 | 0.3077 | 2615 |
| 23439 | 1 | 12 | 4.0032 | 3199 |

| Basin 24 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 24130 | 259 | 8 | 1.0271 | 557 |
| 24132 | 182 | 8 | 4.5652 | 1174 |
| 24135 | 341 | 8 | 1.1731 | 595 |
| 24136 | 298 | 8 | 6.2808 | 1377 |
| 24137 | 131 | 8 | 18.4834 | 2363 |
| 24138 | 133 | 8 | 7.1536 | 1470 |
| 24140 | 264 | 8 | 8.6304 | 1615 |
| 24141 | 22 | 8 | 29.888 | 3005 |
| 24142 | 53 | 8 | 8.5213 | 1604 |
| 24143 | 321 | 8 | 3.2728 | 994 |
| 24149 | 124 | 8 | 8.5716 | 1609 |
| 2483362 | 1 | 12 | 29.1667 | 8636 |
| 2483361 | 21 | 12 | 0.5714 | 1209 |
| 24152 | 40 | 8 | 3.9781 | 1096 |
| 24153 | 335 | 8 | 5.6808 | 1310 |
| 24154 | 280 | 8 | 8.0293 | 1557 |
| 24176 | 126 | 8 | 5.5881 | 1299 |
| 24177 | 378 | 8 | 4.9664 | 1225 |
| 24178 | 227 | 8 | 17.5367 | 2302 |
| 24209 | 95 | 8 | 9.8367 | 1724 |
| 24272 | 32 | 10 | 8.0257 | 2756 |
| 24273 | 128 | 10 | 2.2349 | 1455 |
| 24283 | 156 | 8 | 18.7777 | 2382 |

| Basin 25 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 25113 | 275 | 12 | 1.5711 | 2004 |
| 25115 | 100 | 12 | 1.5702 | 2004 |
| 25116 | 379 | 12 | 1.1874 | 1743 |
| 25117 | 399 | 12 | 2.6325 | 2595 |
| 25118 | 123 | 12 | 6.1171 | 3955 |
| 25119 | 138 | 12 | 6.1347 | 3961 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 25 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 25120 | 111 | 12 | 9.566 | 4946 |
| 25121 | 20 | 12 | 0.6 | 1239 |
| 25122 | 30 | 12 | 14.5173 | 6093 |
| 25129 | 257 | 8 | 0.428 | 360 |
| 25130 | 183 | 8 | 0.4918 | 385 |
| 25131 | 149 | 8 | 0.6712 | 450 |
| 25132 | 142 | 8 | 3.2764 | 995 |
| 25133 | 120 | 8 | 3.235 | 989 |
| 25134 | 270 | 8 | 3.287 | 996 |
| 25136 | 255 | 8 | 1.3727 | 644 |
| 25137 | 226 | 8 | 2.2129 | 818 |
| 25138 | 190 | 8 | 3.6867 | 1055 |
| 25139 | 201 | 8 | 2.2394 | 823 |
| 25140 | 51 | 8 | 0.9804 | 544 |
| 25142 | 179 | 8 | 1.6762 | 712 |
| 25143 | 294 | 8 | 2.3816 | 848 |
| 25144 | 23 | 8 | 8.5968 | 1612 |
| 25146 | 392 | 8 | 1.6584 | 708 |
| 25147 | 383 | 8 | 1.4806 | 669 |
| 25148 | 316 | 8 | 5.8645 | 1331 |
| 25149 | 126 | 8 | 6.0667 | 1354 |
| 25150 | 274 | 8 | 5.0685 | 1237 |
| 25151 | 345 | 8 | 4.2647 | 1135 |
| 25154 | 401 | 8 | 0.4988 | 388 |
| 25169 | 257 | 8 | 6.4335 | 1394 |
| 25235 | 279 | 12 | 6.1189 | 3956 |
| 25246 | 351 | 8 | 2.0802 | 793 |
| 25247 | 35 | 8 | 13.9627 | 2054 |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 26 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 26113 | 155 | 8 | 8.9453 | 1644 |
| 26158 | 256 | 8 | 1.3243 | 633 |
| 26164 | 309 | 8 | 3.5265 | 1032 |
| 26165 | 177 | 8 | 1.6839 | 713 |
| 26176 | 90 | 8 | 5.3521 | 1272 |
| 26177 | 37 | 8 | 2.1897 | 813 |
| 26181 | 32 | 8 | 2.5633 | 880 |
| 26182 | 135 | 8 | 3.632 | 1047 |

| Basin 27 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 27106 | 330 | 8 | 3.4354 | 1019 |
| 27113 | 380 | 8 | 3.5285 | 1032 |
| 27114 | 30 | 8 | 3.6691 | 1053 |
| 27115 | 302 | 8 | 6.9705 | 1451 |
| 27118 | 227 | 8 | 3.9679 | 1095 |
| 27119 | 285 | 8 | 3.5109 | 1030 |
| 27151 | 239 | 8 | 2.9301 | 941 |
| 27152 | 212 | 8 | 2.8313 | 925 |
| 27646 | 20 | 8 | 24.5041 | 2721 |

| Basin 28 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 28148 | 282 | 8 | 3.559 | 1037 |
| 28150 | 399 | 8 | 3.2523 | 991 |
| 28151 | 393 | 8 | 2.7975 | 919 |
| 28152 | 248 | 8 | 6.4651 | 1398 |
| 28153 | 120 | 8 | 13.462 | 2017 |
| 28154 | 110 | 8 | 13.4472 | 2016 |
| 28155 | 360 | 8 | 16.0327 | 2201 |
| 28165 | 193 | 8 | 8.3188 | 1585 |
| 28177 | 378 | 8 | 1.0053 | 551 |
| 28183 | 294 | 8 | 0.4082 | 351 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 29 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 29128 | 170 | 8 | 0.7647 | 481 |
| 29129 | 331 | 8 | 0.3928 | 344 |
| 29131 | 256 | 8 | 1.172 | 595 |
| 29132 | 160 | 8 | 1.2501 | 615 |
| 29134 | 132 | 8 | 1.5153 | 677 |
| 29184 | 331 | 8 | 0.3928 | 344 |
| 29185 | 332 | 8 | 2.1993 | 815 |
| 29186 | 311 | 8 | 4.1192 | 1116 |
| 29187 | 71 | 8 | 9.9074 | 1730 |
| 29188 | 133 | 8 | 2.2562 | 826 |

| Basin 30 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 30126 | 410 | 8 | 0.4878 | 384 |
| 30134 | 91 | 8 | 1.3188 | 631 |
| 30833 | 269 | 10 | 1.2306 | 1079 |
| 30151 | 224 | 8 | 0.4018 | 348 |
| 30827 | 132 | 8 | 0.3939 | 345 |
| 30161 | 48 | 8 | 0.4167 | 355 |
| 30163 | 90 | 8 | 2.0226 | 782 |
| 30164 | 320 | 8 | 0.4 | 348 |
| 30173 | 200 | 8 | 0.4 | 348 |
| 30182 | 245 | 8 | 0.4 | 348 |
| 30139 | 334 | 8 | 0.6587 | 446 |
| 30152 | 185 | 8 | 1.4272 | 657 |
| 30156 | 248 | 8 | 1.5244 | 679 |
| 30155 | 137 | 8 | 0.4964 | 387 |
| 30159 | 88 | 8 | 0.6591 | 446 |
| 30160 | 309 | 8 | 0.4984 | 388 |
| 30174 | 298 | 8 | 0.2215 | 259 |
| 30181 | 298 | 8 | 0.604 | 427 |
| 30180 | 307 | 8 | 2.2807 | 830 |
| 30179 | 402 | 8 | 4.5071 | 1167 |
| 30187 | 380 | 10 | 0.5 | 688 |
| 30186 | 400 | 10 | 0.5 | 688 |
| 30185 | 240 | 10 | 2.5133 | 1542 |
| 30184 | 233 | 15 | 0.2876 | 1555 |
| 30192 | 275 | 15 | 0.2873 | 1554 |
| 30204 | 50 | 15 | 0.86 | 2689 |
| 30206 | 393 | 15 | 0.4046 | 1844 |
| 30209 | 329 | 15 | 2.2376 | 4337 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 30 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 30218 | 308 | 15 | 2.4553 | 4543 |
| 30221 | 147 | 15 | 0.3946 | 1821 |
| 30222 | 160 | 15 | 0.4063 | 1848 |
| 30223 | 318 | 15 | 0.3994 | 1832 |
| 30234 | 213 | 15 | 0.3991 | 1832 |
| 30247 | 198 | 15 | 0.399 | 1831 |
| 30248 | 197 | 15 | 0.4162 | 1871 |
| 30253 | 283 | 15 | 0.3993 | 1832 |
| 30264 | 316 | 15 | 0.3987 | 1831 |
| 30280 | 428 | 15 | 0.3902 | 1811 |
| 30292 | 368 | 15 | 0.4103 | 1857 |
| 30298 | 250 | 15 | 0.4 | 1834 |
| 30316 | 253 | 15 | 0.3992 | 1832 |
| 30324 | 241 | 15 | 0.4025 | 1839 |
| 30334 | 192 | 15 | 0.401 | 1836 |
| 30337 | 306 | 15 | 0.3987 | 1831 |
| 30345 | 230 | 15 | 0.4652 | 1978 |
| 30353 | 108 | 15 | 5.7595 | 6958 |
| 30356 | 160 | 18 | 0.3375 | 2739 |
| 30357 | 90 | 18 | 0.4667 | 3221 |
| 30358 | 240 | 18 | 0.4042 | 2997 |
| 30359 | 165 | 18 | 0.4 | 2982 |
| 30360 | 310 | 18 | 0.4032 | 2994 |
| 30361 | 300 | 18 | 0.3967 | 2969 |
| 30362 | 440 | 18 | 0.4023 | 2990 |
| 30363 | 325 | 18 | 0.4 | 2982 |
| 30631 | 264 | 18 | 0.4015 | 2987 |
| 30628 | 243 | 18 | 0.3992 | 2979 |
| 30623 | 161 | 18 | 0.4969 | 3323 |
| 30624 | 488 | 18 | 0.4918 | 3306 |
| 30617 | 336 | 18 | 0.4554 | 3181 |
| 30611 | 175 | 18 | 0.3771 | 2895 |
| 30610 | 75 | 18 | 1.1467 | 5049 |
| 30605 | 268 | 18 | 0.5 | 3334 |
| 30601 | 183 | 18 | 2.2519 | 7075 |
| 30594 | 191 | 18 | 1.0786 | 4896 |
| 30595 | 72 | 18 | 0.6806 | 3889 |
| 30596 | 293 | 18 | 0.4744 | 3247 |
| 30597 | 188 | 18 | 0.6383 | 3767 |
| 30579 | 225 | 18 | 0.4889 | 3297 |
| 30581 | 275 | 18 | 0.4364 | 3114 |
| 30582 | 365 | 18 | 0.6028 | 3660 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 30 | | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 30568 | 75 | 18 | 0.5333 | 3443 | |
| 30569 | 140 | 18 | 0.5 | 3334 | |
| 30570 | 213 | 18 | 0.4695 | 3230 | |
| 30571 | 213 | 18 | 0.2817 | 2502 | |
| 30572 | 225 | 18 | 0.4889 | 3297 | |
| 30573 | 205 | 18 | 0.4976 | 3326 | |
| 30577 | 255 | 18 | 0.498 | 3327 | |
| 30559 | 384 | 8 | 9.1527 | 1663 | |
| 30574 | 93 | 8 | 7.5483 | 1510 | |
| 30576 | 220 | 18 | 0.5 | 3334 | |
| 30575 | 91 | 18 | 0.5055 | 3352 | |
| 30564 | 265 | 18 | 0.5019 | 3340 | |
| 30563 | 225 | 18 | 0.4978 | 3326 | |
| 30554 | 500 | 18 | 1.2001 | 5165 | |
| 30781 | 135 | 18 | 0.8223 | 4275 | |
| 30780 | 373 | 18 | 1.1341 | 5021 | |
| 30799 | 225 | 18 | 0.5511 | 3500 | |
| 30773 | 295 | 18 | 0.4881 | 3294 | |
| 30762 | 115 | 18 | 0.4348 | 3109 | |
| 30758 | 175 | 18 | 0.4571 | 3188 | |
| 30750 | 140 | 18 | 0.5714 | 3564 | |
| 30751 | 170 | 18 | 0.4706 | 3234 | |
| 30752 | 270 | 18 | 0.4815 | 3271 | |
| 30749 | 320 | 18 | 0.4688 | 3228 | |
| 30753 | 300 | 18 | 0.5333 | 3443 | |
| 30754 | 450 | 18 | 0.5111 | 3371 | |
| 30738 | 350 | 18 | 1.543 | 5857 | |
| 30721 | 153 | 8 | 7.5377 | 1509 | |
| 30722 | 65 | 18 | 3.849 | 9250 | |
| 30723 | 170 | 18 | 5.1244 | 673 | |
| 30724 | 150 | 18 | 3.9163 | 9330 | |
| 30726 | 235 | 18 | 5.0789 | 625 | |
| 30698 | 100 | 12 | 6.212 | 3986 | |
| 30699 | 150 | 18 | 2.6676 | 7700 | |
| 30687 | 430 | 18 | 2.559 | 7542 | |
| 30681 | 37 | 18 | 2.0274 | 6713 | |
| 30680 | 160 | 18 | 1.0313 | 4788 | |
| 30679 | 200 | 18 | 1.1151 | 4979 | |
| 30678 | 235 | 18 | 1.1065 | 4959 | |
| 30668 | 435 | 18 | 1.6324 | 6024 | |
| 30651 | 175 | 8 | 9.7604 | 1717 | |
| 30655 | 270 | 18 | 0.4815 | 3271 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 30 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 30654 | 305 | 18 | 0.5246 | 3415 |
| 3059572 | 380 | 18 | 0.5 | 3334 |

| Basin 31 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 31197 | 283 | 8 | 1.9438 | 766 |
| 31200 | 183 | 8 | 0.8197 | 498 |
| 31203 | 180 | 8 | 1.1112 | 579 |
| 31206 | 266 | 8 | 3.3063 | 999 |
| 31208 | 425 | 8 | 2.5891 | 884 |
| 31213 | 185 | 8 | 1.8922 | 756 |
| 31216 | 182 | 8 | 0.544 | 405 |
| 31218 | 115 | 8 | 0.7044 | 461 |
| 31159 | 115 | 8 | 2.0004 | 777 |
| 31158 | 235 | 8 | 0.3872 | 342 |
| 31157 | 80 | 8 | 0.2375 | 268 |
| 31156 | 310 | 10 | 0.2065 | 442 |
| 31168 | 171 | 10 | 0.2105 | 446 |
| 31170 | 267 | 10 | 0.2172 | 453 |
| 31427 | 5 | 10 | 90.2526 | 9243 |
| 31171 | 200 | 8 | 0.42 | 356 |
| 31229 | 319 | 12 | 3.7644 | 3103 |
| 31231 | 435 | 8 | 5.9646 | 1342 |
| 31233 | 280 | 8 | 1.368 | 643 |
| 31424 | 800 | 6 | 3.824 | 701 |
| 31263 | 332 | 8 | 0.2861 | 294 |
| 31265 | 320 | 8 | 0.375 | 337 |
| 31266 | 258 | 8 | 0.5 | 389 |
| 31279 | 261 | 8 | 0.2797 | 291 |
| 31281 | 340 | 8 | 0.4059 | 350 |
| 31283 | 62 | 8 | 0.7742 | 484 |
| 31284 | 259 | 8 | 0.3745 | 336 |
| 31294 | 327 | 8 | 0.367 | 333 |
| 31317 | 257 | 8 | 0.4008 | 348 |
| 31318 | 189 | 8 | 0.4021 | 349 |
| 31319 | 285 | 8 | 0.7649 | 481 |
| 31320 | 272 | 8 | 2.5965 | 886 |
| 31375 | 261 | 8 | 0.3985 | 347 |
| 31376 | 260 | 8 | 0.4 | 348 |
| 31377 | 190 | 8 | 0.4 | 348 |
| 31228 | 260 | 12 | 0.0538 | 371 |
| 31181 | 35 | 12 | 0.0857 | 468 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 31 | | | | |
|------------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 31182 | 292 | 12 | 0.2466 | 794 |
| 31267 | 140 | 12 | 0.25 | 800 |
| 31268 | 324 | 12 | 0.2778 | 843 |
| 31286 | 241 | 8 | 0.4025 | 349 |
| 31296 | 105 | 8 | 0.3524 | 326 |
| 31297 | 242 | 8 | 0.3512 | 326 |
| 31301 | 270 | 8 | 0.1 | 174 |
| 31426 | 34 | 8 | 1.0589 | 566 |
| 31306 | 136 | 8 | 0.0956 | 170 |
| 31307 | 105 | 8 | 0.1333 | 201 |
| 31285 | 448 | 12 | 0.2344 | 774 |
| 31189 | 129 | 12 | 0.2558 | 809 |
| 31188 | 204 | 12 | 0.2549 | 807 |
| 31184 | 163 | 12 | 0.2577 | 812 |
| 31183 | 65 | 12 | 0.2615 | 818 |
| 31160 | 412 | 12 | 0.4757 | 1103 |
| 31173 | 20 | 12 | 0.4 | 1011 |
| 31177 | 126 | 12 | 0.254 | 806 |
| 31178 | 262 | 12 | 0.2557 | 809 |
| 31429 | 20 | 12 | 0.4 | 1011 |
| Metro31431 | 20 | 12 | 4.1536 | 3259 |
| Metro31432 | 20 | 12 | 0.4 | 1011 |

| Basin 32 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 32129 | 28 | 8 | 14.3233 | 2080 |
| 32165 | 400 | 12 | 0.2 | 715 |
| 32170 | 265 | 12 | 0.3245 | 911 |
| 32171 | 135 | 12 | 0.8593 | 1482 |
| 32172 | 226 | 12 | 0.4425 | 1064 |
| 32173 | 225 | 8 | 9.9015 | 1730 |
| 32174 | 212 | 8 | 1.1793 | 597 |
| 32177 | 263 | 12 | 0.8251 | 1453 |
| 32198 | 366 | 8 | 13.7989 | 2042 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 33* | | Capacity ¹ (gpm)** |
|------|-------------|---------------|-----------|-------------------------------|
| | | Diameter (in) | Slope (%) | |
| 139 | 325.6 | 8 | 0.5 | 385 |
| 127 | 63.4 | 8 | 0.5 | 385 |
| 126 | 224.7 | 8 | 0.5 | 385 |
| 125 | 231.1 | 8 | 0.5 | 385 |
| 138 | 394 | 8 | 0.8 | 486 |
| 104 | 236.4 | 8 | 1 | 544 |
| 128 | 207.2 | 8 | 1.37 | 636 |
| 140 | 331.2 | 8 | 1.37 | 636 |
| 141 | 307 | 8 | 1.4 | 643 |
| 119 | 316.8 | 8 | 2 | 769 |
| 105 | 244.8 | 8 | 4.1 | 1101 |
| 118 | 194 | 8 | 4.2 | 1114 |
| 117 | 348.1 | 8 | 4.3 | 1128 |
| 124 | 255.1 | 8 | 7.07 | 1446 |
| 137 | 260.6 | 8 | 9.02 | 1633 |
| 103 | 160.4 | 8 | 12.23 | 1902 |
| 102 | 136.2 | 8 | 999.99 | Unknown |
| 101 | 98.6 | 0 | 999.99 | Unknown |

*: Basin 33 sewers are not modeled. Information shown is the best available from the City’s as-built data.
 **: Unknown capacities given for pipes with unknown slopes or diameters

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 34 | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 34305 | 215 | 8 | 0.507 | 391 |
| 34304 | 235 | 8 | 0.4043 | 349 |
| 34303 | 235 | 8 | 2.0004 | 777 |
| 34302 | 400 | 8 | 1.5427 | 683 |
| 34301 | 200 | 8 | 0.4 | 348 |
| 34300 | 170 | 8 | 0.4 | 348 |
| 34299 | 160 | 8 | 0.4063 | 350 |
| 34298 | 398 | 8 | 0.402 | 348 |
| 34297 | 400 | 8 | 0.45 | 369 |
| 34227 | 244 | 8 | 0.3771 | 338 |
| 34228 | 250 | 8 | 0.4 | 348 |
| 34229 | 319 | 8 | 0.4483 | 368 |
| 34224 | 85 | 8 | 0.2471 | 273 |
| 34212 | 282 | 8 | 0.4255 | 359 |
| 34213 | 313 | 8 | 0.3962 | 346 |
| 34218 | 269 | 8 | 0.9666 | 540 |
| 34196 | 129 | 8 | 0.4031 | 349 |
| 34197 | 171 | 8 | 1.743 | 726 |
| 34198 | 101 | 8 | 0.5149 | 394 |
| 34202 | 142 | 8 | 0.9296 | 530 |
| 34334 | 177 | 8 | 0.9322 | 531 |
| 34203 | 119 | 8 | 0.9328 | 531 |
| 34335 | 62 | 8 | 0.9355 | 532 |
| 34204 | 199 | 8 | 0.9247 | 529 |
| 34240 | 257 | 8 | 1.1285 | 584 |
| 34241 | 41 | 8 | 0.4146 | 354 |
| 34242 | 259 | 8 | 0.4015 | 348 |
| 34243 | 46 | 8 | 0.413 | 353 |
| 34244 | 300 | 8 | 1.2334 | 610 |
| 34122 | 173 | 8 | 1.1041 | 578 |
| 34129 | 298 | 8 | 1.0437 | 562 |
| 34130 | 401 | 8 | 1.232 | 610 |
| 34131 | 158 | 8 | 2.976 | 948 |
| 34132 | 169 | 8 | 4.4838 | 1164 |
| 34133 | 181 | 8 | 1.5306 | 680 |
| 34134 | 22 | 12 | 0.4091 | 1023 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 35 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 35184 | 60 | 8 | 0.5 | 389 |
| 35186 | 98 | 8 | 24.1437 | 2701 |
| 35187 | 199 | 8 | 1.0051 | 551 |
| 35188 | 255 | 8 | 2.9424 | 943 |
| 35204 | 304 | 8 | 2.4679 | 863 |
| 35205 | 400 | 8 | 4.1285 | 1117 |
| 35206 | 254 | 8 | 8.1728 | 1571 |
| 35207 | 143 | 8 | 0.3986 | 347 |
| 35208 | 400 | 8 | 0.4 | 348 |
| 35209 | 159 | 8 | 1.1196 | 582 |
| 35210 | 95 | 8 | 23.075 | 2640 |
| 35211 | 190 | 8 | 3.1595 | 977 |
| 35212 | 48 | 8 | 2.0838 | 793 |
| 35213 | 62 | 8 | 13.1278 | 1991 |
| 35214 | 81 | 8 | 13.1366 | 1992 |
| 35215 | 89 | 8 | 13.1228 | 1991 |
| 35226 | 56 | 8 | 13.1479 | 1993 |
| 35227 | 37 | 8 | 4.0574 | 1107 |
| 35228 | 385 | 8 | 11.2392 | 1843 |
| 35230 | 73 | 8 | 2.7408 | 910 |
| 35231 | 120 | 8 | 13.4535 | 2016 |
| 35232 | 279 | 8 | 1.4338 | 658 |
| 35233 | 280 | 8 | 15.912 | 2192 |
| 35236 | 297 | 8 | 12.5557 | 1948 |
| 35239 | 73 | 8 | 0.6849 | 455 |
| 35240 | 151 | 8 | 4.4481 | 1159 |
| 35241 | 283 | 8 | 0.3463 | 323 |
| 35243 | 209 | 8 | 0.4258 | 359 |
| 35244 | 324 | 8 | 10.8661 | 1812 |
| 35245 | 276 | 8 | 12.2577 | 1924 |
| 35246 | 392 | 8 | 1.1276 | 584 |
| 35258 | 149 | 8 | 4.9052 | 1217 |
| 35261 | 281 | 8 | 7.8533 | 1540 |
| 35262 | 339 | 8 | 0.9853 | 546 |
| 35263 | 254 | 8 | 1.004 | 551 |
| 35293 | 65 | 8 | 12.402 | 1936 |
| 35294 | 96 | 8 | 21.3007 | 2537 |
| 35295 | 78 | 8 | 15.57 | 2169 |
| 35296 | 190 | 8 | 13.2733 | 2002 |
| 35297 | 10 | 8 | 14.0363 | 2059 |
| 35301 | 12 | 12 | 2.2506 | 2399 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 35 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 35302 | 314 | 8 | 0.9809 | 544 |
| 35310 | 121 | 10 | 0.2975 | 531 |
| 35311 | 74 | 10 | 1.5813 | 1223 |
| 35312 | 121 | 10 | 0.1901 | 424 |
| 35313 | 116 | 10 | 0.3362 | 564 |
| 35314 | 165 | 10 | 0.2364 | 473 |
| 35315 | 79 | 10 | 0.4684 | 666 |
| 35316 | 92 | 10 | 1.2718 | 1097 |
| 35319 | 94 | 10 | 0.1489 | 375 |
| 35321 | 47 | 8 | 1.2341 | 611 |
| 35322 | 190 | 12 | 2.4534 | 2505 |
| 35323 | 207 | 12 | 1.6379 | 2047 |
| 35324 | 193 | 12 | 1.482 | 1947 |
| 35325 | 49 | 12 | 1.4491 | 1925 |
| 35326 | 126 | 12 | 2.1275 | 2332 |
| 35327 | 257 | 15 | 0.2529 | 1458 |
| 35328 | 49 | 15 | 0.3265 | 1657 |
| 35329 | 11 | 15 | 1.091 | 3028 |
| 35330 | 196 | 15 | 0.2806 | 1536 |
| 35331 | 20 | 15 | 1.1001 | 3041 |
| 35332 | 83 | 15 | 0.494 | 2038 |
| 35333 | 190 | 15 | 0.3105 | 1616 |
| 35334 | 125 | 12 | 1.0881 | 1668 |
| 35335 | 172 | 12 | 1.0698 | 1654 |
| 35418 | 270 | 8 | 0.0259 | 89 |
| 35400 | 378 | 8 | 0.709 | 463 |
| 35401 | 130 | 8 | 0.5231 | 398 |
| 35402 | 186 | 8 | 0.2634 | 282 |
| 35403 | 402 | 8 | 0.0871 | 162 |
| 35404 | 87 | 8 | 0.3678 | 333 |
| 35405 | 120 | 8 | 0.8167 | 497 |
| 35406 | 395 | 8 | 1.157 | 591 |
| 35407 | 398 | 8 | 0.5327 | 401 |
| 35408 | 301 | 8 | 1.0632 | 567 |
| 35409 | 400 | 8 | 0.755 | 478 |
| 35410 | 400 | 8 | 0.8425 | 505 |
| 35411 | 18 | 8 | 4.6718 | 1188 |
| 35412 | 58 | 8 | 0.8276 | 500 |
| 35413 | 39 | 8 | 15.7827 | 2184 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 36 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 36101 | 400 | 0.4 | 12 | 1011 |
| 36102 | 400 | 0.4 | 12 | 1011 |
| 36103 | 293 | 0.3003 | 12 | 876 |
| 36104 | 148 | 0.3987 | 12 | 1010 |
| 36105 | 176 | 0.3636 | 12 | 964 |
| 36106 | 50 | 0.28 | 12 | 846 |
| 36107 | 48 | 0.8125 | 12 | 1441 |
| 36108 | 130 | 0.5692 | 12 | 1206 |
| 36109 | 40 | 1.0501 | 8 | 563 |
| 36111 | 45 | 0.4 | 8 | 348 |
| 36112 | 80 | 0.4 | 8 | 348 |
| 36114 | 400 | 0.4 | 8 | 348 |
| 36115 | 300 | 0.4 | 8 | 348 |
| 36116 | 380 | 0.4 | 8 | 348 |
| 36119 | 429 | 0.4009 | 8 | 348 |
| 36139 | 400 | 0.4 | 12 | 1011 |
| 36279 | 342 | 0.3977 | 12 | 1008 |
| 36150 | 309 | 0.2977 | 8 | 300 |
| 36152 | 388 | 0.0541 | 8 | 128 |
| 36243 | 65 | 1.8311 | 8 | 744 |
| 36158 | 379 | 0.3087 | 8 | 305 |
| 36207 | 400 | 0.4 | 8 | 348 |
| 3680602 | 58 | 0.3966 | 8 | 346 |
| 36148 | 30 | 0.5 | 8 | 389 |
| 36147 | 27 | 2.6305 | 8 | 891 |
| 36146 | 65 | 12.3233 | 8 | 1539 |
| 36232 | 103 | 7.2129 | 6 | 1476 |
| 36231 | 300 | 0.5033 | 8 | 390 |
| 36237 | 175 | 0.2857 | 8 | 135 |
| CO | 292 | 0.2089 | 6 | 115 |
| 3680634 | 420 | 0.0002 | 6 | 4 |
| 3672309 | 22 | 1.8185 | 6 | 741 |
| OverFlow | 400 | 4.9059 | 8 | 4604 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 37 | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 37116 | 70 | 8 | 40.9013 | 3515 |
| 37117 | 100 | 8 | 39.2668 | 3444 |
| 37118 | 170 | 8 | 8.4417 | 1597 |
| 37119 | 37 | 8 | 1.9463 | 767 |
| 37128 | 101 | 8 | 1.3566 | 640 |
| 37130 | 100 | 8 | 6.9165 | 1446 |
| 37131 | 125 | 8 | 44.5837 | 3670 |
| 37132 | 72 | 10 | 48.1962 | 6754 |
| 37133 | 100 | 10 | 18.1518 | 4145 |
| 37134 | 70 | 10 | 3.5451 | 1832 |
| 37135 | 63 | 10 | 56.1387 | 7290 |
| 37136 | 101 | 15 | 1.4754 | 3522 |
| 37137 | 168 | 8 | 8.5489 | 1607 |
| 37138 | 171 | 8 | 14.4467 | 2089 |
| 37142 | 252 | 8 | 16.1304 | 2207 |
| 37143 | 135 | 8 | 14.827 | 2116 |
| 37146 | 132 | 8 | 8.4313 | 1596 |
| 37147 | 219 | 8 | 6.6448 | 1417 |
| 37148 | 109 | 8 | 12.0405 | 1907 |
| 37149 | 35 | 8 | 6.8733 | 1441 |
| 37150 | 81 | 8 | 40.5683 | 3501 |
| 37151 | 100 | 8 | 8.632 | 1615 |
| 37184 | 385 | 8 | 7.0722 | 1462 |
| 37208 | 141 | 15 | 3.2855 | 5255 |
| 37209 | 93 | 10 | 5.2761 | 2235 |
| 37213 | 160 | 10 | 8.9671 | 2913 |
| 37214 | 263 | 10 | 13.6267 | 3592 |
| 37215 | 197 | 10 | 4.7006 | 2109 |
| 37216 | 125 | 10 | 2.4567 | 1525 |
| 37217 | 94 | 10 | 6.471 | 2475 |
| 37236 | 199 | 15 | 0.4774 | 2003 |
| 37237 | 233 | 15 | 0.3991 | 1832 |
| 37238 | 183 | 15 | 0.3989 | 1831 |
| 37239 | 270 | 15 | 0.4 | 1834 |
| 37240 | 225 | 15 | 0.4089 | 1854 |
| 37241 | 335 | 15 | 0.3612 | 1743 |
| 37242 | 232 | 15 | 0.4741 | 1996 |
| 37243 | 306 | 15 | 0.3595 | 1738 |
| 37244 | 198 | 15 | 0.3232 | 1648 |
| 37245 | 202 | 10 | 4.2811 | 2013 |
| 37359 | 180 | 8 | 6.3573 | 1386 |
| 37360 | 84 | 8 | 18.2989 | 2351 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 37 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 37361 | 67 | 8 | 13.7398 | 2037 |
| 37362 | 82 | 8 | 13.0612 | 1986 |
| 37363 | 78 | 8 | 10.3108 | 1765 |
| 37364 | 235 | 8 | 5.5703 | 1297 |
| 37369 | 76 | 8 | 15.158 | 2140 |
| 37370 | 72 | 15 | 0.5556 | 2161 |
| 37372 | 171 | 15 | 0.5673 | 2184 |
| 37373 | 124 | 15 | 0.5081 | 2067 |
| 37375 | 91 | 10 | 13.7547 | 3608 |
| 37376 | 209 | 15 | 0.5455 | 2141 |
| 37377 | 119 | 10 | 3.9274 | 1928 |
| 37378 | 334 | 15 | 0.4401 | 1923 |
| 37381 | 89 | 10 | 9.7425 | 3037 |
| 37382 | 168 | 10 | 6.3461 | 2451 |
| 37383 | 176 | 8 | 12.7909 | 1966 |
| 37394 | 135 | 8 | 19.7286 | 2441 |
| 37395 | 274 | 8 | 17.9196 | 2327 |
| 37396 | 95 | 8 | 18.4981 | 2364 |
| 37400 | 295 | 8 | 15.2769 | 2148 |
| 37403 | 59 | 8 | 10.5497 | 1785 |
| 37404 | 85 | 8 | 6.212 | 1370 |
| 37405 | 283 | 8 | 8.0543 | 1560 |
| 37414 | 83 | 8 | 10.8709 | 1812 |
| 37415 | 146 | 8 | 3.7561 | 1065 |
| 37425 | 255 | 8 | 8.4774 | 1600 |
| 37426 | 217 | 15 | 0.6083 | 2261 |
| 37428 | 199 | 15 | 0.5628 | 2175 |
| 37456 | 188 | 8 | 11.4358 | 1859 |
| 37457 | 93 | 8 | 12.4612 | 1940 |
| 37458 | 98 | 8 | 8.6237 | 1614 |
| 37459 | 125 | 8 | 11.0264 | 1825 |
| 37460 | 214 | 8 | 5.8511 | 1330 |
| 37461 | 307 | 8 | 8.862 | 1636 |
| 37468 | 100 | 8 | 13.9333 | 2052 |
| 37469 | 112 | 8 | 14.4706 | 2091 |
| 37470 | 198 | 8 | 10.5122 | 1782 |
| 37471 | 119 | 8 | 9.9651 | 1735 |
| 37475 | 248 | 8 | 3.5304 | 1033 |
| 37476 | 230 | 8 | 8.5353 | 1606 |
| 37515 | 122 | 8 | 2.9685 | 947 |
| 37516 | 99 | 8 | 2.5261 | 874 |
| 37537 | 145 | 8 | 2.6561 | 896 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 37 | | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 37538 | 150 | 8 | 0.4933 | 386 | |
| 37539 | 158 | 8 | 0.5063 | 391 | |
| 37540 | 83 | 8 | 10.7115 | 1799 | |
| 37541 | 221 | 8 | 0.4027 | 349 | |
| 37542 | 145 | 8 | 7.323 | 1487 | |
| 37543 | 183 | 8 | 3.2367 | 989 | |
| 37544 | 111 | 8 | 15.0319 | 2131 | |
| 37545 | 263 | 8 | 7.3199 | 1487 | |
| 37546 | 97 | 8 | 4.0239 | 1103 | |
| 37556 | 167 | 8 | 1.8027 | 738 | |
| 37582 | 111 | 8 | 3.1547 | 976 | |
| 37583 | 245 | 8 | 5.0472 | 1235 | |
| 37584 | 92 | 8 | 5.836 | 1328 | |
| 37586 | 331 | 8 | 13.3935 | 2012 | |
| 37588 | 173 | 8 | 7.3726 | 1492 | |
| 37589 | 202 | 8 | 6.6483 | 1417 | |
| 37590 | 210 | 8 | 3.0586 | 961 | |
| 37591 | 157 | 8 | 9.8371 | 1724 | |
| 37592 | 48 | 8 | 2.6259 | 891 | |
| 37595 | 106 | 8 | 4.287 | 1138 | |
| 37596 | 95 | 8 | 8.4511 | 1598 | |
| 37597 | 66 | 8 | 11.1443 | 1835 | |
| 37610 | 40 | 12 | 4.2288 | 3288 | |
| 37611 | 129 | 12 | 3.11 | 2820 | |
| 37612 | 39 | 12 | 0.7436 | 1379 | |
| 37625 | 80 | 12 | 0.5125 | 1145 | |
| 37626 | 167 | 15 | 0.497 | 2044 | |
| 37627 | 265 | 15 | 0.4981 | 2046 | |
| 37628 | 230 | 15 | 0.5 | 2050 | |
| 37629 | 88 | 15 | 0.5 | 2050 | |
| 37630 | 209 | 15 | 4.3198 | 6026 | |
| 37631 | 114 | 15 | 0.5 | 2050 | |
| 37632 | 191 | 15 | 0.4974 | 2045 | |
| 37648 | 191 | 15 | 0.5183 | 2087 | |
| 37650 | 329 | 15 | 0.4863 | 2022 | |
| 37652 | 136 | 15 | 0.5147 | 2080 | |
| 37653 | 125 | 15 | 0.48 | 2009 | |
| 37656 | 144 | 15 | 0.9723 | 2859 | |
| 37657 | 181 | 15 | 7.1619 | 7759 | |
| 37658 | 186 | 15 | 9.6304 | 8998 | |
| 37659 | 339 | 14 | 0.5015 | 1721 | |
| 37662 | 18 | 8 | 10.0504 | 1742 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 37 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 37663 | 99 | 8 | 10.5532 | 1786 |
| 37666 | 110 | 8 | 4.2493 | 1133 |
| 37667 | 141 | 8 | 3.79 | 1070 |
| 37668 | 168 | 8 | 2.6795 | 900 |
| 37669 | 125 | 8 | 0.808 | 494 |
| 37670 | 148 | 8 | 0.5 | 389 |
| 37671 | 319 | 8 | 3.2117 | 985 |
| 37746 | 157 | 8 | 5.2173 | 1255 |
| 37747 | 60 | 8 | 1.1334 | 585 |
| 37748 | 148 | 14 | 0.5 | 1719 |
| 37749 | 178 | 15 | 0.618 | 2279 |
| 37750 | 149 | 14 | 0.349 | 1436 |
| 37751 | 69 | 14 | 0.7971 | 2170 |
| 37752 | 162 | 14 | 0.4938 | 1708 |
| 37753 | 111 | 14 | 0.5045 | 1726 |
| 37754 | 150 | 15 | 0.5 | 2050 |
| 37755 | 187 | 15 | 0.4973 | 2045 |
| 37763 | 147 | 10 | 4.6513 | 2098 |
| 37764 | 190 | 10 | 5.5982 | 2302 |
| 37765 | 276 | 10 | 1.8119 | 1310 |
| 37766 | 169 | 10 | 4.2642 | 2009 |
| 37767 | 168 | 10 | 4.2897 | 2015 |
| 37769 | 200 | 10 | 14.9545 | 3762 |
| 37770 | 216 | 10 | 8.6619 | 2863 |
| 37774 | 130 | 10 | 9.5822 | 3012 |
| 37775 | 121 | 10 | 4.0529 | 1959 |
| 37776 | 294 | 10 | 5.2453 | 2228 |
| 37777 | 106 | 12 | 0.5377 | 1173 |
| 37779 | 225 | 12 | 0.4933 | 1123 |
| 37780 | 283 | 12 | 0.4594 | 1084 |
| 37784 | 73 | 12 | 4.0993 | 3238 |
| 37785 | 344 | 12 | 5.2164 | 3652 |
| 37799 | 134 | 15 | 2.9117 | 4947 |
| 37866 | 40 | 8 | 15.5082 | 2164 |
| 37867 | 26 | 12 | 2.3468 | 2450 |
| 37875 | 395 | 8 | 18.901 | 2390 |
| 37876 | 127 | 8 | 0.3465 | 324 |
| 37877 | 138 | 8 | 1.0001 | 550 |
| 37878 | 95 | 8 | 3.8766 | 1082 |
| 37879 | 160 | 8 | 13.1113 | 1990 |
| 37880 | 103 | 8 | 17.2511 | 2283 |
| 37881 | 168 | 8 | 13.1113 | 1990 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 37 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 37882 | 87 | 8 | 9.2345 | 1670 |
| 371074 | 400 | 12 | 4.1711 | 3266 |
| 37883 | 105 | 15 | 1.3716 | 3396 |
| 371073 | 140 | 12 | 4.6909 | 3463 |
| 37129 | 378 | 15 | 2.8239 | 4872 |
| 37115 | 77 | 14 | 1.3768 | 2832 |
| 37925 | 24 | 8 | 26.0956 | 2774 |
| 37926 | 245 | 8 | 0.996 | 549 |
| 37936 | 160 | 8 | 0.8813 | 516 |
| 37937 | 45 | 8 | 19.6581 | 2437 |
| 37938 | 151 | 8 | 2.0998 | 796 |
| 37939 | 95 | 8 | 29.9784 | 3009 |
| 37946 | 156 | 8 | 9.6016 | 1703 |
| 37947 | 160 | 8 | 1.1313 | 585 |
| 37948 | 97 | 8 | 4.3236 | 1143 |
| 37949 | 180 | 8 | 0.7 | 460 |
| 37950 | 74 | 8 | 7.5893 | 1514 |
| 3783829 | 48 | 12 | 3.4395 | 2966 |

| Basin 38 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 38744 | 39 | 12 | 2.5393 | 2548 |
| 38101 | 88 | 12 | 0.3409 | 934 |
| 38102 | 45 | 12 | 1.4446 | 1922 |
| 38103 | 75 | 12 | 0.0267 | 261 |
| 38104 | 71 | 12 | 0.338 | 930 |
| 38169 | 253 | 12 | 0.3636 | 964 |
| 38171 | 347 | 10 | 0.3141 | 545 |
| 38172 | 356 | 10 | 2.7454 | 1612 |
| 38173 | 320 | 8 | 2.6415 | 893 |
| 38174 | 55 | 8 | 0.5273 | 399 |
| 38175 | 148 | 10 | 8.7974 | 2886 |
| 38184 | 347 | 10 | 3.4718 | 1813 |
| 38185 | 106 | 10 | 3.6061 | 1848 |
| 38186 | 97 | 10 | 3.3317 | 1776 |
| 38187 | 205 | 10 | 5.4667 | 2275 |
| 38188 | 253 | 10 | 6.0108 | 2385 |
| 38189 | 275 | 10 | 2.5572 | 1556 |
| 38190 | 298 | 10 | 2.0441 | 1391 |
| 38745 | 129 | 15 | 1.0001 | 2899 |
| 38746 | 128 | 10 | 1.0001 | 973 |
| 38702 | 150 | 16 | 1.5002 | 4190 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 38 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 38703 | 44 | 15 | 10.9977 | 9615 |
| 38704 | 181 | 15 | 12.0704 | 73 |
| 38705 | 95 | 15 | 4.1826 | 5930 |
| 38706 | 101 | 15 | 3.9734 | 5779 |
| 38707 | 211 | 15 | 16.0266 | 1607 |
| 38708 | 170 | 15 | 18.6639 | 2526 |
| 38709 | 66 | 15 | 1.8336 | 3926 |
| 38710 | 250 | 15 | 4.1997 | 5942 |
| 38711 | 258 | 15 | 2.1168 | 4218 |
| 38283 | 10 | 10 | 2.0004 | 1376 |
| 38195 | 390 | 10 | 3.2761 | 1761 |
| 38196 | 230 | 8 | 3.2844 | 996 |
| 38284 | 365 | 10 | 1.5481 | 1211 |
| 38285 | 324 | 10 | 0.8889 | 917 |
| 38286 | 343 | 10 | 0.8892 | 917 |
| 38287 | 349 | 10 | 0.8912 | 918 |
| 38288 | 350 | 8 | 3.402 | 1014 |
| 38289 | 343 | 8 | 7.0025 | 1454 |
| 38290 | 236 | 8 | 6.7356 | 1426 |
| 38291 | 69 | 8 | 2.6531 | 895 |
| 38281 | 300 | 8 | 70.3716 | 4611 |
| 38280 | 97 | 8 | 15.3637 | 2154 |
| 38279 | 228 | 8 | 26.8189 | 2846 |
| 38278 | 122 | 8 | 36.4796 | 3320 |
| 38277 | 136 | 8 | 45.3015 | 3699 |
| 38276 | 49 | 8 | 29.8838 | 3005 |
| 38263 | 151 | 8 | 11.7356 | 1883 |
| 38275 | 171 | 8 | 9.991 | 1737 |
| 38274 | 326 | 8 | 1.5278 | 679 |
| 38231 | 288 | 8 | 0.5139 | 394 |
| 38226 | 390 | 8 | 0.5 | 389 |
| 38224 | 260 | 8 | 0.5 | 389 |
| 38223 | 170 | 8 | 6.7329 | 1426 |
| 38217 | 319 | 8 | 0.5016 | 389 |
| 38292 | 108 | 8 | 0.5093 | 392 |
| 38201 | 90 | 8 | 0.5 | 389 |
| 38200 | 160 | 8 | 3.258 | 992 |
| 38199 | 260 | 8 | 0.5 | 389 |
| 38198 | 160 | 8 | 3.0014 | 952 |
| 38197 | 282 | 8 | 0.5 | 389 |
| 38143 | 313 | 8 | 0.5016 | 389 |
| 38142 | 144 | 8 | 0.5 | 389 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 38 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 38141 | 301 | 8 | 0.5017 | 389 |
| 38138 | 180 | 8 | 0.5 | 389 |
| 38712 | 66 | 15 | 7.4906 | 7935 |
| 38713 | 172 | 18 | 1.2036 | 5172 |
| 38714 | 377 | 18 | 0.8541 | 4357 |
| 38715 | 228 | 18 | 1.1492 | 5054 |
| 38716 | 74 | 18 | 0.7297 | 4028 |
| 38717 | 66 | 18 | 1.1819 | 5126 |
| 38718 | 129 | 18 | 0.7985 | 4213 |
| 38719 | 194 | 18 | 0.8145 | 4255 |
| 38720 | 279 | 18 | 0.828 | 4290 |
| 38721 | 194 | 18 | 5.0632 | 609 |
| 38722 | 203 | 18 | 7.2207 | 2669 |
| 38723 | 46 | 18 | 3.6546 | 9013 |
| 38724 | 238 | 15 | 5.4535 | 6771 |
| 38725 | 143 | 15 | 2.0914 | 4193 |
| 38726 | 120 | 16 | 3.6023 | 6493 |
| 38950 | 269 | 15 | 0.9368 | 2806 |
| 38949 | 196 | 15 | 5.7236 | 6936 |
| 38595 | 415 | 12 | 10.1703 | 5100 |
| 38596 | 284 | 12 | 17.0452 | 6602 |
| 38597 | 100 | 12 | 3.0014 | 2770 |
| 38598 | 545 | 12 | 10.4884 | 5179 |
| 38599 | 70 | 12 | 3.0014 | 2770 |
| 38600 | 81 | 12 | 16.7357 | 6542 |
| 38601 | 99 | 12 | 22.8466 | 7643 |
| 38602 | 145 | 12 | 2.8978 | 2722 |
| 38604 | 150 | 12 | 3.1215 | 2825 |
| 38603 | 290 | 12 | 7.556 | 4396 |
| 38605 | 350 | 12 | 15.9802 | 6392 |
| 38606 | 140 | 16 | 2.5723 | 5487 |
| 38607 | 442 | 15 | 23.7662 | 4135 |
| 38404 | 203 | 12 | 2.661 | 2609 |
| 38403 | 34 | 16 | 0.5588 | 2557 |
| 38402 | 224 | 16 | 0.5357 | 2504 |
| 38401 | 230 | 15 | 0.587 | 2221 |
| 38386 | 208 | 15 | 1.5002 | 3551 |
| 38366 | 415 | 15 | 1.5038 | 3555 |
| 38365 | 280 | 15 | 1.0001 | 2899 |
| 38364 | 285 | 15 | 1.0001 | 2899 |
| 381097 | 143 | 12 | 1.4267 | 1910 |
| 38373 | 48 | 15 | 1.8336 | 3926 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 38 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 38363 | 190 | 15 | 0.9264 | 2791 |
| 38362 | 153 | 8 | 3.4596 | 1022 |
| 38727 | 304 | 15 | 2.5963 | 4672 |
| 38728 | 120 | 15 | 5.726 | 6938 |
| 38729 | 70 | 15 | 2.8869 | 4926 |
| 38730 | 69 | 15 | 2.7402 | 4799 |
| 38429 | 218 | 12 | 4.2469 | 3295 |
| 38430 | 100 | 12 | 11.3117 | 5378 |
| 38738 | 86 | 12 | 1.0001 | 1599 |
| 38739 | 90 | 12 | 15.2867 | 6252 |
| 38431 | 162 | 12 | 1.2347 | 1777 |
| 38432 | 74 | 12 | 5.7935 | 3849 |
| 38433 | 196 | 12 | 1.0001 | 1599 |
| 38434 | 378 | 12 | 4.5364 | 3406 |
| 38465 | 16 | 8 | 9.3531 | 1681 |
| 38466 | 166 | 8 | 21.6208 | 2556 |
| 38467 | 157 | 8 | 12.9741 | 1980 |
| 38468 | 148 | 8 | 10.0572 | 1743 |
| 38469 | 239 | 8 | 13.2057 | 1997 |
| 38470 | 78 | 8 | 15.0523 | 2132 |
| 38793 | 108 | 8 | 13.7771 | 2040 |
| 38471 | 106 | 8 | 7.0647 | 1461 |
| 38435 | 135 | 12 | 11.1502 | 5340 |
| 38436 | 150 | 12 | 10.7753 | 5249 |
| 38437 | 174 | 12 | 4.914 | 3545 |
| 38438 | 350 | 12 | 0.6 | 1239 |
| 38731 | 394 | 8 | 6.3886 | 1389 |
| 38733 | 310 | 8 | 4.3137 | 1142 |
| 38734 | 406 | 8 | 6.7964 | 1433 |
| 38735 | 105 | 8 | 8.6898 | 1620 |

| Basin 39 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 39156 | 455 | 24 | 1.2023 | 1133 |
| 39155 | 194 | 24 | 1.1392 | 838 |
| 39154 | 116 | 24 | 0.888 | 9568 |
| 39153 | 116 | 24 | 0.8793 | 9521 |
| 39152 | 116 | 24 | 0.888 | 9568 |
| 39151 | 505 | 24 | 0.4792 | 7029 |
| 39150 | 95 | 24 | 1.7266 | 3342 |
| 39149 | 139 | 24 | 0.6331 | 8079 |
| 39173 | 140 | 24 | 0.6572 | 8231 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 39 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 39169 | 300 | 24 | 0.6667 | 8291 |
| 39168 | 147 | 24 | 0.2857 | 5427 |
| 39167 | 90 | 24 | 0.3 | 5561 |
| 39166 | 178 | 24 | 0.3652 | 6136 |
| 39164 | 255 | 24 | 0.2275 | 4842 |
| 39163 | 201 | 10 | 0.4527 | 655 |
| 39249 | 123 | 10 | 0.4309 | 639 |
| 39248 | 174 | 10 | 0.6437 | 781 |
| 39247 | 405 | 10 | 0.3358 | 564 |
| 39225 | 140 | 10 | 0.2786 | 514 |
| 39224 | 234 | 10 | 0.4103 | 623 |
| 39218 | 396 | 10 | 0.3838 | 603 |
| 39214 | 126 | 10 | 0.3095 | 541 |
| 39213 | 169 | 10 | 0.432 | 639 |
| 39195265 | 89 | 8 | 0.5281 | 399 |
| 39195288 | 153 | 8 | 1.2223 | 608 |
| 39195270 | 77 | 8 | 0.5065 | 391 |
| 39195272 | 145 | 8 | 0.9311 | 530 |
| 39208 | 300 | 8 | 4.5146 | 1168 |
| 39207 | 220 | 8 | 2.4098 | 853 |
| 39206 | 123 | 8 | 7.6647 | 1522 |
| 39204 | 184 | 8 | 10.6578 | 1794 |
| 39203 | 179 | 8 | 3.8576 | 1080 |
| 39195 | 338 | 8 | 9.0007 | 1649 |
| 39194 | 130 | 8 | 9.4262 | 1688 |
| 39193 | 218 | 8 | 22.8691 | 2628 |
| 39192 | 279 | 8 | 9.2726 | 1674 |
| 39406 | 127 | 8 | 0.5039 | 390 |
| 39405 | 278 | 8 | 9.4775 | 1692 |
| 39390 | 150 | 8 | 0.7667 | 481 |
| 39356 | 85 | 8 | 0.7647 | 481 |
| 39355 | 77 | 8 | 4.3027 | 1140 |
| 39354 | 139 | 8 | 23.7742 | 2680 |
| 39353 | 374 | 8 | 24.2091 | 2704 |
| 39404 | 174 | 8 | 7.7125 | 1526 |
| 39399 | 9 | 8 | 7.8014 | 1535 |
| 39398 | 60 | 8 | 7.3531 | 1490 |
| 39397 | 400 | 8 | 5.3727 | 1274 |
| 39396 | 350 | 8 | 2.3549 | 843 |
| 39395 | 265 | 8 | 4.1053 | 1114 |
| 39486 | 275 | 8 | 3.9485 | 1092 |
| 39485 | 47 | 8 | 9.6402 | 1707 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 39 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 39172 | 65 | 15 | 4.574 | 6201 |
| 39171 | 292 | 10 | 6.662 | 2511 |
| 39170 | 246 | 10 | 6.477 | 2476 |
| 39259 | 394 | 10 | 6.5879 | 2497 |
| 39258 | 403 | 10 | 5.8412 | 2351 |
| 39257 | 407 | 10 | 4.0081 | 1948 |
| 39256 | 45 | 10 | 3.5133 | 1824 |
| 39255 | 412 | 10 | 5.6693 | 2317 |
| 39254 | 145 | 10 | 5.8028 | 2344 |
| 39253 | 285 | 10 | 3.6164 | 1850 |
| 39252 | 159 | 10 | 4.615 | 2090 |
| 39251 | 241 | 10 | 5.1312 | 2204 |
| 39250 | 175 | 10 | 10.2535 | 3115 |
| 39522 | 147 | 10 | 10.9494 | 3219 |
| 39521 | 246 | 10 | 9.5555 | 3008 |
| 39520 | 125 | 10 | 7.945 | 2742 |
| 39519 | 329 | 10 | 5.968 | 2377 |
| 39518 | 287 | 8 | 15.959 | 2196 |
| 39525 | 318 | 8 | 10.2228 | 1757 |
| 39524 | 97 | 12 | 6.4152 | 4050 |
| 39575 | 150 | 12 | 8.8343 | 4753 |
| 39574 | 82 | 12 | 7.2876 | 4317 |
| 39573 | 74 | 8 | 8.367 | 1590 |
| 39572 | 169 | 8 | 0.4852 | 383 |
| 39571 | 174 | 8 | 9.4907 | 1693 |
| 39570 | 157 | 8 | 5.0382 | 1234 |
| 39568 | 221 | 8 | 3.1237 | 971 |
| 39567 | 169 | 8 | 0.8876 | 518 |
| 39565 | 158 | 8 | 1.8991 | 757 |
| 39564 | 233 | 8 | 8.5287 | 1605 |
| 39563 | 189 | 8 | 4.7142 | 1193 |
| 39562 | 92 | 8 | 5.7268 | 1315 |
| 39561 | 124 | 8 | 5.7676 | 1320 |
| 39798 | 11 | 8 | 26.8251 | 2847 |
| 39797 | 116 | 8 | 0.3966 | 346 |
| 39796 | 142 | 8 | 2.6277 | 891 |
| 39795 | 279 | 8 | 6.1658 | 1365 |
| 39191 | 168 | 12 | 2.8762 | 2712 |
| 39190 | 220 | 12 | 2.2733 | 2411 |
| 39189 | 391 | 12 | 4.5828 | 3423 |
| 39188 | 205 | 12 | 2.8304 | 2690 |
| 39181 | 267 | 12 | 9.0973 | 4823 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 39 | | | | |
|-----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 39180 | 212 | 12 | 0.4764 | 1104 |
| 39179 | 175 | 12 | 3.2016 | 2861 |
| 39306 | 400 | 12 | 3.9781 | 3189 |
| 39305 | 400 | 12 | 0.725 | 1362 |
| 39304 | 399 | 8 | 0.6592 | 446 |
| 39303 | 206 | 10 | 4.4267 | 2047 |
| 39300 | 163 | 8 | 0.9939 | 548 |
| 39299 | 214 | 10 | 3.769 | 1889 |
| 39333 | 109 | 8 | 0.9909 | 547 |
| 39332 | 116 | 10 | 1.3277 | 1121 |
| 39331 | 74 | 8 | 1.0811 | 572 |
| 39484 | 69 | 8 | 9.6828 | 1710 |
| 39480 | 207 | 8 | 4.5748 | 1176 |
| 39479 | 371 | 8 | 8.4015 | 1593 |
| 39436089a | 101 | 8 | 1.0001 | 550 |
| 39436089 | 207 | 8 | 1.8796 | 754 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 40 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 40667 | 267 | 6 | 13.2996 | 918 |
| 40666 | 97 | 6 | 8.5569 | 737 |
| 40666a | 2 | 4 | 195 | 1190 |
| 40102 | 164 | 10 | 0.6098 | 767 |
| 40103 | 189 | 10 | 4.7779 | 2147 |
| 40104 | 123 | 10 | 0.3089 | 546 |
| 40105 | 177 | 10 | 0.3051 | 543 |
| 40106 | 394 | 10 | 0.2995 | 538 |
| 40107 | 173 | 10 | 0.4277 | 642 |
| 40108 | 118 | 8 | 1.5256 | 671 |
| 40109 | 241 | 10 | 1.3238 | 1130 |
| 40116 | 180 | 8 | 10.5584 | 1765 |
| 40117 | 337 | 8 | 8.6074 | 1593 |
| 40118 | 215 | 8 | 8.8484 | 1616 |
| 40119 | 168 | 8 | 11.5768 | 1848 |
| 40120 | 237 | 8 | 10.2989 | 1743 |
| 40444 | 217 | 8 | 9.6343 | 1686 |
| 40443 | 250 | 8 | 11.9974 | 1881 |
| 40442 | 317 | 8 | 7.2429 | 1462 |
| 40441 | 294 | 8 | 11.667 | 1855 |
| 40440 | 247 | 8 | 15.6119 | 2146 |
| 40439 | 196 | 8 | 13.8031 | 2018 |
| 40438 | 162 | 8 | 14.6613 | 2080 |
| 40437 | 214 | 8 | 13.5431 | 1999 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 41 | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 41117 | 25 | 18 | 0.2 | 2108 |
| 41119 | 276 | 12 | 4.0068 | 3201 |
| 41180 | 283 | 12 | 5.5208 | 3757 |
| 41181 | 400 | 12 | 2.5258 | 2541 |
| 41197 | 200 | 10 | 5.207 | 2220 |
| 41198 | 292 | 10 | 6.1038 | 2404 |
| 41199 | 496 | 10 | 3.3507 | 1781 |
| 41200 | 95 | 10 | 4.4465 | 2052 |
| 41201 | 242 | 10 | 4.5916 | 2085 |
| 41202 | 223 | 10 | 2.6422 | 1581 |
| 41203 | 184 | 10 | 6.1201 | 2407 |
| 41204 | 161 | 10 | 5.0063 | 2177 |
| 41205 | 207 | 10 | 4.3519 | 2030 |
| 41206 | 231 | 10 | 5.2018 | 2219 |
| 41207 | 98 | 10 | 9.2226 | 2955 |
| 41208 | 98 | 10 | 5.2111 | 2221 |
| 41209 | 251 | 10 | 7.5513 | 2674 |
| 41210 | 55 | 10 | 70.9306 | 8194 |
| 41458 | 195 | 10 | 1.2565 | 1091 |
| 41459 | 399 | 10 | 0.975 | 961 |
| 41460 | 228 | 10 | 1.6844 | 1263 |
| 41461 | 267 | 10 | 1.4983 | 1191 |
| 41462 | 111 | 10 | 5.3228 | 2245 |
| 41465 | 197 | 10 | 1.848 | 1323 |
| 41466 | 140 | 10 | 2.844 | 1641 |
| 41467 | 173 | 10 | 3.4587 | 1809 |
| 41468 | 165 | 10 | 5.201 | 2219 |
| 41469 | 385 | 10 | 0.5273 | 706 |
| 41470 | 247 | 8 | 2.7946 | 908 |
| 41471 | 180 | 8 | 0.5 | 384 |
| 41472 | 229 | 8 | 0.524 | 393 |
| 41473 | 51 | 8 | 3.7477 | 1051 |
| 41474 | 68 | 8 | 3.3696 | 997 |
| 41479 | 267 | 8 | 1.0862 | 566 |
| 41482 | 20 | 8 | 1.0001 | 543 |
| 41483 | 185 | 8 | 0.5027 | 385 |
| 41568 | 242 | 8 | 0.5 | 384 |
| 41546 | 50 | 8 | 0.5 | 384 |
| 41547 | 167 | 8 | 0.503 | 385 |
| 41548 | 187 | 8 | 0.4973 | 383 |
| 41549 | 177 | 8 | 0.4972 | 383 |
| 41550 | 200 | 8 | 0.5 | 384 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 41 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 41551 | 206 | 8 | 0.5 | 384 |
| 41552 | 137 | 8 | 0.4964 | 383 |
| 41555 | 307 | 8 | 0.4853 | 378 |
| 41556 | 28 | 8 | 3.6095 | 1032 |
| 41557 | 90 | 8 | 1.1556 | 584 |
| 41558 | 148 | 8 | 0.7027 | 455 |
| 41487 | 42 | 10 | 11.8927 | 3355 |
| 41506 | 167 | 8 | 4.4295 | 1143 |
| 41507 | 55 | 8 | 5.5357 | 1278 |
| 41526 | 199 | 8 | 2.9561 | 934 |
| 41530 | 200 | 8 | 7.254 | 1463 |
| 41488 | 219 | 8 | 0.8676 | 512 |
| 41489 | 359 | 8 | 0.8524 | 501 |
| 41504 | 171 | 8 | 15.2867 | 2123 |
| 41503 | 90 | 8 | 4.226 | 1116 |
| 41502 | 148 | 8 | 4.2606 | 1121 |
| 41501 | 270 | 8 | 4.2446 | 1119 |
| 41182 | 400 | 10 | 1.3001 | 1109 |
| 41183 | 313 | 10 | 0.9361 | 941 |
| 41184 | 88 | 10 | 24.3876 | 4805 |
| 41185 | 193 | 10 | 3.0844 | 1709 |
| 41186 | 310 | 10 | 23.1095 | 4677 |
| 41187 | 30 | 10 | 1.3668 | 1137 |
| 41188 | 260 | 10 | 0.9577 | 952 |
| 41189 | 100 | 10 | 33.5763 | 5638 |
| 41190 | 230 | 10 | 4.1645 | 1985 |
| 41191 | 250 | 10 | 1.4602 | 1176 |
| 41192 | 390 | 10 | 4.5303 | 2071 |
| 41193 | 195 | 10 | 2.0517 | 1394 |
| 41611 | 127 | 10 | 8.8534 | 2895 |
| 41116 | 131 | 16 | 0.6718 | 2804 |
| 41115 | 372 | 16 | 0.6989 | 2860 |
| 41114 | 135 | 16 | 1.3038 | 3906 |
| 41113 | 611 | 16 | 0.766 | 2994 |
| 41112 | 137 | 16 | 0.2555 | 1729 |
| 41111 | 327 | 16 | 0.2508 | 1713 |
| 41179 | 24 | 16 | 3.6691 | 6553 |
| 41110 | 44 | 16 | 0.4773 | 2363 |
| 41120 | 230 | 15 | 1.4349 | 3473 |
| 41121 | 199 | 15 | 1.4675 | 3512 |
| 41122 | 44 | 15 | 1.8185 | 3910 |
| 41127 | 90 | 12 | 2.0782 | 2305 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 41 | | | Capacity ¹ (gpm) |
|---------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 41158 | 190 | 12 | 2.3111 | 2431 | |
| 41128 | 14 | 12 | 1.0001 | 1599 | |
| 41129 | 320 | 12 | 1.3251 | 1841 | |
| 4182808 | 175 | 12 | 0.5714 | 1209 | |
| 4182806 | 19 | 12 | 1.0527 | 1641 | |
| 4182803 | 291 | 12 | 0.4811 | 1109 | |
| 4182801 | 152 | 12 | 0.4868 | 1116 | |
| 41362 | 16 | 12 | 0.9375 | 1548 | |
| 41363 | 367 | 12 | 0.327 | 914 | |
| 41366 | 318 | 12 | 0.5252 | 1159 | |
| 41367 | 268 | 12 | 0.8881 | 1507 | |
| 41368 | 46 | 10 | 0.7826 | 861 | |
| 41369 | 44 | 10 | 2.0231 | 1384 | |
| 41370 | 25 | 10 | 0.8 | 870 | |
| 41371 | 102 | 10 | 0.5098 | 695 | |
| 41372 | 22 | 10 | 1.0001 | 973 | |
| 41373 | 23 | 10 | 1.8699 | 1330 | |
| 41375 | 147 | 10 | 1.0545 | 999 | |
| 41376 | 131 | 10 | 2.2219 | 1450 | |
| 41377 | 191 | 10 | 2.0266 | 1385 | |
| 41378 | 269 | 10 | 1.8591 | 1327 | |
| 41379 | 395 | 10 | 1.5192 | 1199 | |
| 41380 | 310 | 8 | 7.9932 | 1554 | |
| 41381 | 325 | 8 | 9.6477 | 1707 | |
| 41382 | 160 | 8 | 17.6695 | 2310 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 42 | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 42152 | 200 | 8 | 2.4507 | 860 |
| 42153 | 207 | 8 | 4.7881 | 1203 |
| 42154 | 200 | 8 | 4.7052 | 1192 |
| 42155 | 198 | 8 | 1.7174 | 720 |
| 42156 | 229 | 8 | 2.5336 | 875 |
| 42157 | 241 | 8 | 1.4524 | 662 |
| 42179 | 189 | 8 | 6.7827 | 1431 |
| 42184 | 55 | 8 | 6.212 | 1370 |
| 42185 | 200 | 8 | 2.6009 | 886 |
| 42186 | 244 | 8 | 6.5715 | 1409 |
| 42187 | 173 | 8 | 1.6765 | 712 |
| 42188 | 87 | 8 | 6.913 | 1445 |
| 42190 | 222 | 8 | 6.6589 | 1418 |
| 42191 | 340 | 8 | 9.0218 | 1651 |
| 42193 | 250 | 8 | 1.2001 | 602 |
| 42194 | 152 | 8 | 6.4608 | 1397 |
| 42214 | 141 | 8 | 1.7024 | 717 |
| 42215 | 131 | 8 | 7.2634 | 1481 |
| 42216 | 212 | 8 | 10.242 | 1759 |
| 42231 | 126 | 8 | 12.5663 | 1948 |
| 42232 | 278 | 10 | 0.6943 | 811 |
| 42235 | 103 | 8 | 2.0393 | 785 |
| 42236 | 280 | 8 | 22.0915 | 2583 |
| 42240 | 280 | 8 | 23.1693 | 2646 |
| 42241 | 150 | 8 | 16.0148 | 2200 |
| 42244 | 33 | 8 | 2.3643 | 845 |
| 42269 | 178 | 8 | 9.0822 | 1656 |
| 42293 | 315 | 8 | 5.3218 | 1268 |
| 42294 | 17 | 12 | 0.2353 | 776 |
| 42295 | 348 | 12 | 0.4224 | 1039 |
| 42296 | 300 | 12 | 0.4933 | 1123 |
| 42297 | 111 | 12 | 0.6036 | 1242 |
| 42298 | 144 | 12 | 0.3958 | 1006 |
| 42299 | 121 | 12 | 0.3141 | 896 |
| 42300 | 125 | 12 | 0.304 | 882 |
| 42301 | 125 | 10 | 2.745 | 1612 |
| 42302 | 129 | 10 | 2.6366 | 1580 |
| 42303 | 125 | 10 | 6.6547 | 2510 |
| 42306 | 216 | 12 | 0.338 | 930 |
| 42308 | 392 | 12 | 4.1797 | 3269 |
| 42309 | 192 | 12 | 0.3438 | 938 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 42 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 42310 | 138 | 10 | 6.7837 | 2534 |
| 42311 | 107 | 12 | 8.9137 | 4774 |
| 42312 | 237 | 12 | 1.2659 | 1799 |
| 42313 | 68 | 12 | 4.1949 | 3275 |
| 42314 | 176 | 12 | 6.2337 | 3993 |
| 42318 | 188 | 8 | 9.3653 | 1682 |
| 42319 | 214 | 8 | 9.013 | 1650 |
| 42320 | 81 | 8 | 6.1846 | 1367 |
| 42351 | 188 | 8 | 7.5641 | 1512 |
| 42397 | 277 | 12 | 0.2527 | 804 |
| 42356 | 116 | 12 | 0.2414 | 786 |
| 42355 | 399 | 12 | 0.2682 | 828 |
| 42325 | 108 | 12 | 0.287 | 857 |
| 42326 | 212 | 12 | 1.0378 | 1629 |
| 42327 | 126 | 12 | 0.9524 | 1561 |
| 42328 | 84 | 12 | 0.6548 | 1294 |
| 42329 | 457 | 12 | 1.5319 | 1979 |
| 42330 | 267 | 15 | 0.2921 | 1567 |
| 42331 | 357 | 15 | 0.2717 | 1511 |
| 42332 | 79 | 15 | 0.2405 | 1422 |
| 42333 | 379 | 15 | 0.2797 | 1533 |
| 42334 | 293 | 15 | 0.2833 | 1543 |
| 42335 | 192 | 15 | 0.401 | 1836 |
| 42337 | 84 | 15 | 0.2738 | 1517 |
| 42338 | 90 | 15 | 0.2667 | 1497 |
| 42339 | 90 | 15 | 0.2556 | 1466 |
| 42340 | 67 | 15 | 0.4627 | 1972 |
| 42341 | 378 | 15 | 0.2778 | 1528 |
| 42342 | 160 | 15 | 0.2813 | 1538 |
| 42343 | 142 | 15 | 1.0564 | 2980 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 43 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 242 | 250 | 12 | 0.76 | 1394 |
| 243 | 18 | 12 | 0.3889 | 997 |
| 244 | 315 | 12 | 3.3956 | 2947 |
| 245 | 50 | 12 | 3.1616 | 2843 |
| 246 | 216 | 12 | 2.1162 | 2326 |
| 249 | 248 | 12 | 4.4641 | 3379 |
| 321 | 301 | 14 | 0.299 | 1319 |
| 322 | 180 | 14 | 0.3 | 1321 |
| 323 | 48 | 14 | 0.0208 | 348 |
| 1 | 400 | 12 | 5.551 | 3768 |

| Basin 44* | | | | |
|-----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 209 | 146.7 | 8 | 0.57 | 411 |
| 210 | 82.1 | 8 | 0.59 | 418 |
| 212 | 394.9 | 8 | 0.5 | 385 |
| 213 | 94.4 | 8 | 0.5 | 385 |
| 214 | 65.2 | 8 | 0.5 | 385 |
| 215 | 81.9 | 8 | 0.5 | 385 |
| 205 | 74.2 | 8 | 0.5 | 385 |
| 204 | 263.5 | 8 | 0.5 | 385 |
| 203 | 107.4 | 8 | 0.5 | 385 |
| 80528 | 129.1 | 8 | 0.4 | 344 |
| 207 | 135.7 | 8 | 0.5 | 385 |
| 206 | 278.8 | 8 | 0.5 | 385 |
| 219 | 305.8 | 8 | 0.9 | 516 |
| 218 | 104.6 | 8 | 0.67 | 445 |
| 217 | 120.7 | 8 | 1.03 | 552 |
| 211 | 111 | 8 | 0.45 | 365 |
| 202 | 132.1 | 8 | 0.24 | 266 |

*: Basin 44 sewers are not modeled. Information shown is the best available from the City’s as-built data.

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 45 | | Capacity ¹ (gpm) |
|-------|-------------|---------------|-----------|-----------------------------|
| | | Diameter (in) | Slope (%) | |
| 45101 | 17 | 10 | 30.4365 | 5419 |
| 45102 | 82 | 10 | 0.061 | 243 |
| 45103 | 150 | 10 | 3.3352 | 1794 |
| 45104 | 48 | 10 | 5.925 | 2391 |
| 45105 | 69 | 10 | 23.2701 | 4739 |
| 45106 | 110 | 10 | 11.9299 | 3393 |
| 45107 | 381 | 10 | 13.3509 | 3589 |
| 45108 | 361 | 10 | 7.4194 | 2676 |
| 45144 | 314 | 10 | 5.7155 | 2349 |
| 45145 | 396 | 10 | 4.6033 | 2108 |
| 45146 | 285 | 10 | 4.5288 | 2091 |
| 45147 | 166 | 10 | 7.1686 | 2630 |
| 45263 | 390 | 10 | 3.5935 | 1862 |
| 45267 | 415 | 10 | 5.7748 | 2361 |
| 45268 | 413 | 10 | 3.8475 | 1927 |
| 45269 | 431 | 10 | 1.8688 | 1343 |
| 45123 | 8 | 12 | 48.9938 | 1193 |
| 45124 | 73 | 12 | 1.7903 | 2140 |
| 45125 | 123 | 12 | 0.9805 | 1583 |
| 45126 | 98 | 12 | 1.4644 | 1935 |
| 45127 | 190 | 10 | 3.2933 | 1783 |
| 45128 | 65 | 10 | 39.7192 | 6191 |
| 45129 | 259 | 10 | 24.3112 | 4844 |
| 45130 | 147 | 10 | 4.4276 | 2067 |
| 45154 | 143 | 10 | 8.9406 | 2937 |
| 45155 | 40 | 10 | 6.846 | 2570 |
| 45156 | 400 | 10 | 10.4873 | 3181 |
| 45157 | 384 | 10 | 4.3887 | 2058 |
| 45158 | 180 | 10 | 2.2093 | 1460 |
| 45159 | 200 | 10 | 4.5207 | 2089 |
| 45274 | 216 | 10 | 5.6214 | 2329 |
| 45277 | 121 | 10 | 2.6354 | 1595 |
| 45278 | 344 | 10 | 3.4733 | 1831 |
| 45279 | 159 | 10 | 2.086 | 1419 |
| 45280 | 74 | 10 | 1.5858 | 1237 |
| 45283 | 97 | 10 | 2.3993 | 1522 |
| 45284 | 286 | 10 | 2.6233 | 1591 |
| 45285 | 110 | 10 | 1.2989 | 1120 |
| 45318 | 392 | 10 | 2.6256 | 1592 |
| 45319 | 210 | 10 | 0.8683 | 915 |
| 45320 | 340 | 10 | 0.8495 | 905 |
| 45321 | 272 | 10 | 1.9078 | 1357 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 45 | | | | |
|----------|-------------|---------------|-----------|-----------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm) |
| 45322 | 225 | 10 | 0.3748 | 601 |
| 45323 | 168 | 10 | 1.1957 | 1074 |
| 45324 | 264 | 10 | 1.2142 | 1082 |
| 45350 | 181 | 10 | 2.0669 | 1412 |
| 45217 | 391 | 10 | 4.3441 | 2047 |
| 4582439 | 48 | 10 | 11.7804 | 3372 |
| 45418 | 364 | 10 | 0.5524 | 730 |
| 45419 | 342 | 10 | 0.2628 | 504 |
| 45420 | 361 | 10 | 0.3281 | 563 |
| 45362 | 356 | 10 | 0.2967 | 535 |
| 45000 | 50 | 60 | 0.002 | 5228 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 46 | | | Capacity ¹ (gpm) |
|---------|-------------|---------------|-----------|------|-----------------------------|
| | | Diameter (in) | Slope (%) | | |
| 46257 | 75.6 | 10 | 0.6821 | 811 | |
| 46180 | 250 | 10 | 0.8024 | 880 | |
| 46154 | 193 | 10 | 0.6199 | 773 | |
| 46151 | 402.5 | 10 | 1.6899 | 1277 | |
| 46149 | 233.9 | 10 | 1.1538 | 1055 | |
| 46222 | 290.1 | 10 | 10.1575 | 3131 | |
| 46223 | 185.2 | 10 | 2.779 | 1638 | |
| 46267 | 298 | 8 | 0.4996 | 384 | |
| 46256 | 241 | 10 | 0.8888 | 926 | |
| 46207 | 335 | 10 | 0.901 | 932 | |
| 46153 | 136.8 | 10 | 5.257 | 2252 | |
| 46165 | 23 | 8 | 11.0053 | 1802 | |
| 46150 | 50 | 10 | 2.2189 | 1463 | |
| 46140 | 101 | 12 | 18.4133 | 6862 | |
| 46145 | 81 | 12 | 4.1169 | 3245 | |
| 46146 | 326.2 | 8 | 0.668 | 444 | |
| 46152 | 156.2 | 10 | 0.6362 | 784 | |
| 46181 | 40.9 | 12 | 1.0123 | 1609 | |
| 46158 | 360 | 8 | 0.5 | 384 | |
| 46133 | 43 | 16 | 1.6979 | 4485 | |
| 46134 | 34.9 | 16 | 4.2053 | 7058 | |
| 46135 | 49.6 | 16 | 0.9743 | 3397 | |
| 46136 | 399.6 | 12 | 2.5908 | 2574 | |
| 46137 | 264 | 12 | 5.1688 | 3636 | |
| 46138 | 303 | 12 | 3.9727 | 3187 | |
| 4684414 | 50 | 10 | 0.9855 | 975 | |
| 46139 | 190 | 12 | 7.3488 | 4335 | |
| 46148 | 243 | 12 | 7.6567 | 4425 | |
| 46157 | 17 | 8 | 0.5882 | 417 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 47* | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|-------------------------------|
| | | Diameter (in) | Slope (%) | |
| 116 | 231.1 | 8 | 0.44 | 361 |
| 111 | 122.2 | 8 | 0.49 | 381 |
| 110 | 172.2 | 8 | 0.5 | 385 |
| 109 | 61 | 8 | 0.5 | 385 |
| 108 | 98 | 8 | 0.5 | 385 |
| 104 | 133 | 8 | 0.5 | 385 |
| 103 | 245.7 | 8 | 0.5 | 385 |
| 102 | 69.5 | 8 | 0.5 | 385 |
| 101 | 105.1 | 8 | 0.5 | 385 |
| 138 | 323 | 8 | 0.5 | 385 |
| 123 | 40.3 | 8 | 0.5 | 385 |
| 107 | 150 | 8 | 0.63 | 432 |
| 134 | 219.4 | 8 | 0.93 | 524 |
| 144 | 149 | 8 | 1 | 544 |
| 120 | 72 | 8 | 1.01 | 547 |
| 121 | 147.1 | 8 | 1.06 | 560 |
| 78959 | 51.5 | 8 | 1.3 | 620 |
| 106 | 224.1 | 8 | 1.65 | 699 |
| 157 | 312.2 | 8 | 1.7 | 709 |
| 155 | 249 | 8 | 1.7 | 709 |
| 115 | 39 | 8 | 1.71 | 711 |
| 146 | 30.3 | 8 | 1.93 | 755 |
| 156 | 145.7 | 8 | 3 | 942 |
| 154 | 159.1 | 8 | 4.5 | 1154 |
| 118 | 167 | 8 | 4.7 | 1179 |
| 142 | 82 | 8 | 4.76 | 1186 |
| 105 | 93.3 | 8 | 5 | 1216 |
| 148 | 72.6 | 8 | 5.2 | 1240 |
| 150 | 323.2 | 8 | 5.71 | 1299 |
| 143 | 55 | 8 | 6.02 | 1334 |
| 152 | 121.2 | 8 | 6.48 | 1384 |
| 141 | 163 | 8 | 6.8 | 1418 |
| 153 | 132.4 | 8 | 6.92 | 1431 |
| 124 | 114 | 8 | 7.1 | 1449 |
| 145 | 20 | 8 | 7.5 | 1489 |
| 430999 | 186 | 8 | 8.66 | 1600 |
| 128 | 87 | 8 | 8.9 | 1622 |
| 149 | 286.3 | 8 | 9.29 | 1657 |
| 114 | 175.4 | 8 | 9.9 | 1711 |
| 151 | 84.7 | 8 | 11.22 | 1822 |
| 430986 | 103.6 | 8 | 11.55 | 1848 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 47* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 85500 | 35 | 8 | 11.86 | 1873 |
| 126 | 164.8 | 8 | 14.9 | 2099 |
| 125 | 161.3 | 8 | 15 | 2106 |
| 140 | 152 | 8 | 16.6 | 2216 |
| 127 | 136.2 | 8 | 17.18 | 2254 |
| 430978 | 26 | 8 | 17.27 | 2260 |
| 430982 | 76 | 8 | 19.5 | 2401 |
| 117 | 60.2 | 8 | 20.6 | 2468 |
| 119 | 60.6 | 8 | 23.3 | 2625 |
| 130 | 184.1 | 8 | 24.2 | 2675 |
| 135 | 104.8 | 8 | 25.71 | 2757 |
| 112 | 49.1 | 8 | 35 | 3217 |
| 129 | 50 | 8 | 39.6 | 3422 |
| 137 | 40.9 | 8 | 999.99 | Unknown |
| 133 | 40.2 | 8 | 999.99 | Unknown |
| 136 | 38.3 | 8 | 0 | Unknown |
| 139 | 241.9 | 8 | 0 | Unknown |
| 113 | 94 | 8 | 999.99 | Unknown |
| 122 | 73 | 8 | 999.99 | Unknown |
| 78964 | 48.3 | 8 | 0 | Unknown |
| 81841 | 35 | 8 | 0 | Unknown |
| 82407 | 36 | 6 | 0 | Unknown |
| 82406 | 49 | 8 | 0 | Unknown |
| 82405 | 73 | 8 | 0 | Unknown |
| 82404 | 127 | 8 | 0 | Unknown |
| 82403 | 106 | 8 | 0 | Unknown |

*: Basin 47 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 48* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 118 | 239.1 | 12 | 0.65 | 2825 |
| 117 | 377 | 12 | 0.65 | 2825 |
| 182 | 30.9 | 10 | 0.28 | 3639 |
| 181 | 121.3 | 10 | 0.28 | 3639 |
| 132 | 399.3 | 8 | 0.4 | 5943 |
| 183 | 174.2 | 8 | 0.4 | 5943 |
| 180 | 295.4 | 8 | 0.4 | 5943 |
| 167 | 26.4 | 8 | 0.4 | 5943 |
| 163 | 73.2 | 8 | 0.4 | 5943 |
| 144 | 70.4 | 8 | 0.5 | 6179 |
| 145 | 107.4 | 8 | 0.5 | 6179 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 48* | | | Capacity ¹ (gpm)** |
|------|-------------|---------------|-----------|-------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 148 | 71.2 | 8 | 0.5 | 6179 | |
| 149 | 251.5 | 8 | 0.5 | 6179 | |
| 131 | 125.7 | 8 | 0.54 | 6263 | |
| 157 | 313.2 | 8 | 0.61 | 6397 | |
| 176 | 207.8 | 8 | 0.63 | 6433 | |
| 119 | 40.1 | 8 | 0.65 | 6469 | |
| 173 | 251.2 | 8 | 0.68 | 6520 | |
| 139 | 78.8 | 8 | 0.7 | 6553 | |
| 136 | 110.2 | 8 | 0.78 | 6678 | |
| 147 | 191.1 | 8 | 0.8 | 6707 | |
| 124 | 72.9 | 8 | 0.8 | 6707 | |
| 143 | 150.2 | 8 | 0.9 | 6847 | |
| 146 | 202.1 | 8 | 0.9 | 6847 | |
| 162 | 121 | 8 | 0.93 | 6886 | |
| 138 | 379.3 | 8 | 0.95 | 6912 | |
| 140 | 152.8 | 8 | 0.96 | 6924 | |
| 172 | 38.5 | 8 | 0.96 | 6924 | |
| 141 | 142.5 | 8 | 1 | 6974 | |
| 142 | 188.8 | 8 | 1 | 6974 | |
| 123 | 385.4 | 8 | 1 | 6974 | |
| 168 | 83.3 | 8 | 1 | 6974 | |
| 179 | 245.6 | 8 | 1.1 | 7091 | |
| 134 | 115.6 | 8 | 1.5 | 7485 | |
| 154 | 177.2 | 8 | 1.93 | 7822 | |
| 161 | 104.7 | 8 | 2 | 7870 | |
| 155 | 218.5 | 8 | 2.1 | 7938 | |
| 165 | 144.2 | 8 | 2.13 | 7957 | |
| 169 | 203.5 | 8 | 2.29 | 8059 | |
| 175 | 229.2 | 8 | 2.52 | 8194 | |
| 166 | 122.9 | 8 | 2.8 | 8347 | |
| 159 | 234.8 | 8 | 2.94 | 8418 | |
| 177 | 310.3 | 8 | 3.08 | 8487 | |
| 170 | 138.1 | 8 | 3.97 | 8871 | |
| 174 | 109.6 | 8 | 4.4 | 9032 | |
| 178 | 130.5 | 8 | 4.43 | 9042 | |
| 130 | 168.6 | 8 | 4.58 | 9095 | |
| 160 | 141.7 | 8 | 6.12 | 9567 | |
| 133 | 216 | 8 | 6.3 | 9616 | |
| 128 | 251.8 | 8 | 6.54 | 9678 | |
| 158 | 136.3 | 8 | 6.71 | 9722 | |
| 137 | 246.3 | 8 | 7.7 | 9958 | |
| 125 | 146.5 | 8 | 8.22 | 10073 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 48* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 156 | 180.6 | 8 | 8.7 | 10173 |
| 129 | 270.1 | 8 | 8.73 | 10179 |
| 122 | 156.6 | 8 | 9.1 | 10253 |
| 164 | 125.3 | 8 | 10.55 | 10521 |
| 127 | 135.4 | 8 | 12.61 | 10854 |
| 126 | 311.2 | 8 | 14.02 | 11056 |
| 135 | 151.9 | 8 | 18.2 | 11571 |
| 171 | 47.5 | 8 | 999.99 | Unknown |
| 20312 | 92.3 | 0 | 999.99 | Unknown |
| 20311 | 65 | 0 | 999.99 | Unknown |
| 20310 | 184.7 | 0 | 999.99 | Unknown |
| 20309 | 351.2 | 0 | 999.99 | Unknown |
| 20308 | 177 | 0 | 999.99 | Unknown |
| 20307 | 239.2 | 0 | 999.99 | Unknown |
| 20304 | 114.6 | 0 | 999.99 | Unknown |
| 20303 | 224.7 | 0 | 999.99 | Unknown |
| 20053 | 288.8 | 0 | 999.99 | Unknown |
| 20052 | 313.8 | 0 | 999.99 | Unknown |
| 20051 | 194.4 | 0 | 999.99 | Unknown |
| 20050 | 347.1 | 0 | 999.99 | Unknown |
| 20049 | 301 | 0 | 999.99 | Unknown |
| 19839 | 316.3 | 0 | 999.99 | Unknown |
| 19838 | 309.3 | 0 | 999.99 | Unknown |
| 19837 | 247 | 0 | 999.99 | Unknown |
| 19836 | 388.9 | 0 | 999.99 | Unknown |
| 19384 | 30.7 | 0 | 999.99 | Unknown |
| 19383 | 19.6 | 0 | 999.99 | Unknown |
| 19382 | 23.1 | 0 | 999.99 | Unknown |
| 19381 | 45.4 | 0 | 999.99 | Unknown |
| 19380 | 374 | 0 | 999.99 | Unknown |

*: Basin 48 sewers are not modeled. Information shown is the best available from the City's as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 50* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 102 | 277.1 | 8 | 0.5 | 385 |
| 104 | 132.3 | 8 | 0.5 | 385 |
| 145 | 139.2 | 8 | 0.5 | 385 |
| 674 | 219.4 | 8 | 0.5 | 385 |
| 105 | 212.6 | 8 | 0.5 | 385 |
| 148 | 148.5 | 8 | 0.5 | 385 |
| 699 | 91.1 | 8 | 0.5 | 385 |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 50* | | | Capacity ¹ (gpm)** |
|------|-------------|---------------|-----------|------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 697 | 206.6 | 8 | 0.5 | 385 | |
| 154 | 108.5 | 8 | 0.5 | 385 | |
| 152 | 120.1 | 8 | 0.5 | 385 | |
| 153 | 58 | 8 | 0.5 | 385 | |
| 155 | 145.9 | 8 | 0.5 | 385 | |
| 698 | 284 | 8 | 0.5 | 385 | |
| 665 | 158.6 | 8 | 0.52 | 392 | |
| 666 | 123.3 | 8 | 0.55 | 403 | |
| 673 | 403.4 | 8 | 0.58 | 414 | |
| 151 | 170.7 | 8 | 0.71 | 458 | |
| 552 | 102.8 | 6 | 3.45 | 469 | |
| 135 | 377.3 | 8 | 1 | 544 | |
| 147 | 388.3 | 8 | 1 | 544 | |
| 110 | 154.3 | 8 | 1.16 | 586 | |
| 115 | 97 | 8 | 1.29 | 618 | |
| 678 | 135.7 | 8 | 1.62 | 692 | |
| 675 | 120.1 | 8 | 1.73 | 715 | |
| 108 | 53.1 | 8 | 2.04 | 777 | |
| 124 | 205.8 | 8 | 2.2 | 807 | |
| 150 | 241.7 | 8 | 2.5 | 860 | |
| 131 | 174.5 | 8 | 2.51 | 862 | |
| 127 | 298 | 8 | 3.2 | 973 | |
| 845 | 20 | 8 | 3.38 | 1000 | |
| 113 | 179.8 | 8 | 3.81 | 1061 | |
| 101 | 160.3 | 8 | 4.4 | 1141 | |
| 670 | 360 | 8 | 5.64 | 1291 | |
| 157 | 223.4 | 8 | 6.1 | 1343 | |
| 156 | 198.8 | 8 | 6.2 | 1354 | |
| 117 | 342.1 | 8 | 6.41 | 1377 | |
| 116 | 142.2 | 8 | 6.48 | 1384 | |
| 149 | 233.2 | 8 | 7.24 | 1463 | |
| 130 | 122.7 | 8 | 7.48 | 1487 | |
| 136 | 133.1 | 8 | 7.7 | 1509 | |
| 132 | 224 | 8 | 8.29 | 1566 | |
| 109 | 131.4 | 8 | 8.33 | 1569 | |
| 123 | 149.3 | 8 | 8.5 | 1585 | |
| 694 | 47 | 8 | 8.5 | 1585 | |
| 118 | 124.8 | 8 | 9.3 | 1658 | |
| 120 | 236 | 8 | 10.9 | 1795 | |
| 111 | 172.2 | 8 | 11 | 1804 | |
| 122 | 161.6 | 8 | 12.3 | 1907 | |
| 671 | 150.3 | 8 | 12.87 | 1951 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 50* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 677 | 52.7 | 8 | 13.58 | 2004 |
| 125 | 138.7 | 8 | 14 | 2035 |
| 696 | 153.5 | 8 | 14.6 | 2078 |
| 134 | 106.1 | 8 | 14.84 | 2095 |
| 126 | 195.9 | 8 | 15 | 2106 |
| 139 | 132 | 8 | 15.61 | 2149 |
| 133 | 93.9 | 8 | 16.77 | 2227 |
| 146 | 196.2 | 8 | 17.12 | 2250 |
| 142 | 269 | 8 | 17.4 | 2268 |
| 672 | 88.3 | 8 | 18 | 2307 |
| 137 | 134.2 | 8 | 18.21 | 2321 |
| 143 | 41.6 | 8 | 18.4 | 2333 |
| 144 | 105.8 | 8 | 19 | 2370 |
| 121 | 96 | 8 | 19.9 | 2426 |
| 129 | 79.8 | 8 | 21.08 | 2497 |
| 128 | 150.9 | 8 | 21.52 | 2523 |
| 119 | 143.1 | 8 | 22.6 | 2585 |
| 695 | 301.9 | 8 | 27.2 | 2836 |
| 114 | 80.9 | 8 | 42.4 | 3541 |
| 669 | 114.8 | 8 | 45.43 | 3665 |
| 112 | 105.5 | 8 | 46 | 3688 |
| 667 | 92.7 | 0 | 0 | Unknown |
| 107 | 15.7 | 8 | 0 | Unknown |
| 81481 | 76.4 | 8 | 0 | Unknown |
| 668 | 101 | 8 | 0 | Unknown |
| 846 | 15.6 | 8 | 999.99 | Unknown |
| 106 | 36.8 | 8 | 999.99 | Unknown |
| 141 | 19.2 | 10 | 999.99 | Unknown |
| 138 | 40 | 8 | 999.99 | Unknown |
| 140 | 72.8 | 10 | 999.99 | Unknown |
| 676 | 196.4 | 8 | 999.99 | Unknown |
| 709 | 63.8 | 8 | 999.99 | Unknown |

*: Basin 50 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 51* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 715 | 129.9 | 8 | 0.02 | 77 |
| 843 | 335 | 6 | 0.5 | 179 |
| 173 | 149.9 | 6 | 0.7 | 211 |
| 292 | 23.8 | 8 | 0.4 | 344 |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 51* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 293 | 177.3 | 8 | 0.4 | 344 |
| 176 | 208.9 | 8 | 0.4 | 344 |
| 858 | 292.6 | 8 | 0.46 | 369 |
| 291 | 218 | 8 | 0.49 | 381 |
| 302 | 142.5 | 8 | 0.5 | 385 |
| 278 | 307.9 | 8 | 0.5 | 385 |
| 652 | 207.5 | 8 | 0.5 | 385 |
| 726 | 198.1 | 8 | 0.5 | 385 |
| 722 | 132 | 8 | 0.5 | 385 |
| 869 | 81 | 8 | 0.51 | 388 |
| 159 | 246.2 | 8 | 0.54 | 400 |
| 352 | 238.5 | 8 | 0.58 | 414 |
| 870 | 116 | 8 | 0.65 | 438 |
| 282 | 144 | 8 | 0.69 | 452 |
| 863 | 55 | 8 | 0.87 | 507 |
| 859 | 51 | 8 | 0.94 | 527 |
| 727 | 128.1 | 8 | 0.98 | 538 |
| 294 | 129.3 | 8 | 1.04 | 555 |
| 361 | 96.8 | 8 | 1.04 | 555 |
| 283 | 386.9 | 10 | 0.32 | 558 |
| 866 | 99 | 8 | 1.15 | 583 |
| 454327 | 122 | 6 | 6.49 | 643 |
| 281 | 316.7 | 8 | 1.89 | 748 |
| 716 | 30 | 8 | 2 | 769 |
| 862 | 124.2 | 8 | 2 | 769 |
| 868 | 31 | 8 | 2.1 | 788 |
| 298 | 126 | 8 | 2.34 | 832 |
| 865 | 25 | 8 | 2.38 | 839 |
| 413042 | 231 | 12 | 0.3 | 878 |
| 288 | 144.4 | 8 | 2.8 | 910 |
| 723 | 210.8 | 8 | 2.83 | 915 |
| 833 | 144.5 | 10 | 0.98 | 976 |
| 172 | 335.9 | 8 | 3.4 | 1003 |
| 784 | 95 | 8 | 3.52 | 1020 |
| 79248 | 243.4 | 8 | 3.7 | 1046 |
| 171 | 128.9 | 8 | 3.7 | 1046 |
| 413053 | 106.1 | 12 | 0.43 | 1051 |
| 861 | 79.5 | 8 | 3.87 | 1070 |
| 167 | 444 | 8 | 3.9 | 1074 |
| 287 | 139.8 | 8 | 3.9 | 1074 |
| 284 | 253.3 | 10 | 1.22 | 1089 |
| 289 | 343.6 | 8 | 4.2 | 1114 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 51* | | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|---------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 164 | 59 | 8 | 4.3 | 1128 | |
| 160 | 215 | 8 | 4.3 | 1128 | |
| 163 | 181.2 | 8 | 4.34 | 1133 | |
| 864 | 216 | 8 | 4.82 | 1194 | |
| 720 | 131.6 | 8 | 5.43 | 1267 | |
| 871 | 179.4 | 8 | 5.59 | 1286 | |
| 867 | 98 | 8 | 5.83 | 1313 | |
| 719 | 339 | 8 | 6.09 | 1342 | |
| 166 | 383.8 | 8 | 6.2 | 1354 | |
| 275 | 99 | 8 | 6.43 | 1379 | |
| 413046 | 84.8 | 12 | 0.8 | 1434 | |
| 162 | 134.6 | 8 | 7.07 | 1446 | |
| 161 | 108.8 | 8 | 7.07 | 1446 | |
| 413039 | 22.7 | 12 | 0.82 | 1452 | |
| 651 | 30.1 | 8 | 7.5 | 1489 | |
| 351 | 362.9 | 8 | 7.56 | 1495 | |
| 728 | 233.8 | 8 | 7.62 | 1501 | |
| 277 | 267.9 | 8 | 8.02 | 1540 | |
| 413057 | 242.9 | 12 | 0.95 | 1563 | |
| 785 | 133 | 8 | 9.29 | 1657 | |
| 718 | 262 | 8 | 11.14 | 1815 | |
| 844 | 217.5 | 10 | 5.58 | 2329 | |
| 721 | 96.2 | 8 | 19.23 | 2385 | |
| 413061 | 35.5 | 12 | 2.37 | 2468 | |
| 276 | 75.3 | 8 | 26.25 | 2786 | |
| 435840 | 28.3 | 8 | 67.67 | 4473 | |
| 362 | 19 | 8 | 0 | Unknown | |
| 79247 | 199.4 | 6 | 0 | Unknown | |
| 177 | 392.9 | 8 | 0 | Unknown | |
| 853 | 446 | 8 | 0 | Unknown | |
| 175 | 248.4 | 8 | 0 | Unknown | |
| 174 | 252.7 | 8 | 0 | Unknown | |
| 829 | 162.9 | 8 | 0 | Unknown | |
| 851 | 34 | 8 | 0 | Unknown | |
| 850 | 265.3 | 8 | 0 | Unknown | |
| 849 | 33.7 | 6 | 0 | Unknown | |
| 832 | 328.2 | 8 | 0 | Unknown | |
| 875 | 90 | 8 | 0 | Unknown | |
| 725 | 185.7 | 8 | 0 | Unknown | |
| 724 | 62.6 | 8 | 0 | Unknown | |
| 158 | 139 | 8 | 0 | Unknown | |
| 860 | 73.8 | 8 | 0 | Unknown | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 51* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 295 | 31 | 8 | 0 | Unknown |
| 710 | 55.2 | 8 | 0 | Unknown |
| 711 | 23.4 | 8 | 0 | Unknown |
| 297 | 83.8 | 8 | 999.99 | Unknown |
| 299 | 202.9 | 8 | 999.99 | Unknown |
| 357 | 321.3 | 8 | 999.99 | Unknown |
| 355 | 426.3 | 8 | 999.99 | Unknown |
| 356 | 229.8 | 8 | 999.99 | Unknown |
| 353 | 23.8 | 8 | 999.99 | Unknown |
| 296 | 141.1 | 8 | 999.99 | Unknown |
| 280 | 25.8 | 8 | 999.99 | Unknown |
| 876 | 36 | 6 | 999.99 | Unknown |
| 165 | 289 | 8 | 999.99 | Unknown |
| 824 | 15 | 8 | 999.99 | Unknown |

*: Basin 51 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 52* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 83974 | 27.8 | 6 | 0.14 | 94 |
| 551 | 41.2 | 6 | 0.4 | 160 |
| 548 | 111.1 | 6 | 1 | 253 |
| 549 | 77.1 | 6 | 1 | 253 |
| 560 | 16.2 | 8 | 0.28 | 288 |
| 530 | 90 | 8 | 0.4 | 344 |
| 559 | 371.2 | 8 | 0.4 | 344 |
| 554 | 100.1 | 8 | 0.4 | 344 |
| 639 | 102.1 | 8 | 0.4 | 344 |
| 567 | 235.6 | 8 | 0.4 | 344 |
| 486 | 44.5 | 8 | 0.4 | 344 |
| 491 | 98.4 | 8 | 0.4 | 344 |
| 492 | 389.5 | 8 | 0.41 | 348 |
| 565 | 282.1 | 8 | 0.42 | 352 |
| 431 | 345 | 8 | 0.44 | 361 |
| 536 | 115.3 | 8 | 0.5 | 385 |
| 532 | 43.4 | 8 | 0.5 | 385 |
| 534 | 242 | 8 | 0.5 | 385 |
| 537 | 279.3 | 8 | 0.5 | 385 |
| 496 | 260.3 | 8 | 0.5 | 385 |
| 495 | 160.3 | 8 | 0.5 | 385 |
| 475 | 247.4 | 8 | 0.5 | 385 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 52* | | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|-----|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 501 | 103.4 | 8 | 0.51 | 388 | |
| 436 | 388.9 | 8 | 0.51 | 388 | |
| 703 | 103.8 | 8 | 0.53 | 396 | |
| 494 | 209.9 | 8 | 0.53 | 396 | |
| 438 | 146 | 8 | 0.53 | 396 | |
| 439 | 379.8 | 8 | 0.54 | 400 | |
| 591 | 277.5 | 8 | 0.55 | 403 | |
| 540 | 87.4 | 8 | 0.57 | 411 | |
| 493 | 242.9 | 8 | 0.58 | 414 | |
| 440 | 254.2 | 8 | 0.58 | 414 | |
| 566 | 103.7 | 8 | 0.6 | 421 | |
| 505 | 150 | 8 | 0.61 | 425 | |
| 553 | 49.1 | 6 | 2.95 | 434 | |
| 503 | 38.3 | 8 | 0.64 | 435 | |
| 583 | 15 | 8 | 0.67 | 445 | |
| 509 | 47.7 | 8 | 0.71 | 458 | |
| 488 | 343.1 | 8 | 0.73 | 465 | |
| 516 | 413.3 | 8 | 0.74 | 468 | |
| 860 | 219.4 | 6 | 3.8 | 492 | |
| 482 | 387.2 | 8 | 0.82 | 492 | |
| 436567 | 63 | 8 | 0.84 | 498 | |
| 539 | 53 | 8 | 0.96 | 533 | |
| 987 | 207.6 | 8 | 1 | 544 | |
| 502 | 115 | 8 | 1 | 544 | |
| 857 | 172 | 8 | 1 | 544 | |
| 856 | 126.1 | 8 | 1.05 | 557 | |
| 855 | 112.9 | 8 | 1.05 | 557 | |
| 544 | 144.1 | 8 | 1.09 | 568 | |
| 984 | 91.9 | 8 | 1.13 | 578 | |
| 590 | 351.9 | 8 | 1.15 | 583 | |
| 545 | 40.6 | 8 | 1.17 | 588 | |
| 854 | 85.9 | 8 | 1.27 | 613 | |
| 588 | 255.4 | 8 | 1.28 | 615 | |
| 513 | 135.3 | 8 | 1.32 | 625 | |
| 504 | 187.1 | 8 | 1.58 | 684 | |
| 85421 | 96.4 | 8 | 1.75 | 719 | |
| 481 | 207.2 | 8 | 1.91 | 752 | |
| 572 | 144.1 | 8 | 2 | 769 | |
| 584 | 377.1 | 8 | 2 | 769 | |
| 638 | 272 | 8 | 2.01 | 771 | |
| 562 | 263.5 | 8 | 2.04 | 777 | |
| 499 | 218.8 | 8 | 2.14 | 796 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 52* | | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 484 | 176.3 | 8 | 2.2 | 807 | |
| 483 | 208.2 | 8 | 2.2 | 807 | |
| 569 | 146.9 | 8 | 2.24 | 814 | |
| 476 | 181.2 | 8 | 2.24 | 814 | |
| 585 | 62.1 | 8 | 2.29 | 823 | |
| 594 | 225 | 8 | 2.3 | 825 | |
| 542 | 175.8 | 8 | 2.3 | 825 | |
| 533 | 63 | 6 | 10.7 | 826 | |
| 515 | 25 | 8 | 2.6 | 877 | |
| 587 | 166.9 | 8 | 2.63 | 882 | |
| 581 | 206.9 | 8 | 2.63 | 882 | |
| 582 | 175.9 | 8 | 2.67 | 889 | |
| 506 | 99.5 | 8 | 2.69 | 892 | |
| 473 | 260.2 | 8 | 2.71 | 895 | |
| 595 | 17.8 | 8 | 2.78 | 907 | |
| 988 | 140.9 | 8 | 2.82 | 913 | |
| 592 | 270.1 | 8 | 3.27 | 983 | |
| 571 | 258.4 | 8 | 3.49 | 1016 | |
| 586 | 79.1 | 8 | 3.51 | 1019 | |
| 558 | 242.3 | 8 | 3.54 | 1023 | |
| 523 | 18.3 | 8 | 3.57 | 1027 | |
| 527 | 254.1 | 8 | 3.62 | 1035 | |
| 577 | 262.9 | 8 | 3.63 | 1036 | |
| 433 | 320.6 | 8 | 3.73 | 1050 | |
| 561 | 107.5 | 8 | 3.87 | 1070 | |
| 823 | 179 | 8 | 3.96 | 1082 | |
| 528 | 45.6 | 8 | 3.96 | 1082 | |
| 437 | 272 | 8 | 4.07 | 1097 | |
| 489 | 159.8 | 8 | 4.08 | 1098 | |
| 550 | 36.1 | 8 | 4.1 | 1101 | |
| 574 | 258.7 | 8 | 4.15 | 1108 | |
| 985 | 110 | 8 | 4.15 | 1108 | |
| 490 | 262.3 | 8 | 4.2 | 1114 | |
| 436581 | 62 | 8 | 4.24 | 1120 | |
| 575 | 159.7 | 8 | 4.28 | 1125 | |
| 991 | 102.4 | 8 | 4.28 | 1125 | |
| 986 | 84.7 | 8 | 4.5 | 1154 | |
| 434 | 142.1 | 8 | 4.5 | 1154 | |
| 435 | 278.4 | 8 | 4.5 | 1154 | |
| 990 | 82.6 | 8 | 4.58 | 1164 | |
| 568 | 194.9 | 8 | 4.67 | 1175 | |
| 547 | 50.2 | 8 | 4.67 | 1175 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 52* | | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|---------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 640 | 379.1 | 8 | 4.75 | 1185 | |
| 432 | 399.2 | 8 | 4.81 | 1193 | |
| 555 | 51.7 | 8 | 4.85 | 1198 | |
| 593 | 276.2 | 8 | 5.87 | 1318 | |
| 563 | 335 | 8 | 5.97 | 1329 | |
| 859 | 222.7 | 8 | 6.03 | 1335 | |
| 858 | 249.8 | 8 | 6.32 | 1367 | |
| 436585 | 75 | 8 | 6.36 | 1371 | |
| 579 | 165.4 | 8 | 6.59 | 1396 | |
| 589 | 127.8 | 8 | 6.64 | 1401 | |
| 479 | 237.8 | 8 | 6.69 | 1407 | |
| 500 | 130 | 8 | 6.91 | 1429 | |
| 989 | 102.4 | 8 | 7.19 | 1458 | |
| 498 | 275.3 | 8 | 7.2 | 1459 | |
| 546 | 196.7 | 8 | 7.25 | 1464 | |
| 541 | 122.1 | 8 | 7.32 | 1471 | |
| 570 | 158.2 | 8 | 7.34 | 1473 | |
| 578 | 357.6 | 8 | 7.7 | 1509 | |
| 576 | 82 | 8 | 7.86 | 1525 | |
| 529 | 175 | 8 | 8 | 1538 | |
| 436556 | 99 | 8 | 8.28 | 1565 | |
| 511 | 81.4 | 8 | 8.3 | 1567 | |
| 436577 | 138 | 8 | 8.32 | 1569 | |
| 995 | 111.5 | 8 | 8.55 | 1590 | |
| 827 | 72.2 | 8 | 8.87 | 1620 | |
| 564 | 329.1 | 8 | 8.88 | 1620 | |
| 512 | 209.8 | 8 | 8.97 | 1629 | |
| 83977 | 58 | 8 | 9.36 | 1664 | |
| 573 | 112.1 | 8 | 9.57 | 1682 | |
| 531 | 104.2 | 8 | 10 | 1720 | |
| 84535 | 50 | 8 | 10.69 | 1778 | |
| 477 | 264.1 | 8 | 12.14 | 1895 | |
| 543 | 173.7 | 8 | 12.72 | 1939 | |
| 436563 | 90 | 8 | 13.5 | 1998 | |
| 704 | 102.2 | 8 | 13.68 | 2011 | |
| 485 | 95 | 8 | 18.91 | 2365 | |
| 980 | 92 | 8 | 22.47 | 2578 | |
| 508 | 172 | 8 | -0.24 | Unknown | |
| 538 | 47.3 | 8 | 0 | Unknown | |
| 78173 | 299 | 0 | 0 | Unknown | |
| 359 | 374.6 | 8 | 0 | Unknown | |
| 360 | 375.3 | 8 | 0 | Unknown | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 52* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 361 | 225.2 | 8 | 0 | Unknown |
| 745 | 44.3 | 8 | 0 | Unknown |
| 744 | 126.1 | 8 | 0 | Unknown |
| 556 | 130.6 | 8 | 0 | Unknown |
| 557 | 46.7 | 0 | 0 | Unknown |
| 996 | 108.1 | 8 | 0 | Unknown |
| 83128 | 22.5 | 8 | 0 | Unknown |
| 472 | 40.3 | 8 | 0 | Unknown |
| 478 | 155.1 | 8 | 0 | Unknown |
| 507 | 213.3 | 8 | 999.99 | Unknown |
| 522 | 266.6 | 8 | 999.99 | Unknown |
| 983 | 271 | 8 | 999.99 | Unknown |
| 850 | 30 | 6 | 999.99 | Unknown |
| 514 | 45.5 | 8 | 999.99 | Unknown |
| 524 | 15.9 | 8 | 999.99 | Unknown |
| 992 | 152.3 | 6 | 999.99 | Unknown |
| 521 | 257.5 | 8 | 999.99 | Unknown |
| 519 | 290.1 | 8 | 999.99 | Unknown |
| 517 | 232.1 | 8 | 999.99 | Unknown |
| 518 | 238.4 | 8 | 999.99 | Unknown |
| 831 | 316.3 | 8 | 999.99 | Unknown |
| 520 | 248.2 | 8 | 999.99 | Unknown |
| 497 | 140.5 | 8 | 999.99 | Unknown |
| 487 | 22 | 8 | 999.99 | Unknown |
| 474 | 102 | 8 | 999.99 | Unknown |
| 362 | 391.8 | 8 | 999.99 | Unknown |
| 365 | 248.6 | 8 | 999.99 | Unknown |
| 363 | 199.4 | 8 | 999.99 | Unknown |
| 441 | 90.1 | 8 | 999.99 | Unknown |
| 358 | 384.4 | 8 | 999.99 | Unknown |

*: Basin 52 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 53* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 788 | 212.9 | 8 | 0.05 | 122 |
| 644 | 33.8 | 8 | 0.1 | 172 |
| 787 | 70 | 8 | 0.2 | 243 |
| 315 | 150 | 8 | 0.4 | 344 |
| 840 | 132 | 8 | 0.45 | 365 |
| 314 | 191 | 8 | 0.5 | 385 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 53* | | | Capacity ¹ (gpm)** |
|------|-------------|---------------|-----------|------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 310 | 241.1 | 8 | 0.5 | 385 | |
| 857 | 280.8 | 8 | 0.54 | 400 | |
| 858 | 62 | 8 | 0.74 | 468 | |
| 842 | 265 | 8 | 0.82 | 492 | |
| 838 | 227.5 | 8 | 0.83 | 495 | |
| 839 | 385 | 8 | 0.98 | 538 | |
| 813 | 128 | 8 | 1 | 544 | |
| 812 | 51 | 8 | 1 | 544 | |
| 811 | 58 | 8 | 1 | 544 | |
| 819 | 94.7 | 8 | 1 | 544 | |
| 734 | 95 | 8 | 1 | 544 | |
| 650 | 170 | 8 | 1 | 544 | |
| 841 | 65.3 | 8 | 1 | 544 | |
| 814 | 173.9 | 8 | 1.01 | 547 | |
| 828 | 190.3 | 8 | 1.14 | 581 | |
| 859 | 39.4 | 8 | 1.19 | 593 | |
| 797 | 274.8 | 8 | 1.24 | 606 | |
| 308 | 68.3 | 10 | 0.39 | 616 | |
| 304 | 26.4 | 10 | 0.5 | 697 | |
| 827 | 173.4 | 8 | 1.76 | 721 | |
| 829 | 101.9 | 8 | 1.91 | 752 | |
| 837 | 31 | 8 | 1.94 | 757 | |
| 305 | 224.9 | 12 | 0.23 | 769 | |
| 679 | 264.9 | 8 | 2.09 | 786 | |
| 818 | 179 | 8 | 2.11 | 790 | |
| 832 | 65.8 | 8 | 2.19 | 805 | |
| 810 | 107 | 8 | 2.22 | 810 | |
| 825 | 123.4 | 8 | 2.56 | 870 | |
| 824 | 116.1 | 8 | 2.56 | 870 | |
| 817 | 255 | 8 | 2.83 | 915 | |
| 808 | 18.4 | 8 | 2.86 | 920 | |
| 800 | 143.4 | 8 | 2.91 | 928 | |
| 313 | 88.1 | 8 | 3.1 | 957 | |
| 834 | 225.3 | 8 | 3.13 | 962 | |
| 805 | 22.2 | 8 | 3.39 | 1001 | |
| 809 | 196 | 8 | 3.52 | 1020 | |
| 855 | 96.3 | 6 | 17.25 | 1049 | |
| 845 | 197.4 | 8 | 3.82 | 1063 | |
| 636 | 46.1 | 8 | 4 | 1088 | |
| 735 | 169.7 | 8 | 4.07 | 1097 | |
| 848 | 103.6 | 8 | 4.3 | 1128 | |
| 807 | 152 | 8 | 4.84 | 1196 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 53* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 851 | 91.3 | 8 | 4.86 | 1199 |
| 850 | 171.5 | 8 | 4.94 | 1209 |
| 849 | 151.4 | 8 | 5.15 | 1234 |
| 826 | 78.6 | 8 | 5.58 | 1285 |
| 798 | 45.2 | 8 | 6 | 1332 |
| 736 | 19.5 | 8 | 6.43 | 1379 |
| 815 | 357 | 8 | 6.59 | 1396 |
| 853 | 91.6 | 8 | 7.1 | 1449 |
| 799 | 163.6 | 8 | 7.16 | 1455 |
| 312 | 110.9 | 8 | 7.4 | 1479 |
| 833 | 66.5 | 8 | 8.78 | 1611 |
| 830 | 183.7 | 8 | 8.93 | 1625 |
| 846 | 49.3 | 8 | 9.25 | 1654 |
| 843 | 91.1 | 8 | 10.12 | 1730 |
| 835 | 144 | 8 | 10.24 | 1740 |
| 844 | 159.5 | 8 | 10.77 | 1785 |
| 311 | 98.6 | 8 | 11 | 1804 |
| 742 | 157.1 | 8 | 11.35 | 1832 |
| 831 | 160.7 | 8 | 12.31 | 1908 |
| 680 | 60.7 | 8 | 16.59 | 2215 |
| 852 | 88.2 | 8 | 17.1 | 2249 |
| 741 | 23 | 8 | 43.26 | 3577 |
| 648 | 171.5 | 8 | 0 | Unknown |
| 806 | 99 | 8 | 0 | Unknown |
| 856 | 38.2 | 8 | 0 | Unknown |
| 860 | 26 | 8 | 0 | Unknown |
| 740 | 21.8 | 8 | 0 | Unknown |
| 816 | 38.6 | 8 | 999.99 | Unknown |
| 737 | 105.5 | 8 | 999.99 | Unknown |
| 303 | 73.3 | 10 | 999.99 | Unknown |

*: Basin 53 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 54* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 720 | 42 | 8 | 0.1 | 172 |
| 724 | 64.3 | 8 | 0.11 | 180 |
| 718 | 191.9 | 8 | 0.22 | 255 |
| 184 | 132.9 | 6 | 1.8 | 339 |
| 658 | 235.4 | 8 | 0.4 | 344 |
| 656 | 217.8 | 8 | 0.4 | 344 |
| 721 | 41 | 8 | 0.4 | 344 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 54* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 727 | 157 | 8 | 0.4 | 344 |
| 653 | 299.4 | 8 | 0.4 | 344 |
| 250 | 260.7 | 8 | 0.4 | 344 |
| 654 | 215 | 8 | 0.4 | 344 |
| 655 | 361.1 | 8 | 0.4 | 344 |
| 659 | 401.4 | 8 | 0.4 | 344 |
| 729 | 168.4 | 8 | 0.42 | 352 |
| 657 | 402.7 | 8 | 0.49 | 381 |
| 244 | 145.1 | 6 | 2.28 | 381 |
| 318 | 288 | 8 | 0.5 | 385 |
| 319 | 145.1 | 8 | 0.5 | 385 |
| 237 | 122 | 8 | 0.5 | 385 |
| 262 | 333.8 | 6 | 3.14 | 447 |
| 260 | 274.4 | 6 | 3.34 | 461 |
| 440229 | 53.6 | 8 | 0.73 | 465 |
| 274 | 222.7 | 6 | 3.45 | 469 |
| 731 | 62 | 8 | 0.81 | 489 |
| 218 | 134 | 8 | 0.81 | 489 |
| 325 | 210.5 | 8 | 1.16 | 586 |
| 334 | 163 | 8 | 1.2 | 596 |
| 320 | 133.5 | 8 | 1.4 | 643 |
| 241 | 279 | 6 | 7.14 | 675 |
| 329 | 256.7 | 8 | 1.55 | 677 |
| 256 | 210.2 | 6 | 7.78 | 704 |
| 83522 | 37.1 | 6 | 7.97 | 713 |
| 246 | 65 | 6 | 8.16 | 721 |
| 247 | 189.6 | 6 | 8.16 | 721 |
| 660 | 29.5 | 8 | 1.79 | 728 |
| 240 | 302.4 | 6 | 8.37 | 731 |
| 830 | 111 | 8 | 1.92 | 754 |
| 265 | 206.8 | 10 | 0.6 | 764 |
| 83521 | 97.8 | 8 | 2.06 | 780 |
| 253 | 266.7 | 8 | 2.38 | 839 |
| 242 | 239.1 | 8 | 2.46 | 853 |
| 238 | 390 | 8 | 2.5 | 860 |
| 662 | 116.5 | 8 | 2.6 | 877 |
| 243 | 263.2 | 8 | 2.77 | 905 |
| 263 | 190.4 | 8 | 2.9 | 926 |
| 254 | 267.7 | 8 | 2.91 | 928 |
| 215 | 147.8 | 6 | 13.8 | 938 |
| 216 | 154.5 | 8 | 3.02 | 945 |
| 261 | 327 | 8 | 3.1 | 957 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 54* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 255 | 186 | 8 | 3.15 | 965 |
| 330 | 400.9 | 8 | 3.31 | 989 |
| 259 | 266.1 | 8 | 3.34 | 994 |
| 245 | 188.7 | 6 | 16.8 | 1035 |
| 733 | 80 | 8 | 3.98 | 1085 |
| 236 | 398.8 | 8 | 4.01 | 1089 |
| 339 | 151.4 | 8 | 4.08 | 1098 |
| 730 | 71.6 | 8 | 4.09 | 1100 |
| 739 | 100.6 | 8 | 4.11 | 1102 |
| 267 | 299.4 | 8 | 4.2 | 1114 |
| 333 | 287.6 | 8 | 4.2 | 1114 |
| 269 | 250.4 | 8 | 4.3 | 1128 |
| 231 | 206.9 | 8 | 4.3 | 1128 |
| 273 | 243.5 | 8 | 4.52 | 1156 |
| 182 | 98.6 | 8 | 4.6 | 1166 |
| 266 | 90.6 | 8 | 4.76 | 1186 |
| 183 | 323.8 | 8 | 4.99 | 1215 |
| 271 | 318.4 | 8 | 5.16 | 1235 |
| 332 | 138.3 | 8 | 5.2 | 1240 |
| 223 | 200.1 | 8 | 5.54 | 1280 |
| 328 | 230.7 | 8 | 5.64 | 1291 |
| 217 | 170 | 6 | 28.18 | 1340 |
| 272 | 326 | 8 | 6.19 | 1353 |
| 249 | 283.5 | 8 | 6.27 | 1362 |
| 224 | 97 | 8 | 7 | 1439 |
| 186 | 317.1 | 8 | 7 | 1439 |
| 326 | 169.4 | 8 | 7.11 | 1450 |
| 232 | 204 | 8 | 7.99 | 1537 |
| 663 | 279.1 | 8 | 8.03 | 1541 |
| 226 | 111.6 | 8 | 8.3 | 1567 |
| 213 | 265.9 | 8 | 8.6 | 1595 |
| 221 | 271.2 | 8 | 9 | 1631 |
| 239 | 407 | 8 | 9.5 | 1676 |
| 185 | 370.1 | 8 | 11.32 | 1830 |
| 728 | 185.6 | 8 | 11.42 | 1838 |
| 220 | 212.4 | 8 | 11.6 | 1852 |
| 327 | 211.9 | 8 | 12.71 | 1939 |
| 251 | 184.3 | 8 | 13 | 1961 |
| 340 | 195.7 | 8 | 13.78 | 2019 |
| 723 | 90.9 | 8 | 15 | 2106 |
| 248 | 45.1 | 8 | 17.78 | 2293 |
| 189 | 257.4 | 8 | 19.88 | 2425 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 54* | | | Capacity ¹ (gpm)** |
|-------|-------------|---------------|-----------|---------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 726 | 59.5 | 8 | 20.78 | 2479 | |
| 719 | 90 | 8 | 27 | 2826 | |
| 732 | 40 | 8 | 36 | 3263 | |
| 725 | 41.1 | 8 | 37.5 | 3330 | |
| 722 | 57.5 | 8 | 42.4 | 3541 | |
| 664 | 50.1 | 8 | 0 | Unknown | |
| 10396 | 20.3 | 0 | 0 | Unknown | |
| 234 | 45 | 8 | 0 | Unknown | |
| 179 | 182.5 | 6 | 0 | Unknown | |
| 829 | 200.6 | 8 | 0 | Unknown | |
| 229 | 252 | 8 | 0 | Unknown | |
| 181 | 42 | 6 | 0 | Unknown | |
| 180 | 15.9 | 8 | 0 | Unknown | |
| 206 | 169.8 | 8 | 0 | Unknown | |
| 207 | 99.9 | 8 | 0 | Unknown | |
| 828 | 56.6 | 8 | 0 | Unknown | |
| 336 | 141.8 | 8 | 0 | Unknown | |
| 637 | 156.5 | 8 | 0 | Unknown | |
| 331 | 215.6 | 8 | 0 | Unknown | |
| 317 | 320 | 8 | 0 | Unknown | |
| 214 | 183.6 | 8 | 0 | Unknown | |
| 701 | 103.9 | 6 | 0 | Unknown | |
| 85610 | 14 | 8 | 0 | Unknown | |
| 827 | 25.8 | 8 | 999.99 | Unknown | |
| 743 | 274.4 | 8 | 999.99 | Unknown | |
| 323 | 108.1 | 8 | 999.99 | Unknown | |
| 335 | 91.8 | 8 | 999.99 | Unknown | |
| 338 | 105.1 | 6 | 999.99 | Unknown | |
| 337 | 90 | 0 | 999.99 | Unknown | |
| 322 | 64.9 | 8 | 999.99 | Unknown | |
| 321 | 182.8 | 8 | 999.99 | Unknown | |
| 316 | 55 | 8 | 999.99 | Unknown | |
| 324 | 185.7 | 8 | 999.99 | Unknown | |
| 211 | 162.4 | 6 | 999.99 | Unknown | |
| 212 | 177 | 8 | 999.99 | Unknown | |
| 209 | 104 | 8 | 999.99 | Unknown | |
| 208 | 161.2 | 6 | 999.99 | Unknown | |
| 225 | 188.9 | 8 | 999.99 | Unknown | |
| 78080 | 191 | 8 | 999.99 | Unknown | |
| 210 | 64.2 | 8 | 999.99 | Unknown | |
| 200 | 175.4 | 8 | 999.99 | Unknown | |
| 199 | 118.3 | 6 | 999.99 | Unknown | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 54* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 203 | 31.4 | 8 | 999.99 | Unknown |
| 204 | 89.2 | 6 | 999.99 | Unknown |
| 201 | 109.8 | 8 | 999.99 | Unknown |
| 202 | 79.4 | 6 | 999.99 | Unknown |
| 205 | 21.6 | 8 | 999.99 | Unknown |
| 190 | 95.9 | 8 | 999.99 | Unknown |
| 191 | 76.6 | 8 | 999.99 | Unknown |
| 194 | 87.3 | 8 | 999.99 | Unknown |
| 192 | 106.7 | 8 | 999.99 | Unknown |
| 195 | 144.9 | 8 | 999.99 | Unknown |
| 196 | 172.1 | 8 | 999.99 | Unknown |
| 197 | 123.4 | 8 | 999.99 | Unknown |
| 198 | 45.6 | 8 | 999.99 | Unknown |
| 193 | 30.4 | 8 | 999.99 | Unknown |
| 826 | 99.3 | 6 | 999.99 | Unknown |
| 842 | 359.6 | 6 | 999.99 | Unknown |
| 257 | 248.2 | 6 | 999.99 | Unknown |
| 270 | 258.2 | 6 | 999.99 | Unknown |
| 252 | 184.2 | 8 | 999.99 | Unknown |
| 258 | 253.3 | 6 | 999.99 | Unknown |

*: Basin 54 sewers are not modeled. Information shown is the best available from the City's as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 55* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 471 | 284.5 | 8 | 0.02 | 77 |
| 786 | 229.6 | 8 | 0.02 | 77 |
| 370 | 100 | 6 | 0.5 | 179 |
| 789 | 33.1 | 8 | 0.17 | 224 |
| 758 | 74 | 8 | 0.2 | 243 |
| 417 | 209.3 | 8 | 0.24 | 266 |
| 350 | 309.1 | 8 | 0.24 | 266 |
| 349 | 219.8 | 8 | 0.29 | 293 |
| 346 | 104.6 | 8 | 0.3 | 298 |
| 385 | 20.5 | 8 | 0.38 | 335 |
| 470 | 170.4 | 8 | 0.4 | 344 |
| 469 | 416 | 8 | 0.4 | 344 |
| 368 | 218.8 | 8 | 0.4 | 344 |
| 374 | 269.2 | 8 | 0.41 | 348 |
| 425 | 52.7 | 8 | 0.41 | 348 |
| 375 | 337.7 | 8 | 0.44 | 361 |
| 432446 | 21 | 6 | 2.1 | 366 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 55* | | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|-----|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 753 | 292.9 | 8 | 0.49 | 381 | |
| 834 | 126.2 | 8 | 0.5 | 385 | |
| 347 | 250.1 | 8 | 0.5 | 385 | |
| 785 | 79.8 | 8 | 0.5 | 385 | |
| 428 | 245 | 8 | 0.51 | 388 | |
| 849 | 81.8 | 8 | 0.51 | 388 | |
| 860 | 286 | 8 | 0.55 | 403 | |
| 463 | 120.6 | 8 | 0.57 | 411 | |
| 429 | 306.4 | 8 | 0.61 | 425 | |
| 345 | 293.7 | 8 | 0.75 | 471 | |
| 457 | 396.9 | 8 | 0.8 | 486 | |
| 344 | 38.9 | 8 | 0.8 | 486 | |
| 447 | 35 | 8 | 0.81 | 489 | |
| 373 | 143.6 | 8 | 0.86 | 504 | |
| 754 | 202.5 | 8 | 0.87 | 507 | |
| 432410 | 373.2 | 8 | 0.95 | 530 | |
| 430 | 249.7 | 8 | 0.96 | 533 | |
| 348 | 188.5 | 8 | 0.97 | 536 | |
| 859 | 163 | 8 | 0.97 | 536 | |
| 452 | 178.6 | 6 | 4.56 | 539 | |
| 837 | 110 | 8 | 0.99 | 541 | |
| 473 | 100 | 8 | 1 | 544 | |
| 367 | 221.6 | 8 | 1 | 544 | |
| 765 | 51.6 | 8 | 1 | 544 | |
| 838 | 87.9 | 8 | 1 | 544 | |
| 839 | 152.5 | 8 | 1 | 544 | |
| 773 | 84 | 8 | 1 | 544 | |
| 772 | 83 | 8 | 1 | 544 | |
| 771 | 165 | 8 | 1 | 544 | |
| 460 | 80.2 | 8 | 1.03 | 552 | |
| 459 | 78.6 | 8 | 1.16 | 586 | |
| 432414 | 30.2 | 8 | 1.2 | 596 | |
| 841 | 186.1 | 8 | 1.21 | 598 | |
| 416 | 269.1 | 8 | 1.33 | 627 | |
| 432443 | 58.4 | 8 | 1.39 | 641 | |
| 759 | 397.5 | 8 | 1.49 | 664 | |
| 870 | 63 | 8 | 1.54 | 675 | |
| 432406 | 29.1 | 8 | 1.69 | 707 | |
| 464 | 182.1 | 8 | 1.94 | 757 | |
| 342 | 176 | 8 | 1.96 | 761 | |
| 382 | 105.4 | 8 | 2.21 | 808 | |
| 467 | 382.1 | 8 | 2.28 | 821 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 55* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 770 | 110.8 | 8 | 2.41 | 844 |
| 376 | 204.4 | 8 | 2.54 | 867 |
| 449 | 136.7 | 8 | 2.72 | 897 |
| 411 | 272.7 | 8 | 3.04 | 948 |
| 389 | 99.8 | 8 | 3.13 | 962 |
| 862 | 178.9 | 8 | 3.19 | 971 |
| 793 | 331.7 | 8 | 3.3 | 988 |
| 413 | 270.6 | 8 | 3.33 | 992 |
| 412 | 331.3 | 8 | 3.37 | 998 |
| 390 | 193.1 | 8 | 3.55 | 1025 |
| 444 | 39.6 | 8 | 3.69 | 1045 |
| 762 | 82.9 | 8 | 4 | 1088 |
| 853 | 101.2 | 8 | 4.22 | 1117 |
| 866 | 78.9 | 8 | 4.28 | 1125 |
| 383 | 252.5 | 8 | 4.39 | 1139 |
| 446 | 319.4 | 8 | 4.52 | 1156 |
| 875 | 52.9 | 8 | 4.53 | 1157 |
| 472 | 153 | 8 | 4.56 | 1161 |
| 366 | 169.1 | 8 | 4.85 | 1198 |
| 752 | 48.3 | 8 | 5.04 | 1221 |
| 851 | 110 | 8 | 5.06 | 1223 |
| 856 | 77 | 8 | 5.06 | 1223 |
| 850 | 107.2 | 8 | 5.08 | 1226 |
| 855 | 75 | 8 | 5.2 | 1240 |
| 871 | 114 | 8 | 5.45 | 1270 |
| 848 | 78 | 8 | 5.53 | 1279 |
| 380 | 81.5 | 8 | 5.63 | 1290 |
| 443 | 120.7 | 8 | 5.73 | 1302 |
| 840 | 106.2 | 8 | 6.02 | 1334 |
| 873 | 209 | 8 | 6.12 | 1345 |
| 379 | 63.3 | 8 | 6.15 | 1349 |
| 369 | 296 | 8 | 6.4 | 1376 |
| 419 | 127.1 | 8 | 6.45 | 1381 |
| 867 | 224.2 | 8 | 6.99 | 1438 |
| 864 | 74.4 | 8 | 7.1 | 1449 |
| 466 | 76.3 | 10 | 2.16 | 1449 |
| 863 | 99.2 | 8 | 7.33 | 1472 |
| 378 | 306.6 | 8 | 7.4 | 1479 |
| 454 | 96.6 | 8 | 7.42 | 1481 |
| 423 | 266.3 | 8 | 7.88 | 1527 |
| 445 | 253 | 8 | 7.88 | 1527 |
| 764 | 113.5 | 8 | 8 | 1538 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 55* | | | Capacity ¹ (gpm)** |
|--------|-------------|---------------|-----------|---------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 801 | 71.9 | 8 | 8 | 1538 | |
| 761 | 180.2 | 8 | 8 | 1538 | |
| 865 | 230.3 | 8 | 8 | 1538 | |
| 755 | 141.2 | 8 | 8.07 | 1545 | |
| 763 | 139.8 | 8 | 8.23 | 1560 | |
| 432382 | 163.5 | 8 | 8.87 | 1620 | |
| 377 | 270.9 | 8 | 9.27 | 1656 | |
| 424 | 317.8 | 8 | 9.4 | 1667 | |
| 858 | 70 | 8 | 9.6 | 1685 | |
| 766 | 76.9 | 8 | 10 | 1720 | |
| 757 | 174.1 | 8 | 10.05 | 1724 | |
| 458 | 232 | 8 | 10.13 | 1731 | |
| 857 | 152 | 8 | 10.46 | 1759 | |
| 835 | 162.4 | 8 | 10.5 | 1762 | |
| 427 | 97.8 | 8 | 10.9 | 1795 | |
| 450 | 133.9 | 8 | 11.36 | 1833 | |
| 405 | 117.2 | 8 | 11.36 | 1833 | |
| 869 | 70 | 8 | 11.51 | 1845 | |
| 420 | 133 | 8 | 11.78 | 1866 | |
| 432440 | 84.7 | 8 | 12.05 | 1888 | |
| 760 | 41 | 8 | 12.68 | 1936 | |
| 381 | 251.6 | 8 | 12.68 | 1936 | |
| 854 | 77.1 | 8 | 12.96 | 1958 | |
| 410 | 168.2 | 8 | 13.35 | 1987 | |
| 461 | 87.6 | 8 | 13.96 | 2032 | |
| 432398 | 293 | 8 | 14.49 | 2070 | |
| 422 | 120.7 | 8 | 16.17 | 2187 | |
| 421 | 55.3 | 8 | 16.22 | 2190 | |
| 462 | 259.3 | 8 | 18.3 | 2326 | |
| 451 | 186.5 | 8 | 22.03 | 2552 | |
| 432402 | 169.3 | 8 | 24.2 | 2675 | |
| 453 | 128.2 | 8 | 27.51 | 2852 | |
| 384 | 26.7 | 8 | 32.14 | 3083 | |
| 872 | 20 | 8 | 67.6 | 4471 | |
| 404 | 237 | 8 | -33.68 | Unknown | |
| 876 | 138 | 8 | 0 | Unknown | |
| 836 | 214.9 | 8 | 0 | Unknown | |
| 388 | 40.1 | 8 | 0 | Unknown | |
| 455 | 146.5 | 8 | 0 | Unknown | |
| 396 | 257.5 | 6 | 999.99 | Unknown | |
| 402 | 323.4 | 8 | 999.99 | Unknown | |
| 392 | 87.5 | 8 | 999.99 | Unknown | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 55* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 406 | 194.5 | 6 | 999.99 | Unknown |
| 465 | 15.7 | 10 | 999.99 | Unknown |
| 847 | 62.1 | 8 | 999.99 | Unknown |
| 780 | 138.7 | 8 | 999.99 | Unknown |
| 468 | 417.7 | 8 | 999.99 | Unknown |
| 456 | 112.8 | 6 | 999.99 | Unknown |
| 474 | 63 | 8 | 999.99 | Unknown |
| 756 | 70 | 8 | 999.99 | Unknown |
| 448 | 22.4 | 8 | 999.99 | Unknown |
| 371 | 144.9 | 8 | 999.99 | Unknown |
| 372 | 107.8 | 8 | 999.99 | Unknown |
| 391 | 188.8 | 8 | 999.99 | Unknown |
| 399 | 57.1 | 8 | 999.99 | Unknown |
| 393 | 91.5 | 8 | 999.99 | Unknown |
| 386 | 84 | 8 | 999.99 | Unknown |
| 415 | 271.8 | 8 | 999.99 | Unknown |
| 414 | 96.3 | 8 | 999.99 | Unknown |
| 403 | 153 | 8 | 999.99 | Unknown |
| 401 | 162.2 | 8 | 999.99 | Unknown |
| 407 | 332.4 | 8 | 999.99 | Unknown |
| 408 | 345.6 | 8 | 999.99 | Unknown |
| 409 | 151.5 | 8 | 999.99 | Unknown |
| 400 | 354.1 | 8 | 999.99 | Unknown |
| 398 | 209.9 | 8 | 999.99 | Unknown |
| 395 | 146.9 | 8 | 999.99 | Unknown |
| 397 | 112.8 | 6 | 999.99 | Unknown |
| 394 | 195.4 | 6 | 999.99 | Unknown |
| 877 | 60 | 6 | 999.99 | Unknown |
| 341 | 168.7 | 8 | 999.99 | Unknown |
| 442 | 186.9 | 8 | 999.99 | Unknown |
| 82507 | 186.9 | 8 | 999.99 | Unknown |

*: Basin 55 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 56* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 161 | 53.1 | 8 | 0.1 | 172 |
| 148 | 198.9 | 8 | 0.3 | 298 |
| 149 | 204.6 | 8 | 0.3 | 298 |
| 155 | 259.5 | 8 | 0.4 | 344 |
| 154 | 398.9 | 8 | 0.4 | 344 |
| 153 | 119.9 | 8 | 0.4 | 344 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 56* | | | Capacity ¹ (gpm)** |
|-------|-------------|---------------|-----------|------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 156 | 253 | 8 | 0.4 | 344 | |
| 157 | 135 | 8 | 0.4 | 344 | |
| 127 | 20 | 8 | 0.4 | 344 | |
| 126 | 194.8 | 8 | 0.4 | 344 | |
| 125 | 286.7 | 8 | 0.4 | 344 | |
| 160 | 196.9 | 8 | 0.5 | 385 | |
| 140 | 108.4 | 8 | 0.5 | 385 | |
| 128 | 186.4 | 8 | 0.5 | 385 | |
| 104 | 52.8 | 8 | 0.5 | 385 | |
| 103 | 34 | 8 | 0.5 | 385 | |
| 110 | 102.9 | 8 | 0.5 | 385 | |
| 118 | 34.5 | 6 | 2.65 | 411 | |
| 147 | 200.9 | 8 | 0.6 | 421 | |
| 146 | 198.6 | 8 | 0.6 | 421 | |
| 150 | 68.9 | 8 | 0.7 | 455 | |
| 152 | 259.4 | 8 | 0.8 | 486 | |
| 151 | 186.5 | 8 | 0.8 | 486 | |
| 145 | 419.8 | 8 | 0.89 | 513 | |
| 133 | 74.7 | 8 | 0.98 | 538 | |
| 135 | 316.2 | 8 | 0.98 | 538 | |
| 144 | 69.8 | 8 | 1 | 544 | |
| 143 | 37.7 | 8 | 1 | 544 | |
| 85353 | 61.3 | 8 | 1.02 | 549 | |
| 112 | 248.2 | 8 | 1.24 | 606 | |
| 102 | 160.6 | 8 | 1.24 | 606 | |
| 116 | 239.3 | 8 | 1.33 | 627 | |
| 139 | 294.9 | 8 | 1.39 | 641 | |
| 124 | 194.8 | 8 | 1.53 | 673 | |
| 85351 | 160.8 | 8 | 1.54 | 675 | |
| 163 | 182.6 | 8 | 1.7 | 709 | |
| 129 | 123.6 | 8 | 1.72 | 713 | |
| 132 | 378.8 | 8 | 1.79 | 728 | |
| 106 | 114.5 | 8 | 1.92 | 754 | |
| 105 | 220.2 | 8 | 2.21 | 808 | |
| 108 | 161 | 8 | 2.62 | 880 | |
| 111 | 53.4 | 8 | 2.79 | 908 | |
| 120 | 134.1 | 8 | 3.28 | 985 | |
| 136 | 270.1 | 8 | 3.28 | 985 | |
| 109 | 51 | 8 | 3.97 | 1084 | |
| 115 | 77.1 | 8 | 4 | 1088 | |
| 137 | 39.1 | 8 | 4 | 1088 | |
| 121 | 131.2 | 8 | 4.17 | 1110 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 56* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 159 | 320 | 8 | 4.25 | 1121 |
| 123 | 371.9 | 8 | 4.5 | 1154 |
| 122 | 184.6 | 8 | 4.71 | 1180 |
| 113 | 153.1 | 8 | 6.7 | 1408 |
| 107 | 118.1 | 8 | 6.7 | 1408 |
| 114 | 177.2 | 8 | 9.8 | 1702 |
| 134 | 283.1 | 8 | 0 | Unknown |
| 117 | 36.9 | 0 | 0 | Unknown |
| 130 | 305 | 8 | 0 | Unknown |
| 131 | 27.5 | 8 | 0 | Unknown |
| 138 | 125.4 | 8 | 0 | Unknown |
| 158 | 35 | 8 | 999.99 | Unknown |
| 101 | 43 | 6 | 999.99 | Unknown |
| 119 | 36.9 | 8 | 999.99 | Unknown |
| 78252 | 62 | 8 | 999.99 | Unknown |

*: Basin 56 sewers are not modeled. Information shown is the best available from the City's as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 57* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 380 | 169.2 | 8 | 0.1 | 172 |
| 385 | 104.8 | 8 | 0.15 | 211 |
| 503 | 243 | 8 | 0.19 | 237 |
| 466 | 127.2 | 8 | 0.21 | 249 |
| 663 | 126.8 | 8 | 0.22 | 255 |
| 502 | 174.8 | 8 | 0.24 | 266 |
| 581 | 110.4 | 6 | 1.74 | 333 |
| 364 | 201 | 8 | 0.4 | 344 |
| 512 | 145.2 | 8 | 0.4 | 344 |
| 519 | 396.2 | 8 | 0.4 | 344 |
| 518 | 163.4 | 8 | 0.4 | 344 |
| 517 | 190.3 | 8 | 0.4 | 344 |
| 513 | 271 | 8 | 0.4 | 344 |
| 515 | 123.2 | 8 | 0.4 | 344 |
| 516 | 84.1 | 8 | 0.4 | 344 |
| 397 | 328 | 8 | 0.41 | 348 |
| 565 | 161.8 | 8 | 0.41 | 348 |
| 567 | 263.8 | 8 | 0.43 | 357 |
| 577 | 82.6 | 6 | 2 | 357 |
| 476 | 243.5 | 8 | 0.44 | 361 |
| 568 | 98.1 | 8 | 0.45 | 365 |
| 543 | 398.4 | 8 | 0.46 | 369 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 57* | | | Capacity ¹ (gpm)** |
|------|-------------|---------------|-----------|-----|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 582 | 69.6 | 8 | 0.46 | 369 | |
| 657 | 156.6 | 8 | 0.48 | 377 | |
| 677 | 93.4 | 8 | 0.48 | 377 | |
| 666 | 110.6 | 8 | 0.48 | 377 | |
| 475 | 119.1 | 8 | 0.48 | 377 | |
| 656 | 110.1 | 8 | 0.49 | 381 | |
| 665 | 386.5 | 8 | 0.5 | 385 | |
| 671 | 63.7 | 8 | 0.5 | 385 | |
| 421 | 225.8 | 8 | 0.5 | 385 | |
| 366 | 186 | 8 | 0.5 | 385 | |
| 479 | 100.8 | 8 | 0.5 | 385 | |
| 392 | 52.4 | 8 | 0.5 | 385 | |
| 393 | 159.3 | 8 | 0.5 | 385 | |
| 532 | 70 | 8 | 0.5 | 385 | |
| 525 | 73.7 | 8 | 0.5 | 385 | |
| 523 | 241.9 | 8 | 0.5 | 385 | |
| 531 | 315 | 8 | 0.5 | 385 | |
| 536 | 166.4 | 8 | 0.5 | 385 | |
| 540 | 197.9 | 8 | 0.5 | 385 | |
| 533 | 185.4 | 8 | 0.5 | 385 | |
| 597 | 276.7 | 8 | 0.5 | 385 | |
| 634 | 130.3 | 8 | 0.5 | 385 | |
| 586 | 143.4 | 8 | 0.5 | 385 | |
| 549 | 65.9 | 8 | 0.5 | 385 | |
| 548 | 79.9 | 8 | 0.5 | 385 | |
| 595 | 130.6 | 8 | 0.5 | 385 | |
| 596 | 122.4 | 8 | 0.5 | 385 | |
| 594 | 77.1 | 8 | 0.5 | 385 | |
| 591 | 365.5 | 8 | 0.5 | 385 | |
| 589 | 228.8 | 8 | 0.5 | 385 | |
| 310 | 157.5 | 8 | 0.5 | 385 | |
| 314 | 86.4 | 8 | 0.5 | 385 | |
| 313 | 125 | 8 | 0.5 | 385 | |
| 312 | 74.2 | 8 | 0.5 | 385 | |
| 309 | 254.8 | 8 | 0.5 | 385 | |
| 662 | 146.8 | 8 | 0.52 | 392 | |
| 490 | 41.3 | 8 | 0.53 | 396 | |
| 632 | 332.5 | 8 | 0.53 | 396 | |
| 576 | 90.8 | 6 | 2.5 | 399 | |
| 399 | 164.2 | 8 | 0.56 | 407 | |
| 398 | 108.2 | 8 | 0.57 | 411 | |
| 588 | 342.2 | 8 | 0.58 | 414 | |

- Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 57* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 306 | 195.5 | 8 | 0.6 | 421 |
| 415 | 234.4 | 8 | 0.61 | 425 |
| 331 | 335.7 | 8 | 0.63 | 432 |
| 413 | 228.4 | 8 | 0.64 | 435 |
| 463 | 88.1 | 8 | 0.65 | 438 |
| 699 | 166.8 | 8 | 0.65 | 438 |
| 409 | 239.6 | 8 | 0.66 | 442 |
| 454 | 230.9 | 8 | 0.67 | 445 |
| 464 | 98.4 | 8 | 0.67 | 445 |
| 414 | 136.9 | 8 | 0.68 | 448 |
| 365 | 129.2 | 8 | 0.7 | 455 |
| 416 | 103.4 | 8 | 0.7 | 455 |
| 453 | 80.6 | 8 | 0.7 | 455 |
| 474 | 264.9 | 8 | 0.7 | 455 |
| 308 | 197.3 | 8 | 0.7 | 455 |
| 429 | 103.8 | 8 | 0.72 | 461 |
| 419 | 68.8 | 8 | 0.73 | 465 |
| 578 | 306.8 | 8 | 0.73 | 465 |
| 418 | 116.8 | 8 | 0.75 | 471 |
| 442 | 95.3 | 8 | 0.76 | 474 |
| 441 | 111 | 8 | 0.76 | 474 |
| 430 | 160.6 | 8 | 0.76 | 474 |
| 410 | 141.8 | 8 | 0.77 | 477 |
| 477 | 163.2 | 8 | 0.78 | 480 |
| 412 | 104.1 | 8 | 0.79 | 483 |
| 566 | 273.3 | 8 | 0.8 | 486 |
| 584 | 68.5 | 8 | 0.81 | 489 |
| 402 | 226.1 | 8 | 0.83 | 495 |
| 417 | 128.4 | 8 | 0.84 | 498 |
| 701 | 241.8 | 8 | 0.86 | 504 |
| 538 | 49.8 | 8 | 0.87 | 507 |
| 456 | 146.1 | 8 | 0.9 | 516 |
| 537 | 151.8 | 8 | 0.9 | 516 |
| 559 | 244.6 | 8 | 0.9 | 516 |
| 404 | 335.1 | 8 | 0.92 | 522 |
| 522 | 60.9 | 8 | 0.92 | 522 |
| 424 | 111.9 | 8 | 0.93 | 524 |
| 367 | 175.1 | 8 | 0.94 | 527 |
| 85238 | 87.7 | 8 | 0.97 | 536 |
| 322 | 315.7 | 8 | 0.98 | 538 |
| 500 | 227.6 | 8 | 1 | 544 |
| 689 | 290.1 | 8 | 1.05 | 557 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 57* | | | Capacity ¹ (gpm)** |
|-------|-------------|---------------|-----------|-----|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 378 | 394.4 | 8 | 1.06 | 560 | |
| 379 | 358.3 | 8 | 1.06 | 560 | |
| 553 | 312 | 8 | 1.08 | 565 | |
| 407 | 204.9 | 8 | 1.11 | 573 | |
| 560 | 88.2 | 8 | 1.13 | 578 | |
| 510 | 237.7 | 8 | 1.14 | 581 | |
| 600 | 137.2 | 8 | 1.14 | 581 | |
| 447 | 96 | 8 | 1.15 | 583 | |
| 609 | 320.9 | 8 | 1.16 | 586 | |
| 448 | 115.1 | 8 | 1.17 | 588 | |
| 389 | 198.5 | 8 | 1.18 | 591 | |
| 401 | 223.4 | 8 | 1.18 | 591 | |
| 403 | 230.9 | 8 | 1.2 | 596 | |
| 704 | 176.2 | 8 | 1.2 | 596 | |
| 334 | 208.2 | 8 | 1.22 | 601 | |
| 541 | 171.1 | 8 | 1.22 | 601 | |
| 547 | 195.1 | 8 | 1.26 | 610 | |
| 564 | 202.6 | 8 | 1.29 | 618 | |
| 497 | 99 | 8 | 1.3 | 620 | |
| 370 | 404.3 | 8 | 1.3 | 620 | |
| 423 | 80.6 | 8 | 1.3 | 620 | |
| 686 | 102.2 | 8 | 1.3 | 620 | |
| 633 | 344 | 8 | 1.3 | 620 | |
| 444 | 311 | 8 | 1.43 | 650 | |
| 439 | 208.4 | 8 | 1.44 | 653 | |
| 556 | 67.4 | 8 | 1.44 | 653 | |
| 460 | 170.9 | 8 | 1.45 | 655 | |
| 384 | 103.3 | 8 | 1.5 | 666 | |
| 408 | 83.6 | 8 | 1.5 | 666 | |
| 491 | 225.5 | 8 | 1.53 | 673 | |
| 84866 | 51.5 | 8 | 1.54 | 675 | |
| 336 | 182.5 | 8 | 1.57 | 681 | |
| 462 | 144.6 | 8 | 1.58 | 684 | |
| 333 | 309.3 | 8 | 1.65 | 699 | |
| 580 | 64.2 | 6 | 7.7 | 701 | |
| 678 | 372.7 | 8 | 1.7 | 709 | |
| 682 | 191.9 | 8 | 1.7 | 709 | |
| 684 | 322.8 | 8 | 1.7 | 709 | |
| 318 | 294 | 8 | 1.7 | 709 | |
| 508 | 236.2 | 8 | 1.72 | 713 | |
| 506 | 233.4 | 8 | 1.76 | 721 | |
| 427 | 73.9 | 8 | 1.77 | 723 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 57* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 394 | 94.8 | 8 | 1.8 | 730 |
| 320 | 340 | 8 | 1.8 | 730 |
| 317 | 236 | 8 | 1.8 | 730 |
| 471 | 302.8 | 8 | 1.83 | 736 |
| 507 | 355.7 | 8 | 1.86 | 742 |
| 544 | 154.6 | 8 | 1.9 | 750 |
| 509 | 285.6 | 8 | 1.92 | 754 |
| 330 | 120.1 | 8 | 1.96 | 761 |
| 685 | 346.4 | 8 | 2 | 769 |
| 501 | 278.6 | 8 | 2 | 769 |
| 84858 | 194.2 | 8 | 2 | 769 |
| 451 | 117.1 | 8 | 2.05 | 779 |
| 432 | 214.6 | 8 | 2.05 | 779 |
| 450 | 132.7 | 8 | 2.05 | 779 |
| 449 | 99.4 | 8 | 2.05 | 779 |
| 326 | 83.5 | 8 | 2.06 | 780 |
| 608 | 99 | 8 | 2.09 | 786 |
| 376 | 316.7 | 8 | 2.12 | 792 |
| 406 | 89.7 | 8 | 2.21 | 808 |
| 458 | 275.3 | 8 | 2.26 | 818 |
| 459 | 93.5 | 8 | 2.3 | 825 |
| 587 | 154.5 | 8 | 2.3 | 825 |
| 590 | 322.2 | 8 | 2.3 | 825 |
| 371 | 292.5 | 8 | 2.34 | 832 |
| 604 | 40.4 | 8 | 2.34 | 832 |
| 84862 | 111.3 | 8 | 2.34 | 832 |
| 605 | 67.9 | 8 | 2.37 | 837 |
| 443 | 394.7 | 8 | 2.39 | 841 |
| 433 | 196.1 | 8 | 2.4 | 842 |
| 472 | 282.9 | 8 | 2.41 | 844 |
| 469 | 121.5 | 8 | 2.45 | 851 |
| 498 | 267.4 | 8 | 2.46 | 853 |
| 438 | 295 | 8 | 2.46 | 853 |
| 422 | 110.3 | 8 | 2.47 | 855 |
| 534 | 97.6 | 8 | 2.47 | 855 |
| 554 | 129.8 | 8 | 2.48 | 856 |
| 683 | 325.6 | 8 | 2.5 | 860 |
| 496 | 274.4 | 8 | 2.5 | 860 |
| 79283 | 99 | 8 | 2.53 | 865 |
| 520 | 171.7 | 8 | 2.54 | 867 |
| 602 | 56 | 8 | 2.55 | 868 |
| 79282 | 210 | 8 | 2.56 | 870 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 57* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 431 | 126.3 | 8 | 2.58 | 873 |
| 305 | 128.3 | 8 | 2.58 | 873 |
| 505 | 154.9 | 8 | 2.59 | 875 |
| 425 | 187.6 | 8 | 2.6 | 877 |
| 426 | 183.1 | 8 | 2.61 | 879 |
| 705 | 196.4 | 8 | 2.62 | 880 |
| 304 | 265.2 | 8 | 2.63 | 882 |
| 84876 | 49 | 8 | 2.65 | 885 |
| 391 | 101.5 | 8 | 2.67 | 889 |
| 84870 | 69.1 | 8 | 2.68 | 890 |
| 405 | 140.2 | 8 | 2.7 | 894 |
| 550 | 142.1 | 8 | 2.71 | 895 |
| 84872 | 54.3 | 8 | 2.73 | 898 |
| 551 | 161 | 8 | 2.76 | 903 |
| 504 | 186.7 | 8 | 2.79 | 908 |
| 601 | 49.1 | 8 | 2.81 | 912 |
| 84868 | 46.1 | 8 | 2.83 | 915 |
| 511 | 212.4 | 8 | 2.84 | 916 |
| 428 | 122.5 | 8 | 2.87 | 921 |
| 437 | 251.4 | 8 | 2.88 | 923 |
| 457 | 277.9 | 8 | 2.89 | 924 |
| 436 | 101.4 | 8 | 2.9 | 926 |
| 434 | 206 | 8 | 2.9 | 926 |
| 396 | 257.8 | 8 | 2.9 | 926 |
| 493 | 212.1 | 8 | 2.9 | 926 |
| 492 | 242.8 | 8 | 2.9 | 926 |
| 315 | 116.9 | 8 | 2.9 | 926 |
| 363 | 100.4 | 8 | 3.03 | 947 |
| 495 | 282.3 | 8 | 3.03 | 947 |
| 452 | 141.6 | 8 | 3.13 | 962 |
| 381 | 45.2 | 10 | 0.97 | 971 |
| 455 | 22.5 | 8 | 3.19 | 971 |
| 382 | 263.3 | 8 | 3.2 | 973 |
| 668 | 61.5 | 8 | 3.25 | 980 |
| 563 | 137.5 | 8 | 3.29 | 986 |
| 574 | 197 | 8 | 3.31 | 989 |
| 494 | 264.2 | 8 | 3.35 | 995 |
| 79286 | 108 | 8 | 3.36 | 997 |
| 521 | 99.4 | 8 | 3.39 | 1001 |
| 420 | 158.6 | 8 | 3.4 | 1003 |
| 369 | 192.7 | 8 | 3.42 | 1006 |
| 514 | 191.1 | 8 | 3.47 | 1013 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 57* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 400 | 257.9 | 8 | 3.54 | 1023 |
| 629 | 81 | 8 | 3.66 | 1040 |
| 478 | 135.9 | 8 | 3.68 | 1043 |
| 84875 | 68.3 | 8 | 3.68 | 1043 |
| 468 | 163.3 | 8 | 3.71 | 1047 |
| 681 | 152.7 | 8 | 3.79 | 1059 |
| 700 | 200.6 | 8 | 3.81 | 1061 |
| 79281 | 222 | 8 | 3.82 | 1063 |
| 368 | 279 | 8 | 3.88 | 1071 |
| 374 | 230 | 8 | 3.91 | 1075 |
| 84856 | 135.9 | 8 | 3.93 | 1078 |
| 446 | 283.4 | 8 | 4 | 1088 |
| 558 | 176.6 | 8 | 4.04 | 1093 |
| 557 | 163.7 | 8 | 4.09 | 1100 |
| 484 | 300 | 8 | 4.2 | 1114 |
| 524 | 68.5 | 8 | 4.21 | 1116 |
| 84860 | 73.5 | 8 | 4.25 | 1121 |
| 655 | 227.8 | 8 | 4.44 | 1146 |
| 84864 | 42.3 | 8 | 4.57 | 1163 |
| 79284 | 313 | 8 | 4.61 | 1168 |
| 84877 | 53 | 8 | 4.62 | 1169 |
| 485 | 94.4 | 8 | 4.65 | 1173 |
| 675 | 150 | 8 | 4.7 | 1179 |
| 461 | 75.8 | 8 | 4.78 | 1189 |
| 679 | 154.4 | 8 | 4.8 | 1191 |
| 470 | 31.7 | 8 | 4.8 | 1191 |
| 487 | 253.6 | 8 | 4.8 | 1191 |
| 583 | 80.8 | 8 | 5 | 1216 |
| 706 | 34.6 | 8 | 5 | 1216 |
| 575 | 116.4 | 8 | 5 | 1216 |
| 707 | 143.8 | 8 | 5 | 1216 |
| 395 | 127.9 | 8 | 5.02 | 1218 |
| 467 | 170.8 | 8 | 5.03 | 1220 |
| 535 | 191.3 | 8 | 5.1 | 1228 |
| 631 | 228.9 | 8 | 5.1 | 1228 |
| 387 | 189.3 | 8 | 5.19 | 1239 |
| 489 | 177.9 | 8 | 5.2 | 1240 |
| 411 | 141.2 | 8 | 5.22 | 1242 |
| 79285 | 290 | 8 | 5.37 | 1260 |
| 390 | 308 | 8 | 5.38 | 1261 |
| 488 | 229.1 | 8 | 5.4 | 1264 |
| 599 | 93.9 | 8 | 5.47 | 1272 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 57* | | | Capacity ¹ (gpm)** |
|------|-------------|---------------|-----------|------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 388 | 126.5 | 8 | 5.67 | 1295 | |
| 445 | 148.8 | 8 | 6.16 | 1350 | |
| 653 | 152.6 | 8 | 6.24 | 1358 | |
| 486 | 81.4 | 8 | 6.3 | 1365 | |
| 703 | 155 | 8 | 6.36 | 1371 | |
| 569 | 158.4 | 8 | 6.5 | 1386 | |
| 661 | 176.6 | 8 | 6.63 | 1400 | |
| 660 | 329.8 | 8 | 6.63 | 1400 | |
| 465 | 125.4 | 8 | 6.63 | 1400 | |
| 654 | 53 | 8 | 6.74 | 1412 | |
| 483 | 81.6 | 8 | 6.9 | 1428 | |
| 482 | 95.9 | 8 | 6.9 | 1428 | |
| 687 | 129.9 | 8 | 7 | 1439 | |
| 688 | 206.6 | 8 | 7 | 1439 | |
| 672 | 83.6 | 8 | 7.3 | 1469 | |
| 690 | 246.9 | 8 | 7.4 | 1479 | |
| 555 | 192.5 | 8 | 7.42 | 1481 | |
| 435 | 59 | 8 | 7.43 | 1482 | |
| 552 | 388.5 | 8 | 7.51 | 1490 | |
| 708 | 101.1 | 8 | 7.59 | 1498 | |
| 579 | 69.3 | 8 | 7.59 | 1498 | |
| 673 | 262.1 | 8 | 7.8 | 1519 | |
| 676 | 239 | 8 | 8.2 | 1557 | |
| 674 | 121 | 8 | 8.3 | 1567 | |
| 377 | 265.1 | 8 | 8.3 | 1567 | |
| 527 | 114.7 | 8 | 8.54 | 1589 | |
| 383 | 76.7 | 8 | 8.67 | 1601 | |
| 372 | 232.1 | 8 | 8.9 | 1622 | |
| 373 | 236.9 | 8 | 9.4 | 1667 | |
| 570 | 52.7 | 8 | 9.62 | 1687 | |
| 325 | 58.8 | 8 | 9.64 | 1688 | |
| 598 | 197.3 | 8 | 9.7 | 1694 | |
| 440 | 112.1 | 8 | 9.74 | 1697 | |
| 667 | 230.3 | 8 | 9.77 | 1700 | |
| 561 | 95.5 | 12 | 1.13 | 1704 | |
| 319 | 214.9 | 8 | 10.8 | 1787 | |
| 375 | 286.2 | 8 | 10.9 | 1795 | |
| 323 | 166.3 | 8 | 11.23 | 1822 | |
| 528 | 71.9 | 8 | 11.67 | 1858 | |
| 327 | 33.2 | 8 | 11.92 | 1877 | |
| 628 | 37.8 | 8 | 12.55 | 1926 | |
| 329 | 76.1 | 8 | 13.07 | 1966 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 57* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 328 | 174.9 | 8 | 13.5 | 1998 |
| 529 | 191.5 | 10 | 4.21 | 2023 |
| 316 | 134.2 | 8 | 14.5 | 2071 |
| 321 | 265.6 | 8 | 14.65 | 2081 |
| 593 | 144.3 | 8 | 15.7 | 2155 |
| 606 | 68.5 | 8 | 18.76 | 2355 |
| 607 | 211.4 | 8 | 18.83 | 2360 |
| 585 | 57.7 | 8 | 21.37 | 2514 |
| 562 | 31.1 | 8 | 21.53 | 2523 |
| 702 | 112 | 8 | 21.59 | 2527 |
| 603 | 51.7 | 8 | 23.75 | 2650 |
| 473 | 182.3 | 8 | 24 | 2664 |
| 324 | 181.3 | 8 | 24.4 | 2686 |
| 630 | 60 | 8 | 27.14 | 2833 |
| 530 | 64 | 10 | 12.31 | 3459 |
| 592 | 189.4 | 8 | 54.13 | 4001 |
| 635 | 80.4 | 8 | 0 | Unknown |
| 79287 | 99 | 6 | 0 | Unknown |
| 335 | 115.3 | 8 | 0 | Unknown |
| 307 | 152.3 | 8 | 0 | Unknown |
| 332 | 180.6 | 8 | 0 | Unknown |
| 84897 | 61.9 | 6 | 0 | Unknown |
| 670 | 118.8 | 8 | 999.99 | Unknown |
| 480 | 60.7 | 8 | 999.99 | Unknown |
| 545 | 58.6 | 8 | 999.99 | Unknown |
| 571 | 89.2 | 8 | 999.99 | Unknown |

*: Basin 57 sewers are not modeled. Information shown is the best available from the City's as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

| Basin 58* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 354 | 174 | 8 | 0.12 | 188 |
| 364 | 142.2 | 8 | 0.4 | 344 |
| 370 | 190.4 | 8 | 0.41 | 348 |
| 374 | 152.8 | 8 | 0.43 | 357 |
| 330 | 172.6 | 8 | 0.43 | 357 |
| 367 | 221.2 | 8 | 0.47 | 373 |
| 369 | 96.4 | 8 | 0.6 | 421 |
| 387 | 50.3 | 8 | 1 | 544 |
| 353 | 137.4 | 8 | 1.08 | 565 |
| 331 | 106.3 | 8 | 1.17 | 588 |
| 378 | 98.5 | 8 | 1.3 | 620 |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Name | Length (ft) | Basin 58* | | | Capacity ¹ (gpm)** |
|-------|-------------|---------------|-----------|------|-------------------------------|
| | | Diameter (in) | Slope (%) | | |
| 350 | 55.2 | 8 | 1.72 | 713 | |
| 385 | 212.5 | 8 | 2.13 | 794 | |
| 358 | 213.6 | 8 | 2.3 | 825 | |
| 348 | 292.8 | 8 | 3 | 942 | |
| 344 | 72.2 | 8 | 3.1 | 957 | |
| 334 | 178.3 | 8 | 3.13 | 962 | |
| 375 | 97 | 8 | 3.26 | 982 | |
| 340 | 302.8 | 8 | 3.4 | 1003 | |
| 383 | 106 | 8 | 3.69 | 1045 | |
| 366 | 119.2 | 8 | 3.8 | 1060 | |
| 349 | 154 | 8 | 4 | 1088 | |
| 379 | 188.6 | 8 | 4.25 | 1121 | |
| 352 | 80 | 8 | 4.9 | 1204 | |
| 384 | 311.4 | 8 | 5.5 | 1275 | |
| 85645 | 14.4 | 8 | 5.64 | 1291 | |
| 345 | 109.4 | 8 | 5.78 | 1307 | |
| 335 | 282.4 | 8 | 5.97 | 1329 | |
| 389 | 27.3 | 8 | 6.17 | 1351 | |
| 329 | 152.4 | 8 | 6.47 | 1383 | |
| 78250 | 141.9 | 8 | 7.06 | 1445 | |
| 341 | 180.8 | 8 | 7.14 | 1453 | |
| 339 | 247 | 8 | 7.52 | 1491 | |
| 332 | 159.5 | 8 | 7.71 | 1510 | |
| 342 | 131.4 | 8 | 8.65 | 1599 | |
| 333 | 331.8 | 8 | 9.7 | 1694 | |
| 337 | 115.6 | 8 | 9.82 | 1704 | |
| 328 | 317.6 | 8 | 9.97 | 1717 | |
| 357 | 61.5 | 8 | 10.3 | 1745 | |
| 351 | 77.4 | 8 | 11.2 | 1820 | |
| 368 | 125.1 | 8 | 11.57 | 1850 | |
| 371 | 204.3 | 8 | 11.79 | 1867 | |
| 377 | 127.4 | 8 | 12.1 | 1892 | |
| 336 | 91.4 | 8 | 12.93 | 1955 | |
| 380 | 154.3 | 8 | 13.34 | 1986 | |
| 376 | 86.5 | 8 | 13.74 | 2016 | |
| 365 | 209.1 | 8 | 14 | 2035 | |
| 381 | 54.1 | 8 | 16.44 | 2205 | |
| 355 | 51.2 | 8 | 22 | 2551 | |
| 356 | 133.9 | 8 | 31 | 3028 | |
| 386 | 118.4 | 8 | 31.13 | 3034 | |
| 343 | 167.9 | 8 | 33.33 | 3139 | |
| 388 | 78.8 | 8 | 44.79 | 3639 | |

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

| Basin 58* | | | | |
|-----------|-------------|---------------|-----------|-------------------------------|
| Name | Length (ft) | Diameter (in) | Slope (%) | Capacity ¹ (gpm)** |
| 346 | 61.2 | 8 | 46.59 | 3712 |
| 382 | 73.4 | 8 | 51.1 | 3887 |
| 338 | 54.1 | 8 | 63.88 | 4346 |
| 347 | 122 | 8 | 0 | Unknown |
| 372 | 163.6 | 8 | 999.99 | Unknown |
| 390 | 28.9 | 8 | 999.99 | Unknown |
| 363 | 26.8 | 8 | 999.99 | Unknown |

*: Basin 58 sewers are not modeled. Information shown is the best available from the City’s as-built data.

** : Unknown capacities given for pipes with unknown slopes or diameters

1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.

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1. Capacities shown are estimated based on a gross approximation of pipe roughness for each segment indicated, and do not take into account any downstream backwater effects.