City of Bellevue - Budget One
2013-2019 Utility CIP Plan Proposal

Section 1: Proposal Descriptors

Proposal Title: Utility Improvements for New NE 15th Multi Modal Corridor

Proposal Number: 140.54DA

Proposal Type: New Service

Project Status Funded

Outcome: Improved Mobility

Attachments: No

Primary Dept: Utilities

Parent/Dependent Proposals: P 130.52PA

Primary Staff Contact: Dave Perry, x4351

Previous Proposal # (s): 140.54DN

Section 2: Executive Summary

This proposal is for design and construction of new water pipes under the new NE 15th Multi Modal Corridor, where they are needed to provide water service for redevelopment of adjacent properties in the Bel-Red Corridor. This proposal is required as a result of Transportation's proposal 130.52PA, R-163 NE 15th St Multi-Modal Corridor – 116th Ave NE at NE 12th St to 136th Pl NE at Northup Way, and was therefore developed to complement that proposal's scope. No new sewer pipes are needed in this section of the corridor.

Section 3: Requested Resources $000

CIP #: See Below

CIP Expenditure	Spending Thru 2012	2013	2014	2015	2016	2017	2018	2019
W-105	205,937	208,000	214,020	220,000	225,940	232,260	238,540	367,470
Total Costs/yr	205,937	208,000	214,020	220,000	225,940	232,260	238,540	367,470
2013-2019 Total:		$1,706,230						
CIP M&O:		0	0	0	0	0	0	0
Supporting Revenue								
W-105		208,000	214,020	220,000	225,940	232,260	238,540	367,470
Total Revenue / Yr		208,000	214,020	220,000	225,940	232,260	238,540	367,470

Section 4: Budget Proposal Description

This proposal is supported by utility rates, and was included in the 2011-17 adopted CIP. The timing and magnitude of work have been updated to align with the Parent Proposal. The utility investment associated with redevelopment of the Bel-Red Corridor will be recouped via connection charges collected from benefited properties when they redevelop.

Water pipes will be needed to provide utility services to properties adjacent to the new NE 15th Multi Modal Corridor, and to improve water supply capacity for anticipated growth throughout the Bel-Red Corridor. This project will eventually design and construct approximately 1.0 mile of 16-inch water pipe, and just over 1 mile of 12-inch sewer pipe in the new NE 15th/16th Street right-of-way. Utility design and construction will be coordinated with corridor design and construction, so that utilities are in place and do not conflict with surface design of street/path/bikeway/light rail.

Specific improvements included in this proposal: Design and construction of water facilities needed in the NE 15th St Multi Modal Corridor, between 116th Ave. NE and 136th Pl NE. A new 16" water pipe would be installed from 116th Avenue NE to approximately 128th Ave NE. From 128th Avenue NE east

to 136th Place NE and then north in 136th Pl NE to Northup Way, two parallel 12" water pipes would be installed, one on each side of the proposed Sound Transit Light Rail tracks. One pipe would be relocation and up-sizing, the other would be a new pipe. This CIP will fund the cost of the upsizing and the cost of the new pipe. Relocation costs will be borne by the Sound Transit project.
Total cost of design and construction for the water pipes is estimated at $3.9 million. This includes $2.2 million needed beyond this CIP window (these costs provided in 2012 constant dollars.)
This proposal involves close collaboration between Transportation and Utilities to assure the design and construction of utility facilities is done in coordination with the corridor design and construction. Selection of a consultant or team of consultants for coordinated road and utility design may result in lower design costs.
Short- and long-term benefits of this proposal:
In the short term, this proposal will assure design of utility facilities is complete so utility facilities are ready for construction when resources to build the corridor are secured and approved. The design will provide the basis for an improved construction cost estimate, so appropriate utility rates are collected to pay for it. In the long term, this proposal will assure design and construction of the utilities that will be foundational to eventual construction of the primary mobility corridor through the Bel-Red Corridor.
Describe why the level of service being proposed is the appropriate level: The proposal is intended to design and construct utility facilities concurrent with design of planned street, bikeway, pedestrian and light rail improvements. The proposed budget aligns with the parent Transportation proposal.

Section 5: Responsiveness to Request For Results

A. Factors/Purchasing strategies addressed by this proposal - for the PRIMARY outcome:

Factor 1: Existing and Future Infrastructure. Design of utility facilities concurrent with design of the street corridor supports thoughtful planning and integration of the infrastructure that will be needed to meet the City's vision for the Bel-Red Corridor. Much as the surface improvements will provide the 'backbone' for mobility through the redeveloping residential/commercial district, the large diameter water pipes will provide the primary water pipes for moving water from the regional supply station through the corridor.
Factor 2: Traffic Flow. Design of utility facilities concurrent with the road design supports coordinated construction of utilities with the surface improvements, so that traffic disruptions are minimized.
The proposal addresses these Purchasing Strategies for Improved Mobility: The water and sewer infrastructure will be designed with sufficient capacity to accommodate future population demand, based on land use. New water and sewer pipes are expected to last 125 years, on average, so pipes sized for ultimate capacity will be constructed. Utility facilities designed to deliver safe, reliable utility service are part of the Built Environment, and promote and support the economic vitality of the City.

B. Factors/Purchasing strategies addressed by this proposal - for the OTHER outcome(s):

Factors for other Outcomes: This proposal supports a Healthy and Sustainable Environment by designing facilities that will deliver clean drinking water to and safely remove wastewater from residents and businesses along and near the multi-modal corridor. (Clean Reliable Water). Well-designed utility facilities minimize the opportunities for water or sewer pipe failures, protecting the streams, wetlands, and lakes in the Bel-Red Corridor from pollution and erosion. (Natural Environment). Designing sufficient utility capacity for the planned population is proactive and results in least life cycle cost for pipelines, which last 125 years.
City-wide Purchasing Strategies:
• Design of utilities concurrent with the road improvements assures close collaboration between Utilities and Transportation, as well as Sound Transit for coordination with light rail construction

plans. It provides best value for the community by identifying and resolving potential design conflict issues. Selection of a consultant or team of consultants for coordinated road and utility design may result in lower design costs. (Reduced short term financial impacts)

- The design will assure right-sized utilities that will provide water and wastewater services appropriate for the planned land use, and results in lowest life-cycle cost by building capacity appropriate to the expected 125+year life of the facilities (long term financial benefits), which is a sound resource management strategy.

C. Partnerships and Collaboration proposed:

This proposal involves close collaboration between Transportation and Utilities to assure the design and construction of utility facilities is coordinated with street design and construction.

D. Activities in this proposal that support the work of other proposals, or save costs that would otherwise have to be expended:

Selection of a consultant or team of consultants for coordinated road and utility design may result in lower design costs.

Consequence of not funding the proposal at all

- Customer Impact: Construction of multi-modal surface improvements will be delayed awaiting water and sewer facility design; or (if design is not done prior to corridor construction) newly paved surfaces will need to be dug up to allow construction of water and sewer facilities; and Development/redevelopment projects may be delayed awaiting availability of water and sewer service.

Consequence of funding at a lower level: Utility facilities could not be designed for the full extent of the planned multi-modal corridor.

City of Bellevue - Budget One
2013-2019 Utility CIP Plan Proposal

Section 1: Proposal Descriptors

Proposal Title: Utility Facilities for NE4th St. Extension

Proposal Number: 140.55DA
Proposal Type: New Service
Project Status Funded
Primary Dept: Utilities
Primary Staff Contact: Dave Perry, x4351

Outcome: Improved Mobility
Attachments: No
Parent/Dependent Proposals: P 130.50PA
Previous Proposal # (s): 140.55DN

Section 2: Executive Summary

This proposal is for design and construction of approximately 1400 feet of new 16-inch watermain within the new NE 4th right-of-way, to improve Bellevue's water system's ability to deliver water to the downtown area, and to improve water system redundancy/reliability. This proposal is required as a result of Transportation's proposal 130.50PA, R-160 NE 4th Street Extension – 116th to 120th Avenues NE.

Section 3: Requested Resources $000

CIP #: See Below

CIP Expenditure	Spending Thru 2012	2013	2014	2015	2016	2017	2018	2019
W-106	281,882	98,988	101,853	0	0	0	0	0
Total Costs/yr	281,882	98,988	101,853	0	0	0	0	0
2013-2019 Total:		$200,841						
CIP M&O:		0	0	0	0	0	0	0
Supporting Revenue								
W-106		98,988	101,853	0	0	0	0	0
Total Revenue / Yr		98,988	101,853	0	0	0	0	0

Section 4: Budget Proposal Description

This proposal is supported by utility rates, and was included in the 2011-17 adopted CIP. The timing and magnitude of work has been updated to align with the Parent Proposal.
This proposal will construct approximately 1400 feet of new 16-inch watermain within the new NE 4th right-of-way, to improve Bellevue's water system's ability to deliver water to approximately 20% of the utility's residential customers and the downtown area, and to improve water system redundancy/reliability. There are only limited opportunities for pipelines to cross the BNRR and I-405 that run through Bellevue. This project provides an opportunity to strengthen water system links, so that water can be delivered more easily to downtown Bellevue, and to add redundancy in case any one of the pipes that cross the railroad or highway need to be taken out of service. Utility construction will be coordinated with street construction, so that utilities are in place prior to final street surfacing. This proposal involves close collaboration between Transportation and Utilities to assure the design and construction of utility facilities is done in coordination with street design and construction. Selection of a consultant or team of consultants for coordinated road and utility design may result in lower design costs.
Short- and long-term benefits of this proposal:
In the short term, this proposal will assure design and construction of utility facilities is coordinated

and accomplished efficiently. In the long term, this proposal is will assure utilities that are foundational to reliably meeting the future water needs of the Wilburton area and downtown.
Describe why the level of service being proposed is the appropriate level:
The proposal is intended to design and construct utility facilities concurrent with design and construction of planned street improvements. It is not scalable.

Section 5: Responsiveness to Request For Results

A. Factors/Purchasing strategies addressed by this proposal - for the PRIMARY outcome:

Factor 1: Existing and Future Infrastructure. Design and construction of utility facilities concurrent with design and construction of NE 4th supports thoughtful planning and integration of the infrastructure that will be needed to meet the City's vision for downtown and the Wilburton Area. Much as the new street will provide improved mobility through Wilburton and to/from downtown, the large diameter water pipe will provide improved reliability of water movement through Wilburton and into downtown.

Factor 2: Traffic Flow. Design and construction of utility facilities concurrent with road design and construction supports coordinated of utilities and surface improvements, so that traffic disruptions are minimized.

The proposal addresses these Purchasing Strategies for Improved Mobility: The water infrastructure will be designed with sufficient capacity to accommodate future population demand, based on land use. New water pipes are expected to last 125 years, on average, so pipes sized for ultimate capacity will be constructed. Utility facilities designed to deliver safe, reliable utility service are part of the Built Environment, and promote and support the economic vitality of the City.

B. Factors/Purchasing strategies addressed by this proposal - for the OTHER outcome(s):

Factors for other Outcomes: This proposal supports a Healthy and Sustainable Environment by designing facilities that will improve reliable delivery of clean drinking water to residents and businesses in Wilburton and downtown. (Clean Reliable Water). Well-designed utility facilities minimize the opportunities for water pipe failures, protecting streams, wetlands, and lakes from pollution and erosion. (Natural Environment). Designing sufficient utility capacity for the planned population is proactive and results in least life cycle cost for pipelines, which last 125 years.

City-wide Purchasing Strategies:

- Design of utilities concurrent with the road improvements assures close collaboration between Utilities and Transportation. It provides best value for the community by identifying and resolving potential design conflict issues. Selection of a consultant or team of consultants for coordinated road and utility design may result in lower design costs. (Reduced short term financial impacts)
- The design will assure right-sized utilities that will provide water service appropriate for the planned land use, and results in lowest life-cycle cost by building capacity appropriate to the expected 125+year life of the facilities (long term financial benefits), which is a sound resource management strategy.

C. Partnerships and Collaboration proposed:

This proposal involves close collaboration between Transportation and Utilities to assure the design and construction of utility facilities is coordinated with street design and construction.

D. Activities in this proposal that support the work of other proposals, or save costs that would otherwise have to be expended:

Consequence of not funding the proposal at all

Customer Impact:

- Construction of street improvements will be delayed awaiting water facility design; or
- (If design is not done prior to street construction) Newly paved surfaces will need to be dug up to

allow construction of water facilities.

Consequence of funding at a lower level: This proposal is not scalable; the proposed water pipe cannot be designed and constructed at a lower cost.

City of Bellevue - Budget One
2013-2019 Utility CIP Plan Proposal

Section 1: Proposal Descriptors

Proposal Title: Utility Facilities for 120th Ave NE Improvements Segment 2

Proposal Number: 140.56DA

Proposal Type: New Service

Project Status Funded

Outcome: Improved Mobility

Attachments: No

Parent/Dependent Proposals: P 130.53PA

Previous Proposal # (s): 140.56DN

Primary Dept: Utilities

Primary Staff Contact: Dave Perry, x4351

Section 2: Executive Summary

This proposal is for design and construction of approximately 700 feet of 18-inch sewer pipe in a portion of 120th Ave NE – Segment 2 , between NE 8th St and NE 12th St, in conjunction with street improvements, and where needed to provide sewer service for redevelopment of adjacent properties consistent with Bel-Red Corridor development. This proposal is required as a result of Transportation's proposal 130.52PA, R-164 120th Avenue Segment 2 – NE 8th Street to NE 12th Street, and was therefore developed to approximately match that proposal's scope.

Section 3: Requested Resources $000

CIP #: See Below

CIP Expenditure	Spending Thru 2012	2013	2014	2015	2016	2017	2018	2019
S-63	84,864	0	535,050	550,000	0	0	0	0
Total Costs/yr	84,864	0	535,050	550,000	0	0	0	0
2013-2019 Total:		$1,085,050						
CIP M&O:		0	0	0	0	0	0	0
Supporting Revenue								
S-63		0	535,050	550,000	0	0	0	0
Total Revenue / Yr		0	535,050	550,000	0	0	0	0

Section 4: Budget Proposal Description

This proposal is supported by utility rates, and was included in the 2011-17 adopted CIP. The timing and magnitude of work have been updated to align with the Parent Proposal. The utility investment associated with redevelopment of the Bel-Red Corridor will be recouped via connection charges collected from benefited properties when they redevelop.

To have sewer service available, commercial and residential development along 120th Avenue NE and just uphill from the intersection with NE 12th St will require new sewer facilities be constructed in the street. Utility construction will be coordinated with street construction, so that utilities are in place prior to final street surfacing.

Specific improvements included in this proposal: Design and construction of sewer facilities needed in a portion of 120th Ave NE – Segment 2, between NE 8th St and NE 12th St. The only sewer pipe required in this portion of 120th Ave NE is from NE 12th St, south approximately 700 feet connecting to an existing manhole.

Short- and long-term benefits of this proposal:

In the short term, this proposal will assure design of utility facilities is complete so utility facilities are ready for construction when resources to build the street improvements are secured and approved.

The design will provide the basis for an improved construction cost estimate, so appropriate utility rates are collected to pay for it. In the long term, this proposal will assure utilities that are foundational to eventual construction of the primary mobility corridor through the Bel-Red Corridor.
Describe why the level of service being proposed is the appropriate level:
The proposal is intended to design utility facilities concurrent with design of planned street and light rail improvements. The project is not scalable except if the parent proposal scope is changed; utility facilities must be constructed in concert with street construction.

Section 5: Responsiveness to Request For Results

A. Factors/Purchasing strategies addressed by this proposal - for the PRIMARY outcome:

Factor 1: Existing and Future Infrastructure. Design of utility facilities concurrent with design of the street corridor supports thoughtful planning and integration of the infrastructure that will be needed to meet the City's vision for the Bel-Red Corridor. Much as the surface improvements will provide for mobility needs through the redeveloping residential/commercial district, the sewer pipes will provide needed sewer service through this portion of the corridor. The sewer pipes will be sized to convey anticipated sewage from the planned land uses.
Factor 2: Traffic Flow. Design of utility facilities concurrent with the road design supports coordinated construction of utilities with the surface improvements, so that traffic disruptions are minimized.
The proposal addresses these Purchasing Strategies for Improved Mobility: The sewer infrastructure will be designed with sufficient capacity to accommodate future population demand, based on land use. New sewer pipes are expected to last 125 years, on average, so pipes sized for ultimate capacity will be constructed. Utility facilities designed to deliver safe, reliable utility service are part of the Built Environment, and promote and support the economic vitality of the City.

B. Factors/Purchasing strategies addressed by this proposal - for the OTHER outcome(s):

This proposal supports a Healthy and Sustainable Environment by designing facilities that will safely remove wastewater from residents and businesses along and near 120th Ave NE. (Clean Reliable Water). Well-designed utility facilities minimize the opportunities for sewer pipe failures, protecting streams, wetlands, and lakes in the Bel-Red Corridor from pollution and erosion. (Natural Environment). Designing sufficient utility capacity for the planned population is proactive and results in least life cycle cost for pipelines, which last 125 years. Wastewater service is a basic human need (Innovative, Vibrant and Caring Community), and integral to public health and safety (Quality and Safe Neighborhoods.)
This proposal responds to these City-wide Purchasing Strategies:
• Design of utilities concurrent with the road improvements assures close collaboration between Utilities and Transportation, as well as Sound Transit for coordination with light rail construction plans. It provides best value for the community by identifying and resolving potential design conflict issues. Selection of a consultant or team of consultants for coordinated road and utility design may result in lower design costs. (Reduced short term financial impacts)
• The design will assure right-sized utilities that will provide wastewater services appropriate for the planned land use, and results in lowest life-cycle cost by building capacity appropriate to the expected 125+year life of the facilities (long term financial benefits), which is a sound resource management strategy.

C. Partnerships and Collaboration proposed:

This proposal involves close collaboration between Transportation and Utilities to assure the design and construction of utility facilities is done in coordination with street design and construction.

D. Activities in this proposal that support the work of other proposals, or save costs that would otherwise have to be expended:

Selection of a consultant or team of consultants for coordinated road and utility design may result in lower design costs.

Consequence of not funding the proposal at all

Customer Impact:

- Construction of multi-modal surface improvements will be delayed awaiting water and sewer facility design; or (if design is not done prior to corridor construction)
- Newly paved surfaces will need to be dug up to allow construction of water and sewer facilities; and
- Development/redevelopment projects may be delayed awaiting availability of sewer service.

Consequence of funding at a lower level: Utility facilities could not be designed for the full extent of the planned street improvements.