

8 March 2005

**SR 520 Bridge Replacement
and HOV Project Draft EIS**

Appendix N

**Public Services and Utilities
Discipline Report**



SR 520 Bridge Replacement and HOV Project Draft EIS

Public Services and Utilities Discipline Report



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Federal Highway Administration
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- 1 Utility Permit and Franchise Holders in WSDOT Right-of-Way



List of Exhibits

- Exhibit 1 Project Vicinity Map
- Exhibit 2 No Build Alternative
- Exhibit 3 4-Lane Alternative
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- Exhibit 5 Public Services and Utility Locations in the Seattle Project Area
- Exhibit 6 Public Services and Utility Locations in the Eastside Project Area
- Exhibit 7 Schools in the Seattle Project Area
- Exhibit 8 Schools in the Eastside Project Area



Acronyms and Abbreviations

BCC	Bellevue Community College
BMP	best management practices
BNSF	Burlington Northern Santa Fe
CWA	Cascade Water Alliance
DSL	digital subscriber line
EIS	Environmental Impact Statement
GIS	Geographic Information System
HOV	high-occupancy vehicle
kV	kilovolt
mph	miles per hour
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
SEPA	State Environmental Policy Act
SPU	Seattle Public Utilities
TOPS	The Option Program at Seward School
WSDOT	Washington State Department of Transportation



Introduction

Why are public services and utilities considered in an EIS?

Local governments, utility districts, and occasionally private companies provide public services and utilities to the residents within their service boundaries. Public services include fire and police protection, schools, parks and recreational facilities, churches, and cemeteries. Utilities include electricity, natural gas, water, wastewater and stormwater collection, and telecommunications. If a project has the potential to affect public services and utilities by increasing demand beyond the capability of service providers or by disrupting service, both the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) require that public services and utilities be considered in an Environmental Impact Statement (EIS). Construction may require relocation or adjustment of utility lines or facilities, or may interfere temporarily with police, fire, and emergency services.

What are the key points of this report?

Few effects to public services and utilities are attributable to either build alternative. Most effects would be temporary as a result of construction. A permanent effect of both build alternatives would be the potential relocation of part of the National Oceanic and Atmospheric Administration (NOAA) facility; this effect is discussed in Appendix K, *Land Use, Economics, and Relocations Discipline Report*.

After the project has been completed, many of the effects would be positive with both the build alternatives improving the response times of fire, emergency medical, and police vehicles within the project area.

No utilities would be affected by either of the build alternatives.

What are the project alternatives?

The SR 520 Bridge Replacement and HOV Project area comprises neighborhoods in Seattle from I-5 to the Lake Washington shore, Lake Washington, and Eastside communities and neighborhoods from the Lake Washington shore to 124th Avenue Northeast just east of I-405. Exhibit 1 shows the general location of the project. Neighborhoods and communities in the project area are:



- Seattle neighborhoods – Portage Bay/Roanoke, North Capitol Hill, Montlake, University District, Laurelhurst, and Madison Park
- Eastside communities and neighborhoods – Medina, Hunts Point, Clyde Hill, Yarrow Point, Kirkland (the Lakeview neighborhood), and Bellevue (the North Bellevue, Bridle Trails, and Bel-Red/Northup neighborhoods).

The SR 520 Bridge Replacement and HOV Project Draft EIS evaluates the following three alternatives and one option:

- No Build Alternative
- 4-Lane Alternative
 - Option with pontoons without capacity to carry future high capacity transit
- 6-Lane Alternative

Each of these alternatives is described below. For more information, see the *Description of Alternatives and Construction Techniques Report* contained in Appendix A of this EIS.

What is the No Build Alternative?

All EISs provide an alternative to assess what would happen to the environment in the future if nothing were done to solve the project’s identified problem. This alternative, called the No Build Alternative, means that the existing highway would remain the same as it is today (Exhibit 2). The No Build Alternative provides the basis for measuring and comparing the effects of all of the project’s build alternatives.

This project is unique because the existing SR 520 bridges may not remain intact through 2030, the project’s design year. The fixed spans of the Portage Bay and Evergreen Point bridges are aging and are vulnerable to earthquakes;

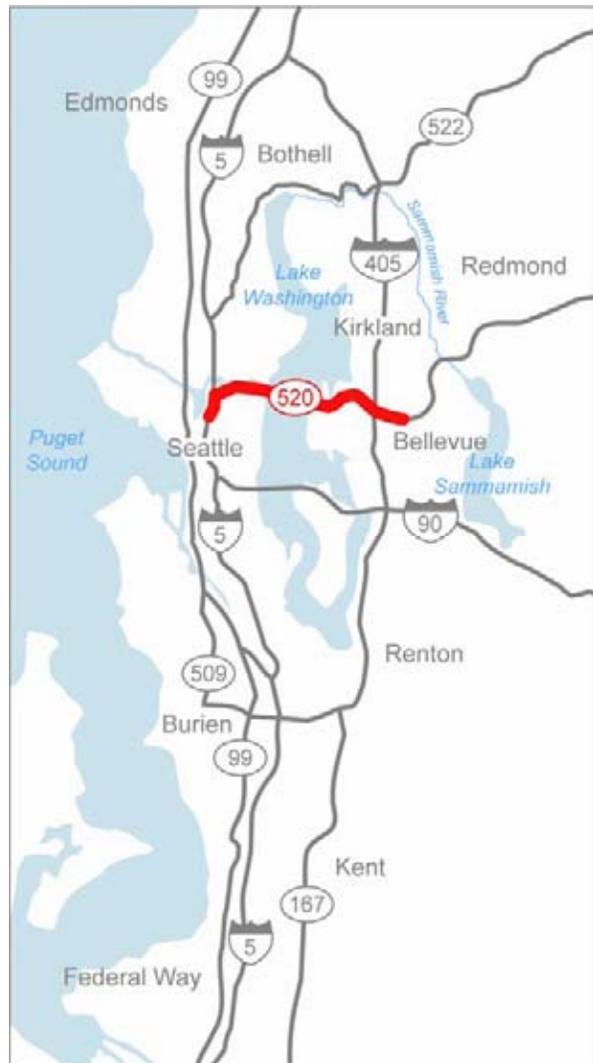


Exhibit 1. Project Vicinity Map

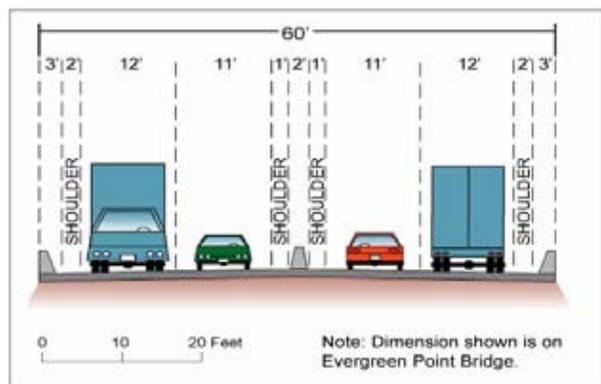


Exhibit 2. No Build Alternative



the floating portion of the Evergreen Point Bridge is vulnerable to wind and waves.

In 1999, the Washington State Department of Transportation (WSDOT) estimated the remaining service life of the Evergreen Point Bridge to be 20 to 25 years based on the existing structural integrity and the likelihood of severe windstorms. The floating portion of the Evergreen Point Bridge was originally designed for a sustained wind speed of 57.5 miles per hour (mph), and was rehabilitated in 1999 to withstand sustained winds of up to 77 mph. The current WSDOT design standard for bridges is to withstand a sustained wind speed of 92 mph. In order to bring the Evergreen Point Bridge up to current design standards to withstand at least 92 mph winds, the floating portion must be completely replaced.

The fixed structures of the Portage Bay and Evergreen Point bridges do not meet current seismic design standards because the bridge is supported on hollow-core piles. These hollow-core piles were not designed to withstand a large earthquake. They are difficult and cost prohibitive to retrofit to current seismic standards.

If nothing is done to replace the Portage Bay and Evergreen Point bridges, there is a high probability that both structures could fail and become unusable to the public before 2030. WSDOT cannot predict when or how these structures would fail, so it is difficult to determine the actual consequences of doing nothing. To illustrate what could happen, two scenarios representing the extremes of what is possible are evaluated as part of the No Build Alternative. These are the Continued Operation and Catastrophic Failure scenarios.

Under the Continued Operation Scenario, SR 520 would continue to operate as it does today as a 4-lane highway with nonstandard shoulders and without a bicycle/pedestrian path. No new facilities would be added and no existing facilities (including the unused R.H. Thompson Expressway Ramps near the Arboretum) would be removed. WSDOT would continue to maintain SR 520 as it does today. This scenario assumes the Portage Bay and Evergreen Point bridges would remain standing and functional through 2030. No catastrophic events (such as earthquakes or high winds) would be severe enough to cause major damage to the SR 520 bridges. This scenario is the baseline the EIS team used to compare the other alternatives.



In the Catastrophic Failure Scenario, both the Portage Bay and Evergreen Point bridges would be lost due to some type of catastrophic event. Although in a catastrophic event, one bridge might fail while the other stands, this Draft EIS assumes the worst-case scenario – that both bridges would fail. This scenario assumes that both bridges would be seriously damaged and would be unavailable for use by the public for an unspecified length of time.

What is the 4-Lane Alternative?

The 4-Lane Alternative would have four lanes (two general purpose lanes in each direction), the same number of lanes as today (Exhibit 3). SR 520 would be rebuilt from I-5 to Bellevue Way. Both the Portage Bay and Evergreen Point bridges would be replaced. The bridges over SR 520 would also be rebuilt. Roadway shoulders would meet current standards (4-foot inside shoulder and 10-foot outside shoulder). A 14-foot-wide bicycle/pedestrian path would be built along the north side of SR 520 through Montlake, across the Evergreen Point Bridge, and along the south side of SR 520 through Medina, Hunts Point, Clyde Hill, and Yarrow Point to 96th Avenue Northeast, connecting to Northeast Points Drive. Sound walls would be built along much of SR 520 in Seattle and the Eastside. This alternative also includes stormwater treatment and electronic toll collection.

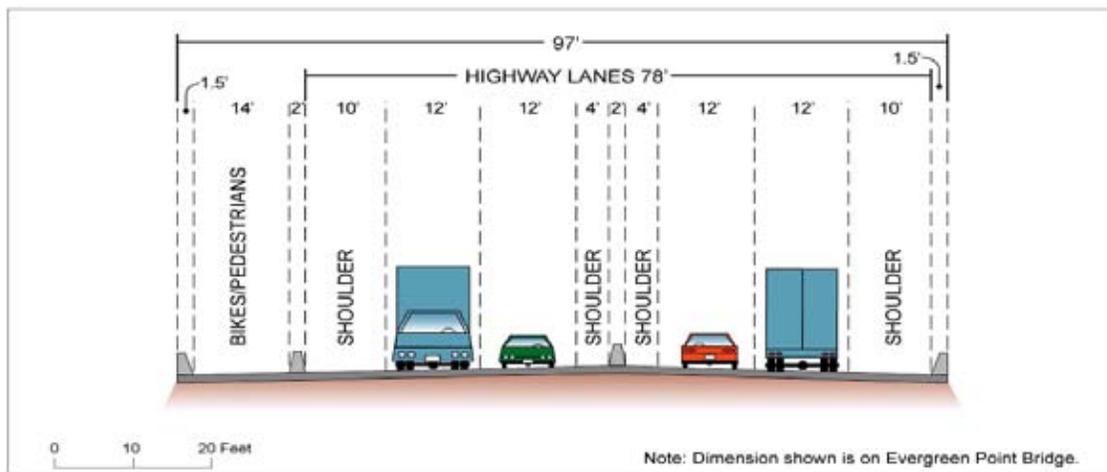


Exhibit 3. 4-Lane Alternative

The floating bridge pontoons of the Evergreen Point Bridge would be sized to carry future high-capacity transit. An option with smaller pontoons that could not carry future high-capacity transit is also analyzed. The alternative does not include high-capacity transit.



A bridge operations facility would be built underground beneath the east roadway approach to the bridge as part of the new bridge abutment. A dock to moor two boats for maintenance of the Evergreen Point Bridge would be located under the bridge on the east shore of Lake Washington.

A flexible transportation plan would promote alternative modes of travel and increase the efficiency of the system. Programs include intelligent transportation and technology, traffic systems management, vanpools and transit, education and promotion, and land use as demand management.

What is the 6-Lane Alternative?

The 6-Lane Alternative would include six lanes (two outer general purpose lanes and one inside HOV lane in each direction; Exhibit 4). SR 520 would be rebuilt from I-5 to 108th Avenue Northeast in Bellevue, with an auxiliary lane added on SR 520 eastbound east of I-405 to 124th Avenue Northeast. Both the Portage Bay and Evergreen Point bridges would be replaced. Bridges over SR 520 would also be rebuilt. Roadway shoulders would meet current standards (10-foot-wide inside shoulder and 10-foot-wide outside shoulder). A 14-foot-wide bicycle/pedestrian path would be built along the north side of SR 520 through Montlake, across the Evergreen Point Bridge, and along the south side of SR 520 through the Eastside to 96th Avenue Northeast, connecting to Northeast Points Drive. Sound walls would be built along much of SR 520 in Seattle and the Eastside. This alternative would also include stormwater treatment and electronic toll collection.

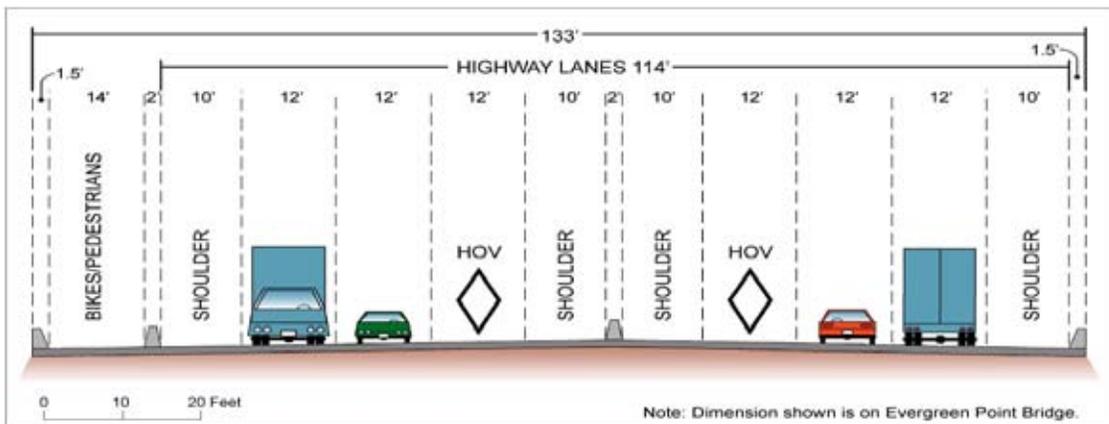


Exhibit 4. 6-Lane Alternative



This alternative would also add five 500-foot-long landscaped lids to be built across SR 520 to help reconnect communities. These communities are Roanoke, North Capitol Hill, Portage Bay, Montlake, Medina, Hunts Point, Clyde Hill, and Yarrow Point. The lids are located at 10th Avenue East and Delmar Drive East, Montlake Boulevard, Evergreen Point Road, 84th Avenue Northeast, and 92nd Avenue Northeast.

The floating bridge pontoons of the Evergreen Point Bridge would be sized to carry future high-capacity transit. The alternative does not include high-capacity transit.

A bridge operations facility would be built underground beneath the east roadway approach to the bridge as part of the new bridge abutment. A dock to moor two boats and maintain the Evergreen Point Bridge would be located under the bridge on the east shore of Lake Washington.

A flexible transportation plan would promote alternative modes of travel and increase the efficiency of the system. Programs would include intelligent transportation and technology, traffic systems management, vanpools and transit, education and promotion, and land use as demand management.

Affected Environment

How was the information collected?

The public services and utilities discipline team reviewed comprehensive plans for each of the cities in the project area to identify the current providers of public services and utilities. Geographic Information System (GIS) mapping helped to locate facilities such as fire and police stations. Many public service providers also have web pages that provided useful information. For specific data, we contacted public service and utility providers directly and interviewed them by phone. We also used maps from utility providers showing the location of their utility lines and facilities. In coordination with WSDOT, we collected information about all known utilities, based on utility permits and franchise agreements, within the WSDOT right-of-way (see Attachment 1 for a complete list).

This report does not include the Lake Washington subarea because there are no public services or utilities in the lake.



What are the existing public services and utilities characteristics of the project area?

The following sections discuss fire and emergency medical services, police, schools, churches, community centers, cemeteries, government offices, and utility providers (electricity and natural gas, telephone service, cable service, water, sewer, and garbage) in the project area. Public services in the Seattle project area are shown on Exhibit 5. Exhibit 6 shows public services and utilities in the Eastside project area.

What fire and emergency medical services are in the project area?

Seattle

Seattle Fire Department Station #22 is near the project area at 901 East Roanoke Street. In 2003, Station #22 average response time (from the time the units were dispatched to arrival at the emergency scene) was just over 5 minutes 40 seconds for fire, rescue calls, and hazardous materials calls, and 4 minutes 21 seconds for basic life support incidents or calls (Seattle Fire Department 2004). The severity of the incident would determine the number and type of response vehicles, which could affect response times.



Seattle Fire Department Station #22

The Seattle Fire Department plans to rebuild Fire Station #22 in 2010 or 2011. Plans to double the footprint of the existing station are in the preliminary stage. The current station would be removed and the vacant WSDOT-owned parcel to the east might be acquired to allow for the expansion. The existing station would be moved to an interim location during the station reconstruction period.

The Seattle Fire Department has an old fireboat, the *Alki*, moored at Fishermen's Terminal in Ballard. They plan to replace the *Alki* with the *Chief Seattle* (currently moored on Elliot Bay) after a new boat is built for Elliot Bay. The *Chief Seattle* has a draft of 7 feet and requires clearance of 32 feet under a bridge. Through mutual aid agreements with jurisdictions around Lake Washington, the fireboat could respond to boat or marina fires anywhere on the lake. It could also pump water to support land-based firefighting of structural fires along the shoreline. Until recently, there was no fireboat stationed inside the Ballard Locks,



so no data are available about how often the fireboat is called to respond to fires in Lake Washington.

The University of Washington Medical Center, located at 1959 Northeast Pacific Street, is the closest hospital to the project area (Exhibit 5). Harborview Medical Center, 325 9th Avenue, is the Level 1 Trauma facility for the region and headquarters for the Seattle Fire Department's Medic One Program. Three ambulances are located here as well as paramedics capable of providing advanced life support techniques in Seattle. These Medic One units respond to all fires, hazardous materials calls, and rescue calls within the project area. In addition to Harborview and the University of Washington, other hospitals serving the project area are:

- Swedish Medical Center/Providence
- Swedish Medical Center/First Hill Campus
- Virginia Mason Medical Center
- Children's Hospital and Regional Medical Center

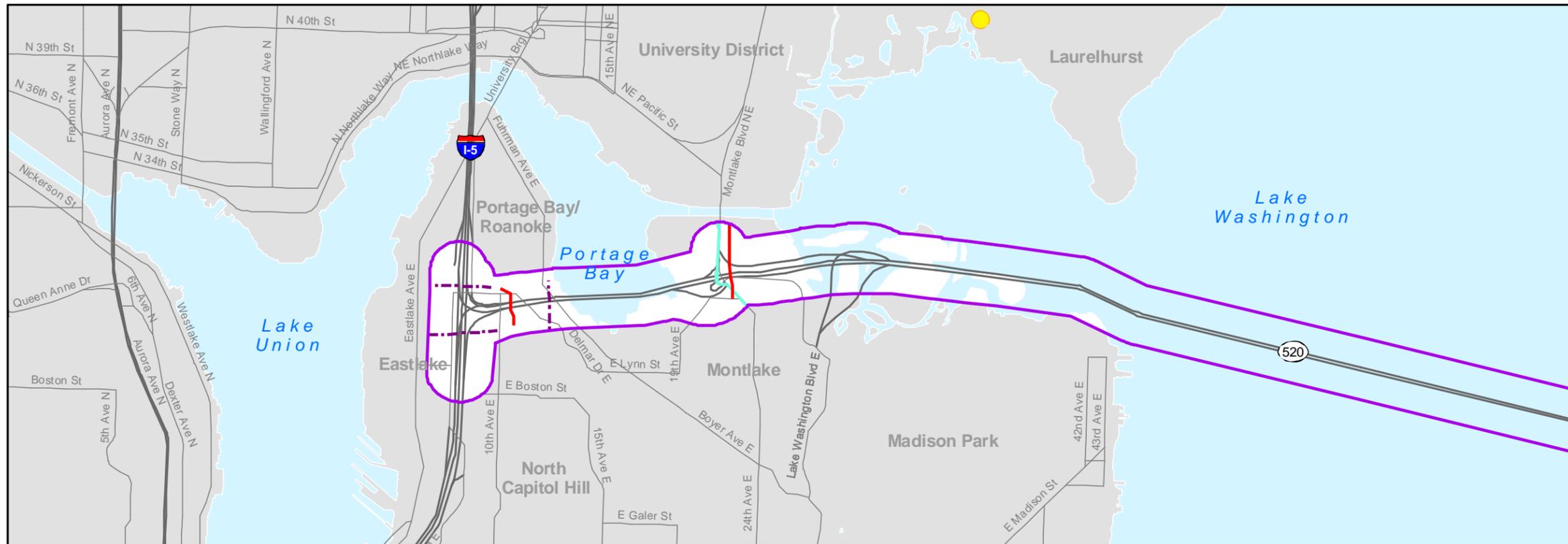
Eastside

Bellevue provides fire protection services to its own citizens and the citizens of Medina, Hunts Point, Clyde Hill, and Yarrow Point. Within Bellevue, there are nine fire stations, with two located within 1 mile of the project area – Station #5 at 9621 Northeast 24th Street in Clyde Hill and Station #6 at 1850 132nd Avenue Northeast (Exhibit 6). Both stations respond to incidents on SR 520. In 2002, average response time for Stations #5 and #6 was 7 minutes 43 seconds for fire, rescue calls, hazardous materials calls, and basic life support responses (Harper pers. comm. 2002).

The Kirkland Fire Department has six stations, although none are located near the project area. The closest is Station #22 located at 6602 108th Avenue Northeast. This station houses a fire engine and one ambulance, and could serve the project area if needed. Most calls for incidents on SR 520 are handled by the Bellevue Fire Department Stations #5 and #6 as they are closer to the SR 520 corridor (Goldberg pers. comm. 2002).

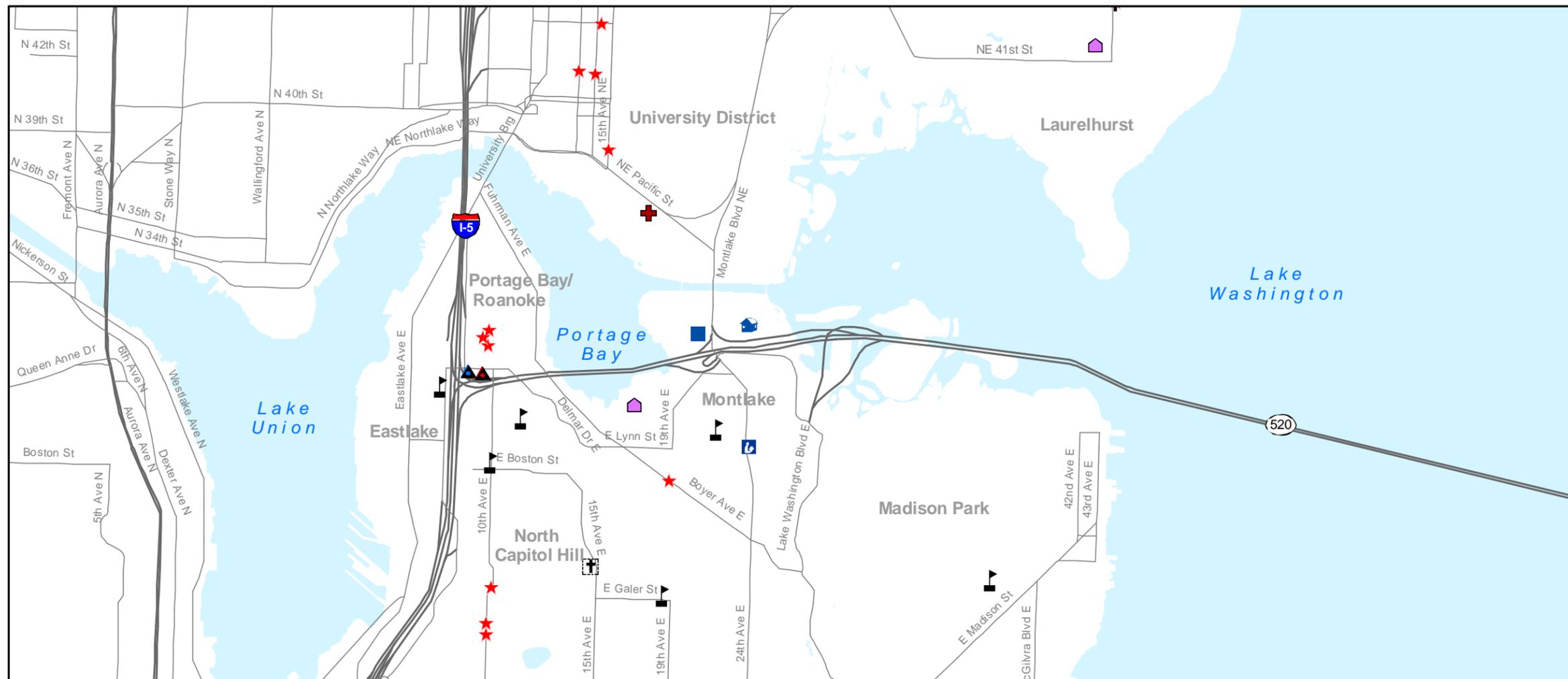
Overlake Hospital Medical Center, located at 1035 116th Avenue Northeast in Bellevue (Exhibit 6), is the closest hospital serving the Eastside project area. The Bellevue Fire Department Medic One unit is located at Overlake Hospital. It houses an aid unit and two paramedics. This unit serves fire and medical emergencies on SR 520. The average





Utilities

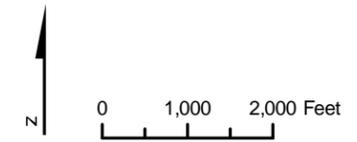
-  Sewer Pump Station
-  Main Feeder Telephone Line
-  Water Main Line
-  Major sewage conveyance system
-  Study Area For Utilities



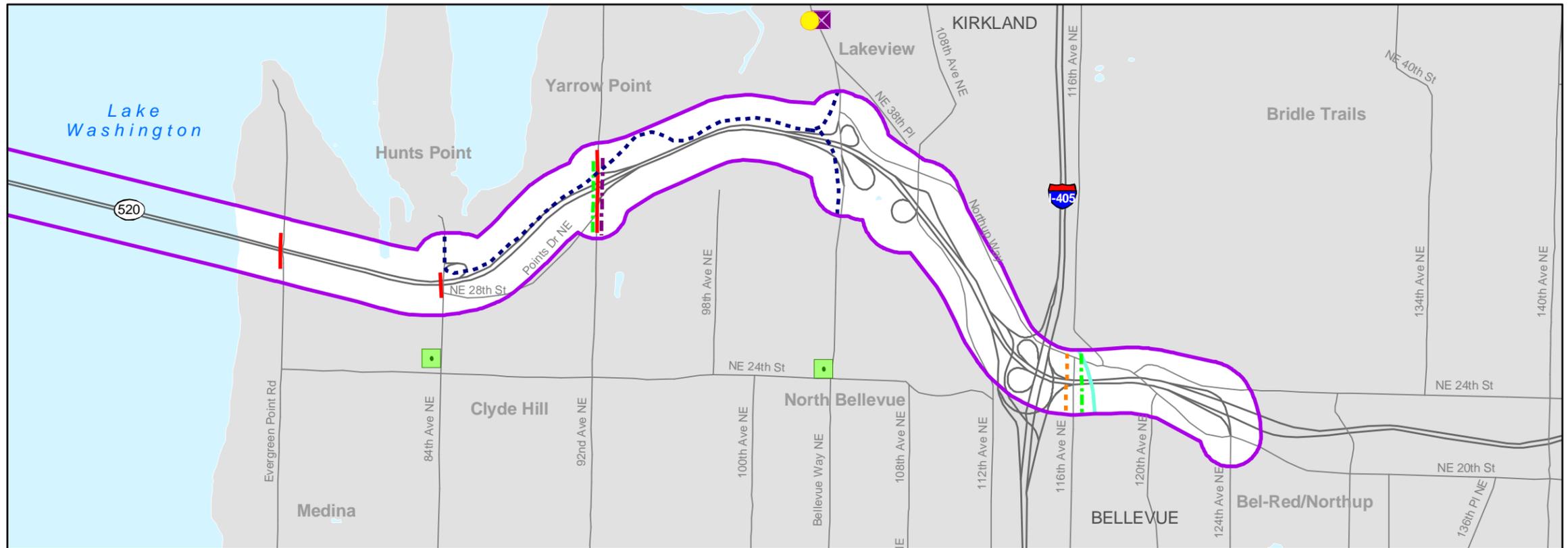
Public Services

-  Community Center
-  Cemetery
-  Government
-  Museum
-  City Hall
-  Library
-  Church
-  Fire Station
-  Law Enforcement
-  Hospital
-  School

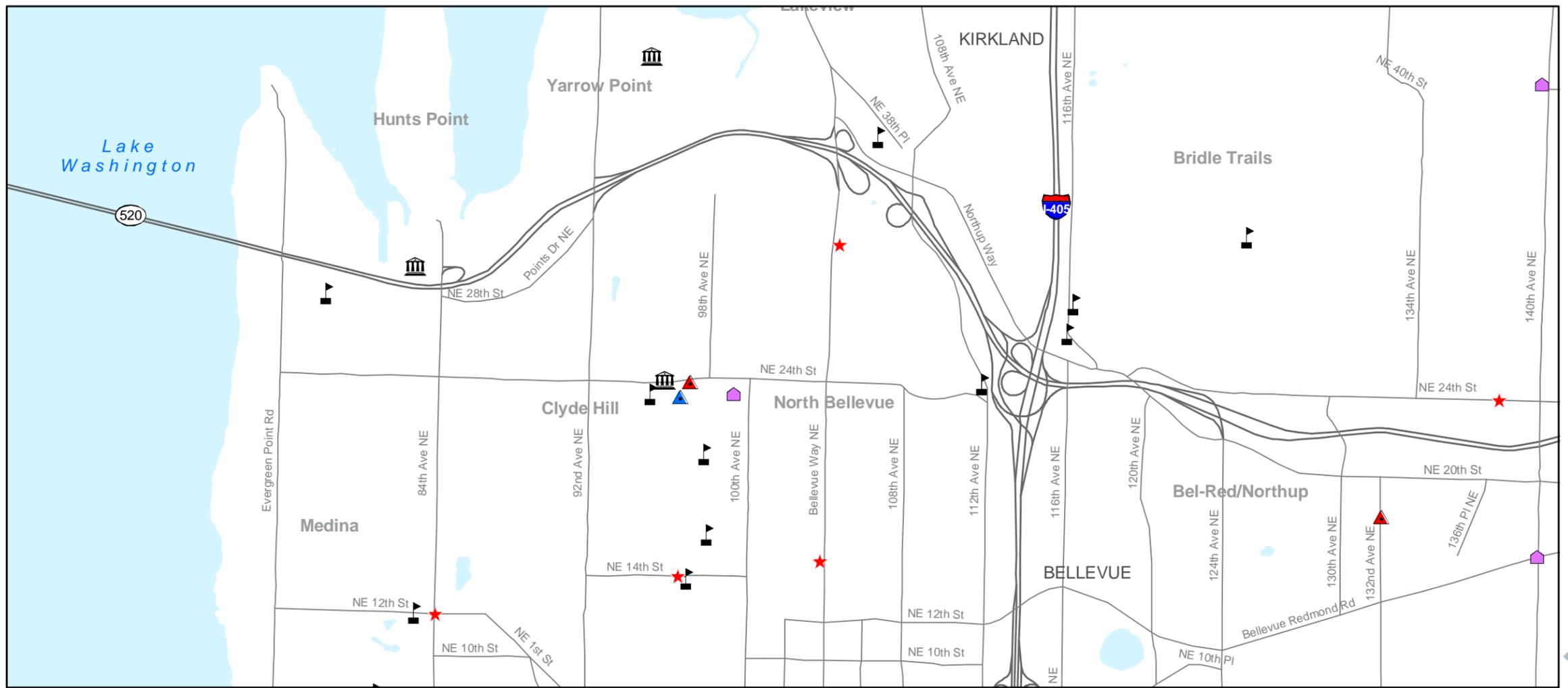
Source: City of Seattle (2003) GIS Data (Sewer, Water, and Public Services); King County (2003) GIS Data (Public Services); Qwest (2002) Data (Telephone Lines). Horizontal datum for all layers is NAD83(91), vertical datum for layers is NAVD88.



 **Exhibit 5. Public Services and Utility Locations in the Seattle Project Area**
SR 520 Bridge Replacement and HOV Project



- Utilities**
- Sewer Pump Station
 - PSE Substation
 - Verizon Telephone Switching Station
 - - - Major Cable Trunk Line
 - - - High-pressure Gas Main
 - - - Main Feeder Telephone Line
 - - - 115 kV Transmission Line
 - Water Main Line
 - Major sewage conveyance system
 - Study Area For Utilities



- Public Services**
- ★ Church
 - City Hall
 - Community Center
 - ▲ Fire Station
 - ▲ Law Enforcement
 - + Hospital
 - School

Source: King County (2003) GIS Data (Sewer, Water, and Public Services); Puget Sound Energy (2002) Data (Substations/Transmission Lines); Verizon (2002) Data (Switching Stations); Comcast (2002) Data (Cable Trunk Lines); Qwest (2002) Data (Telephone Lines). Horizontal datum for all layers is NAD83(91), vertical datum for layers is NAVD88.

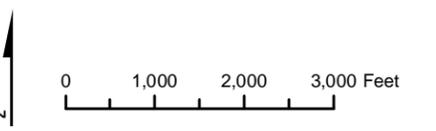


Exhibit 6. Public Services and Utility Locations in the Eastside Project Area
SR 520 Bridge Replacement and HOV Project

response time for Medic One in 2002 (through September) was 10 minutes 41 seconds (Harper pers. comm. 2002). This number is high because the Medic One unit serves a large geographic area. On SR 520, however, response times to incidents would likely be much quicker because of the unit's close proximity to SR 520.

What police districts serve the project area?

Seattle

The Seattle Police Department provides law enforcement and responds to 911 emergency calls in Seattle. The Seattle Police Department has 409 sworn officers and consists of 5 precincts and stations, none of which lie within the project area. The East Precinct (1519 12th Avenue) most likely would respond to calls within the Seattle project area, except for accidents on I-5 or SR 520. District #2 of the Washington State Patrol responds to accidents on these highways and their on-ramps, off-ramps, and interchanges. The Seattle North detachment of the Washington State Patrol is located at 811 East Roanoke within the project area (Exhibit 5).

Eastside

The Clyde Hill Police Department provides police protection for Clyde Hill and Yarrow Point. The Clyde Hill Police Department has a staff of nine (City of Clyde Hill 2004) and is housed in a leased portion of Bellevue Fire Station #5 in Clyde Hill, 9621 Northeast 24th Street, (Exhibit 6).

The Medina Police Department provides police protection for Medina and Hunts Point. The Medina Police Department, which has a nine-person police force, is located at Medina City Hall.

The Bellevue and Kirkland Police Departments also serve the Eastside project area. The Bellevue Police Department, with headquarters at Bellevue City Hall (11511 Main Street), consists of 278 commissioned and noncommissioned staff. There are also three Bellevue police substations, although none are located in the project area. The Kirkland Police Department has 63 commissioned officers and 34 support personnel (City of Kirkland 2004). The Kirkland Police Department has one station located in downtown Kirkland at 123 Fifth Avenue (not in the project area). Exhibit 6 shows the Eastside police stations.

The Eastside project area also is served by the Washington State Patrol. The eastside detachment based in Bellevue, 2803 156th Ave Southeast



(not in project area), patrols SR 520 and I-405 and also investigates all collisions in the cities within this project area.

What schools are nearby?

Seattle

Seattle Public Schools operates two schools within several blocks of the project area, Montlake Elementary and The Option Program at Seward School (TOPS Seward School). TOPS Seward School is an alternative school for grades K-8.

Exhibit 7 is a complete list of all schools that are within the project area as well as the public schools whose attendance boundaries border or include the project area (Seattle Public Schools 2001a,b).



TOPS Seward School

Exhibit 7. Schools in the Seattle Project Area

School Name	Address	City	Grade	Public/Private
Montlake Elementary	2409 22nd Avenue East	Seattle	K-5	Public
TOPS Seward School	2500 Franklin Avenue East	Seattle	K-8	Public
Lowell Elementary	1058 East Mercer Street	Seattle	K-5	Public
Stevens Elementary	1242 18th Avenue East	Seattle	K-5	Public
Meany Middle School	301 21st Avenue East	Seattle	6-8	Public
Washington Middle School	2101 South Jackson	Seattle	6-8	Public
Garfield High School	400 23rd Avenue	Seattle	9-12	Public
Nova Alternative School	2410 East Cherry Street	Seattle	9-12	Public
Seattle Preparatory School	2400 11th Avenue East	Seattle	9-12	Private
University of Washington		Seattle	Post-Secondary	Public

Public school bus routes serving these schools use many streets in the project area, including Franklin Avenue East, Roanoke Street, Eastlake Avenue East, Harvard Avenue East, Boyer Avenue East, and I-5 (Anderson pers. comm. 2002). Buses also use SR 520 between I-5 and the Montlake exit and access the Evergreen Point Bridge for field trips. Exhibit 5 shows the schools in Seattle that lie near the project area.



Eastside

The Bellevue School District and the Lake Washington School District serve the Eastside project area. There are no public schools in the project area. Bellevue Christian School/Three Points Elementary is a private school located near the SR 520 corridor in Medina. Exhibit 6 shows the locations of schools in the project area; Exhibit 8 lists all schools in the project area.



Bellevue Christian School/Three Points Elementary

Student transportation to public schools is based on the student’s home address and school attendance boundaries. The attendance boundary of eight elementary schools, three middle schools, two junior high schools, and four high schools are either within or contiguous to the Eastside project area (Rae pers. comm. 2002; Lake Washington School District 2002). School bus routes use most of the arterials located in the project area (Bellevue School District Transportation Department 2002).

Exhibit 8. Schools in the Eastside Project Area

School Name	Address	City	Grade	Public/Private
Bellevue Christian School/Three Points Elementary	7800 Northeast 28th Street	Medina	K-6	Private
Bellevue Christian Junior High School	1601 98th Avenue Northeast	Clyde Hill	7-8	Private
Bellevue Christian High School	1601 98th Avenue Northeast	Clyde Hill	9-12	Private
Bellevue Montessori School	2411 112th Avenue Northeast	Bellevue	K-6	Private
Chestnut Hill Academy	2610 116th Avenue Northeast	Bellevue	K-5	Private
The Little School	2812 116th Avenue Northeast	Bellevue	K-6	Private
Bellevue Community College – North Campus	10700 Northup Way	Bellevue	Post-Secondary	Public

School buses serving the Bellevue Christian Schools also travel on many streets in the project area. Buses access I-405 and SR 520 (from 84th Avenue Northeast) on a daily basis, and also use Lake Washington Boulevard, Evergreen Point Road, Northeast 12th Street, and Northeast 24th Street (Hodges pers. comm. 2002).

The North Campus of Bellevue Community College (BCC) houses the continuing education administrative offices and classrooms, plus a



growing number of services and classes for credit students. These services include registration, purser's office, counseling/advising, assessment testing for English and math placement, and computer labs. Exhibit 6 shows the location of BCC in the Eastside project area.

What churches are nearby?

Seattle

The project area contains a number of churches and cathedrals of various denominations. Religious facilities located within one or two blocks of the project area are Saint Patrick's Catholic Church at 2702 Broadway East and the Vedanta Society of Western Washington at 2716 Broadway East. Other religious facilities in the Seattle project area are Saint Demetrios Greek Orthodox Church and the Church of Jesus Christ of Latter Day Saints. Exhibit 5 shows religious facilities in the vicinity of the project area.

Eastside

Several churches are near the project area. Saint Thomas Episcopal Church is located at the corner of Northeast 12th Street and 84th Avenue Northeast in Medina. The Sacred Heart Church is located at 9460 Northeast 14th Street in Clyde Hill. Saint Luke's Lutheran Church is located at 3030 Bellevue Way Northeast in Bellevue. In addition, the Saint James Reformed Episcopal Church congregation meets at the Bellevue Christian High School campus each week (Hodges pers. comm. 2002). Exhibit 6 shows the churches in the vicinity of the project area.

There are no religious facilities in Hunts Point or Yarrow Point (McKenzie pers. comm. 2002).

Are other prominent community centers or facilities nearby?

Seattle

The Montlake Community Center is near the project area at 1618 East Calhoun Street at the south end of Montlake Park. Operated by the Seattle Parks and Recreation Department, the center offers a wide array of programs and special events for all ages, including martial arts, dancing, and pottery (Exhibit 5).



Montlake Community Center



Eastside

The Northwest Arts Center is a community center located in Clyde Hill that is maintained by the City of Bellevue. This center is located at 9825 Northeast 24th Street (Exhibit 6). Programs include introductory classes in visual and performing arts and fitness classes for people of all ages. In 1999, Bellevue made several changes to the facility, including the addition of a pottery studio, kiln room, kitchenette, and a new sound system (City of Bellevue 2001).

Are any cemeteries in the project area?

Seattle

The Lakeview Cemetery is located adjacent to the northern boundary of Volunteer Park between 11th Avenue East and 15th Avenue East (Exhibit 5). Created in 1887, the Lakeview Cemetery is the final resting-place of many of Seattle's early pioneers, including members of the Denny, Maynard, Mercer, Yesler, Boren, and Renton families. It is the closest cemetery to the project area.

Eastside

No cemeteries exist within the Eastside project area.

What governmental offices are in the project area?

Seattle

A U.S. Department of Commerce facility is located immediately north of the existing SR 520 corridor at 2725 Montlake Boulevard East (Exhibit 5). This facility houses the NOAA facility.



NOAA Northwest Fisheries Science Center

Eastside

Three town halls lie in the Eastside project area – Hunts Point Town Hall located at 3000 Hunts Point Road, Yarrow Point Town Hall located at 4030 95th Avenue Northeast, and the Clyde Hill City Hall at 9605 Northeast 24th Street (Exhibit 6).

Who provides electricity and natural gas service?

Seattle

The city-owned electric utility, Seattle City Light, provides electric power to the Seattle project area. Seattle City Light owns and maintains approximately 657 miles of transmission lines that carry power from the Skagit and Cedar Falls electrical generating facilities to 14 principal



substations (City of Seattle 2001). None of these substations are located directly within the project area. A number of overhead and underground distribution lines are located adjacent to SR 520 and I-5 within the project area. No major overhead or underground transmission lines cross SR 520 in the project area.

Puget Sound Energy provides natural gas service throughout the entire project area. No high-pressure gas mains are located near SR 520 in the project area.

Eastside

Puget Sound Energy provides electric power to customers in the project area as part of a larger service area called the “Greater Bellevue Area.” The Greater Bellevue Area is roughly the area between Lake Washington and Lake Sammamish (PSE 2001). Power is carried on 115-kilovolt (kV) and 230-kV transmission lines from generating facilities to a variety of substations.

Puget Sound Energy maintains three substations in the project area: one in Medina adjacent to Wells-Medina Nursery on 84th Avenue Northeast (City of Medina 1999); the second substation in Clyde Hill at Bellevue Way Northeast and Northeast 24th Street; and the third substation at Bel-Red Road and 116th Avenue Northeast in Bellevue.

Overhead and underground transmission lines are located adjacent to the SR 520 corridor throughout the project area. Two 115-kV transmission lines cross SR 520 at 92nd Avenue Northeast and 116th Avenue Northeast. One large 230-kV transmission line runs north-south, crossing SR 520 at 124th Avenue Northeast. Exhibit 6 shows the crossing points of these lines and the location of the substations. Puget Sound Energy plans to build two new transmission switch stations in the project area, one at the corner of Bellevue Way and Northeast 24th Street and the other near SR 520 and the Burlington Northern Santa Fe (BNSF) Railroad crossing.

Puget Sound Energy also provides natural gas service to the Eastside project area. Gas is distributed from large high-pressure mains to smaller distribution pipes. One high-pressure gas main crosses SR 520 at 116th Avenue Northeast (Exhibit 6).



Puget Sound Energy–Medina Substation



Who provides telephone service?

Seattle

Qwest Communications is the principal provider of local telephone services throughout the Seattle project area. Qwest also provides digital subscriber line (DSL) internet service to the project area. DSL uses the same wires as the standard telephone line. Telephone lines are typically located within street rights-of-way, aboveground on utility poles in most areas and underground in some areas (including part of downtown Seattle). Other smaller utilities often share these underground trenches or duct banks. Main feeder telephone lines cross SR 520 at Boyer Avenue East, and cross I-5 approximately at East Roanoke Street and East Miller Street (Exhibit 5). No central switching offices are located within the project area.

Eastside

Telephone service is provided to much of the Eastside by both Qwest and Verizon. One main feeder route crosses SR 520 at 92nd Avenue Northeast (Exhibit 6). Cellular One currently has a non-staffed cellular repeating station located at the Bellevue Christian School under an agreement with the Bellevue School District (which owns the land).

Verizon provides telephone service in Kirkland. System facilities include switching stations, trunk lines, and distribution lines. The closest switching station to the SR 520 corridor in Kirkland is located at Northeast 43rd Street and Lake Washington Boulevard (Exhibit 6). Verizon also provides DSL internet service to Kirkland.

Who provides cable service?

Seattle

Two private companies, Comcast and Millennium Digital Media, provide cable television and cable internet service in Seattle. These franchises maintain coaxial and fiber-optic cables that act as distribution lines, along with a total of five receiving (or head-end) sites. A head-end site is an electronic control center where information signals are processed for distribution throughout the cable system (City of Seattle 2001). Coaxial and fiber-optic cables are located throughout the project area, including crossings in the University District near Portage Bay and 11th Avenue East on Capitol Hill.

Eastside

Cable television and cable internet access on the Eastside is provided by Comcast. Comcast maintains coaxial and fiber-optic cables that act as



distribution lines throughout the project area. A major cable trunk route, the main trunk from which many smaller links branch or fan out like at tree, runs north-south along Hunts Point Road (82nd Avenue Northeast). This route then turns east and parallels SR 520 (along its north side), until it meets Northeast Points Drive and continues to Lake Washington Boulevard. A major Comcast trunk route also crosses SR 520 at Bellevue Way Northeast (Exhibit 6).

Who provides water, sewer, and garbage service?

Seattle

Seattle Public Utilities (SPU) provides direct retail water service to about 622,000 people in Seattle, parts of Shoreline, and small areas just south of the city limits (SPU 2004). Drinking water comes from two major water supply sources in the Cascade Mountains – the Cedar River Watershed and the South Fork of the Tolt River Watershed. Major water mains in the project area cross SR 520 at many locations. The most notable crossings include a 42-inch main that crosses SR 520 between 10th Avenue East and Delmar Drive East and a 54-inch main that crosses SR 520 at Montlake Boulevard (Exhibit 5).

The King County Department of Natural Resources Wastewater Treatment Division provides sewage treatment services to Seattle and most of King County. Wastewater from the Seattle project area flows to the West Point Treatment Plant. Major sewer trunk lines include 108-inch and 42-inch sewers that cross SR 520 at Montlake Boulevard, travel south, and connect into a 90-inch main and a 66-inch main. These mains run along East Montlake Place East and West Montlake Place East, respectively (Exhibit 5).

SPU manages Seattle's drainage, surface water runoff, and sewer systems. Sewage and stormwater enter combined systems (i.e., combined sewage and stormwater flows) in Seattle, which are then conveyed via the King County interceptor system to the West Point Treatment Plant. Separate drainage-only systems flow directly to water bodies such as Lake Union, Elliott Bay, and Lake Washington. Stormwater and drainage are discussed further in Appendix T, *Water Resources Discipline Report*.

SPU currently has contracts with two private firms, Washington Waste Hauling and Recycling (Waste Management of Seattle) and U.S. Disposal II (Rabanco), to collect commercial and residential solid waste and recyclable materials generated in Seattle. Under a contract with



Washington Waste Systems, residential garbage is transferred at city recycling and disposal stations and then shipped by rail to a private landfill in eastern Oregon. This contract expires in 2028. No recycling or disposal stations are located in the Seattle project area.

Eastside

The Eastside receives water from the Bellevue Utilities Department and the Kirkland Public Works Department. Both departments began purchasing water from the Cascade Water Alliance (CWA) in January 2004. Established in 1999, CWA comprises eight local municipalities and districts, and provides the current water supply and plans ahead to develop additional water supplies for the alliance members (Cascade Water Alliance 2004). Currently, CWA purchases water from the SPU water supply system, as described in detail in the *Seattle* section above. Water is distributed through mains constructed, operated, and maintained by the respective city departments (City of Bellevue 2001, City of Kirkland 2001).

Various water mains cross under SR 520 in the project area, including at Evergreen Point Road (76th Avenue Northeast), near Fairweather Place, 84th Avenue Northeast, and 92nd Avenue Northeast (Exhibit 6). A variety of smaller Bellevue water pipes cross SR 520 within the project area. These crossings occur at 108th Avenue Northeast, 120th Avenue Northeast, and 130th Avenue Northeast. Water mains also run along many arterials throughout the project area.

The King County Department of Natural Resources Wastewater Treatment Division provides sewage treatment services. Sewage from the Eastside flows to the South Treatment Plant in Renton. The pipelines and other conveyance facilities in Bellevue and Kirkland that carry wastewater to King County interceptors are owned, operated, and maintained by the Bellevue Utilities and Kirkland Public Works Department in their respective jurisdictions.

Several wastewater facilities are in the project area. A King County sewage pumping station is located on the east side of the BNSF right-of-way near Northeast 33rd Place. A 60-inch King County sewer trunk line crosses SR 520 at the SR 520/I-405 Interchange along the BNSF right-of-way (Exhibit 6). Several other smaller sewer lines either cross under SR 520 or run along nearby arterials (Ramshur pers. comm. 2002).

Each of the cities on the Eastside maintains its own stormwater drainage system. Clyde Hill and Medina use two artificial lakes for



detention/retention ponds at the Overlake Golf and Country Club. These cities have an agreement with the Country Club to store runoff and filter sediment and suspended solids before the water enters Fairweather Creek, eventually draining to Lake Washington (City of Clyde Hill 2002). Major storm drain lines in Medina, Hunts Point, Clyde Hill, and Yarrow Point cross SR 520 near 77th Avenue Northeast. Stormwater and drainage within these communities is discussed in more detail in Appendix T, *Water Resources Discipline Report*.

The Bellevue Utilities Department and the Kirkland Public Works Department manage stormwater within their respective jurisdictions. Storm drainage pipes cross SR 520 at 116th Avenue Northeast, Northeast 24th Street, and 124th Avenue Northeast. One regional flood control facility is in the project area. The Upper West Tributary storm and surface water regional flood control facility is located just off 120th Avenue Northeast, where the road crosses the Upper West Tributary. Stormwater and drainage are discussed further in Appendix T, *Water Resources Discipline Report*.

Rabanco provides solid waste collection and recycling services for most of the Eastside. Kirkland has a contract with Waste Management Northwest, which includes curbside recycling for all residents.

Potential Effects of the Project

What methods were used to evaluate the project's potential effects?

The discipline team reviewed existing data, conducted telephone interviews with the potentially affected public service and utility providers, and reviewed project plan sets and construction methods to identify areas of potential concern.

How would the project permanently affect public services and utilities?

The permanent effects of the project occur during highway operation over the long term. This section discusses only areas that would be permanently affected by the project.

Permanent effects on public services could include potential demands placed on fire services, emergency medical services, police services, public schools, and solid waste facilities and services. Permanent effects



on utilities could include design elements that may affect capacity, disrupt service, or impair access and maintenance functions.

Seattle

No Build Alternative

The Continued Operation Scenario would not improve operations on SR 520; therefore, the response times of fire, emergency medical, and police services, as well as other public service vehicles, would either remain at their current levels or potentially increase (see Appendix R, *Transportation Discipline Report*). Because there would be no change to existing utilities, no effects are anticipated.

If the Evergreen Point Bridge and the Portage Bay Bridge were lost before 2030 under the Catastrophic Failure Scenario, traffic delays would increase on I-5 and surrounding arterials, causing longer response times for fire, emergency medical, and police services (see Appendix R, *Transportation Discipline Report* for more information). Loss of the Evergreen Point Bridge would not affect utilities because no utilities are on or near the bridge. Telephone utilities near the Portage Bay Bridge could be affected if the bridge failed, depending on how it failed. Currently, telephone lines run parallel to the Portage Bay Bridge and along Boyer Avenue underneath the bridge (Exhibit 5 shows the locations of these lines).

4-Lane Alternative

The widening of the shoulders along SR 520 could enhance mobility and reduce response times for fire and emergency medical services, compared to the No Build Alternative. Emergency vehicles would use the highway shoulders to bypass traffic during emergency situations, or vehicles would pull off onto the shoulders to allow emergency vehicles through. If necessary, emergency vehicles could also use the bicycle/pedestrian path to bypass traffic, reducing response times.

The 4-Lane Alternative would reduce the travel time in the corridor, which could also reduce response times (see Appendix R, *Transportation Discipline Report*). Any service providers needing to access I-5 south during the morning hours would potentially reduce their respective travel times by using the proposed HOV flyover ramp.

Police services would experience the same effects as those experienced by fire and emergency medical services. Additionally, the 4-Lane Alternative would provide a number of HOV enforcement areas along



SR 520 where police vehicles could be positioned to improve emergency/incident response times within the project area.

The 4-Lane Alternative would reduce travel time for school buses or other vehicles traveling to schools in the project area, compared to the No Build Alternative.

The 4-Lane Alternative would construct sound walls along the south side of the Portage Bay Bridge that would reduce noise levels at the Montlake Community Center (see Appendix M, *Noise Discipline Report*).

The Seattle Fire Department has made preliminary plans to expand Fire Station #22, including acquisition of the vacant land to the east that is part of the WSDOT right-of-way. Negotiations between Seattle and WSDOT about acquisition of the vacant land have not begun. The proposed SR 520 Bridge Replacement and HOV Project would not affect the station expansion.

Part of the NOAA facility would need to be relocated based on the existing 4-Lane Alternative footprint (see Appendix K, *Land Use, Economics, and Relocations Discipline Report*).

A number of utilities are located within the project footprint (Exhibit 5). The exact locations of all known utilities would be confirmed during the final design to determine the need for relocation and protection of utilities.

6-Lane Alternative

The 6-Lane Alternative would have the same effects on fire and emergency medical service vehicles as the 4-Lane Alternative, except that it would allow fire and emergency medical vehicles to use HOV lanes to access incident locations more quickly. The 6-Lane Alternative would increase traffic in the area around Fire Station #22, which may increase response times (see Appendix R, *Transportation Discipline Report*).

Police services would experience the same effects as those experienced by fire and emergency medical services. Additionally, the 6-Lane Alternative proposes to provide enforcement areas along SR 520 where police vehicles could be positioned to respond more quickly to emergencies or incidents in the Seattle project area.

The Seattle Fire Department has made preliminary plans to expand Fire Station #22, including acquisition of the vacant land to the east that is part of the WSDOT right-of-way. The 6-Lane Alternative's limit of



construction would include much of the vacant lot that the Seattle Fire Department would need to complete construction, which would affect the plans to expand the fire station. Negotiations between Seattle and WSDOT about acquisition of the vacant land have not begun.

Part of the NOAA facility would need to be relocated based on the existing 6-Lane Alternative footprint (see Appendix K, *Land Use, Economics, and Relocations Discipline Report*).

A number of utilities are located within the project footprint (Exhibit 5). The exact locations of all known utilities would be confirmed during the final design to determine the need for relocation and protection of utilities.

Lake Washington

No Build Alternative

The Continued Operation Scenario would not improve operations on SR 520, providing only regular maintenance and upkeep. Because of this, the response times of fire, emergency medical, and police services, as well as other public service vehicles, would either remain at their current levels or increase (see Appendix R, *Transportation Discipline Report* for more information). Because there would be no change to existing utilities, no effects are anticipated.

The Catastrophic Failure Scenario would prevent vehicles from using the Evergreen Point Bridge. These vehicles would need to use alternate routes, potentially increasing travel and response times. Utilities would not be affected because there are no utilities associated with the Evergreen Point Bridge.

4-Lane Alternative

The widening of the shoulders along SR 520 could enhance mobility and reduce response times for fire and emergency medical services. Emergency vehicles could use the highway shoulders to bypass traffic during emergency situations, or vehicles could pull off onto the shoulders to allow emergency vehicles through. If necessary, emergency vehicles could use the bicycle/pedestrian path to bypass traffic, reducing response times.

The 4-Lane Alternative would reduce the travel time in the corridor, which could reduce response times (see Appendix R, *Transportation Discipline Report*).



The Seattle Fire Department's fireboat, the *Chief Seattle*, is 32 feet high from the waterline, with a draft of 7 feet. The *Chief Seattle* would not be able to pass through the west navigation channel of the Evergreen Point Bridge because the clearance would only be 25 feet high. However, the fireboat would be able to pass through the 250-foot-wide fifth span west of the floating bridge where clearance would be 37 feet high and depth would be 20 feet. The *Chief Seattle* could also pass under the bridge closer to the Seattle shoreline because the bridge would be higher and the lake depth is adequate to allow the boat to pass.

Police services would experience the same effects as fire and emergency medical services.

6-Lane Alternative

The 6-Lane Alternative would have the same effects on fire and emergency medical service vehicles as the 4-Lane Alternative, except that it would allow fire and emergency medical vehicles to use HOV lanes to access incident locations more quickly. The effects on the fireboat would be the same as the 4-Lane Alternative. Police services would experience the same effects as fire and emergency medical services above. The 6-Lane Alternative would reduce travel times for all other public service vehicles across the Evergreen Point Bridge.

Eastside

No Build Alternative

The Continued Operation Scenario would not improve the operation of SR 520 in the Eastside project area, providing only regular maintenance and upkeep. Under this scenario, response times of fire, emergency medical, and police services, as well as other public service vehicles, would either remain at their current levels or potentially increase (see Appendix R, *Transportation Discipline Report*). Because this scenario would not change existing utilities, no potential effects are anticipated.

Under the Catastrophic Failure Scenario, the loss of the Evergreen Point Bridge would increase traffic delays along I-405 and the surrounding arterials, causing higher response times for fire, emergency medical, and police services. There would be only local traffic on SR 520, which would improve response times for fire, emergency medical, and police services (see Appendix R, *Transportation Discipline Report*). No utilities cross the Evergreen Point Bridge; therefore, the Eastside communities would not be affected by the Catastrophic Failure Scenario.



4-Lane Alternative

Under the 4-Lane Alternative, wider shoulders in both directions would enhance mobility and reduce response times for fire and emergency medical service vehicles along SR 520, compared to the No Build Alternative. The 4-Lane Alternative would also reduce travel time in the corridor, which may reduce response times (see Appendix R, *Transportation Discipline Report*). If necessary, emergency vehicles could use the bicycle/pedestrian path to bypass traffic, reducing response times.

Police services would experience the same effects as those experienced by fire and emergency medical services. Additionally, the 4-Lane Alternative would provide HOV enforcement areas along SR 520 where police vehicles could be positioned to improve emergency/incident response times within the project area.

The 4-Lane Alternative would move SR 520 closer to Bellevue Christian School/Three Points Elementary, but it would also provide sound walls. The walls would decrease noise levels on the school grounds. For a discussion of potential noise effects, see Appendix M, *Noise Discipline Report*.

The 4-Lane Alternative would reduce travel times for all other public services in the Eastside project area (see Appendix R, *Transportation Discipline Report*).

A number of utilities are located within the project footprint (Exhibit 6). The exact locations of all known utilities would be confirmed during the final design to determine the need for relocation and protection of utilities.

6-Lane Alternative

The 6-Lane Alternative would have the same effects on fire and emergency medical services as the 4-Lane Alternative. Police services would experience the same effects as fire and emergency medical services. Additionally, the 6-Lane Alternative proposes enforcement areas along SR 520 where police vehicles could be positioned to respond more quickly to emergencies or incidents in the Eastside project area.

A number of utilities are located within the project footprint (Exhibit 6). The exact locations of all known utilities would be confirmed during the final design to determine the need for relocation and protection of utilities.



How do the alternatives differ in their effects on public services and utilities?

The main differences between the 4-Lane and 6-Lane Alternatives are:

- The 6-Lane Alternative would construct lids at five locations in the project area. Because lids are much wider than the existing bridges over SR 520, the design should consider potential effects on any utilities to ensure continued access for maintenance activities, as well as uninterrupted customer service.
- The 6-Lane Alternative has a wider footprint than the 4-Lane Alternative, which would necessitate protecting a larger area of utilities to accommodate the wider highway.

Response times would be reduced in both build alternatives because of the wider shoulder, compared to the No Build Alternative. The 6-Lane Alternative has the potential to reduce response times, when compared to the 4-Lane Alternative, because of the addition of the HOV lane. Response time under the No Build Alternative scenarios would be longer than today.

How would project construction temporarily affect public services and utilities?

Construction of the 4-Lane or 6-Lane Alternative would have temporary effects on public services and utilities because of construction activities such as earth-moving, pile-driving, and repaving. Access to the project area could be temporarily disrupted.

What construction effects are common throughout the project area?

Construction activities could require temporary road closures that may cause traffic congestion. This increase in traffic congestion would affect access and response times of fire, emergency medical, and police services, as well as the travel times of public service providers. Detour routes would be developed with these providers to minimize the effects on response times and access to their respective facilities. Increased police security may be needed at construction sites and staging areas as a result of theft, vandalism, or trespass. Although a health and safety plan would be in place, there would still be a potential for onsite accidents or an increased need for emergency medical aid from the fire department to respond to calls.



Lane closures, other traffic revisions, and construction staging areas may reduce the levels of service of traffic on I-5, SR 520, and adjacent local streets, which in turn may affect response and travel times of public service and utility providers. WSDOT's existing system of lighting, traffic control, and ramp metering would continue during construction. Temporary electrical systems would need to be put in place to ensure that lighting on temporary bridges and in construction areas and all traffic control systems are able to operate without interruption.

During construction, pile-driving or earth-moving activities may affect utilities located below grade and above grade (overhead wires). During construction, there may be a need to reroute utility lines and/or cables, which could cause temporary outages. These outages are anticipated to be short term and intermittent. Relocation of some utilities may have a subsequent effect on other utilities near the relocation work. These effects would be reviewed and approved on a case-by-case basis prior to action. Exact location and depth of utilities (potholing) would be verified with utility providers during final design and prior to construction. Construction methods and best management practices (BMPs) would be developed prior to construction.

What are the construction effects in the project area?

The effects of construction in the project area would be the same under both the 4-Lane and the 6-Lane Alternatives, except as noted below.

Seattle

Access to and from Seattle Fire Station #22 (Exhibit 5), which is located next to the 10th Avenue East bridge, may be affected at certain times by construction on 10th Avenue East. The closure of the Lake Washington Boulevard ramps and Delmar Drive East could negatively affect response times. Fire suppression may be affected if any hydrants or waterlines in the project footprint were relocated during construction or if water flow was temporarily interrupted.

If the 10th Avenue East bridge is closed, the Washington State Patrol station at 811 East Roanoke (North Seattle Detachment) may be affected by the loss of access.

Construction around the Montlake Boulevard bridge, especially during replacement of the bridge, may affect access to the NOAA facility.

Construction of the project would not likely affect any religious facilities, cemeteries, or community center facilities in the project area.



Lake Washington

The project would not have any effects, except for those effects discussed above in *What construction effects are common throughout the project area?*

Eastside

Fire suppression may be affected if any hydrants or waterlines within the project footprint were relocated during construction or if water flow was temporarily interrupted.

Mitigation

Mitigation measures to minimize potential construction and operational effects on public services and utilities are discussed below. These measures may be refined or revised upon selection of the preferred alternative and when construction techniques are finalized.

What has been done to avoid or minimize negative effects?

The effects on public services and utilities from the construction and operation of the project would be minimal. Design or construction measures would be taken to prevent or further minimize potential effects on public services and utilities. During construction, SR 520 would remain open to four lanes of traffic at most times, maintaining access for public services vehicles in the project area.

How could the project compensate for unavoidable negative effects that are common to all areas?

The project would compensate for the unavoidable negative effects common throughout the project area by working with all necessary service and utility providers during final design to ensure that access is maintained and alternate routes are developed to avoid delays in travel and response times during construction. Potential mitigation measures include:

- Ensure that BMPs are used at all times.
- Coordinate with the representative law enforcement agencies to implement crime prevention principles, where feasible.



- Notify and coordinate with the fire departments for waterline relocations that may affect water supply for fire suppression, and establish alternate supply lines prior to any breaks in service.
- Notify and coordinate with the fire departments during construction to ensure all calls can be handled during those times.
- Notify and coordinate with the fire departments prior to construction to alleviate the potential for increased response times due to roadway closure.
- Notify and coordinate with the police departments and ensure adequate staffing during construction for traffic and pedestrian movement control.
- Provide emergency service providers and police departments with advance notice of construction schedules and any planned street closures.
- Coordinate with school officials during construction.
- Schedule evening construction, where allowed, to reduce congestion during the peak hours, and therefore have less effect on school bus routes and service activities such as trash collection.
- Field-verify the exact locations and depths of underground utilities prior to construction.
- Design the preferred alternative to minimize effects on known major utilities.
- Notify neighborhoods of utility interruptions by providing a schedule of construction activities in those areas.
- Coordinate with service providers and provide them with project schedules to minimize the effects of utility relocations (equipment procurement times, relocate in advance of construction, etc.).
- Consider the location of utilities in future detailed designs to avoid or minimize conflicts, disruption of service, and disruption of or restrictions on access and maintenance functions.
- Prepare a consolidated utility plan through a Subservice Utility Engineering plan, consisting of key elements such as existing locations, potential temporary locations, and potential new locations for utilities; sequence and coordinated schedules for utility work; and detailed description of any service disruptions. This plan would be reviewed by and discussed with affected utility providers prior to the start of construction to reduce effects.



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Attachment 1

**Utility Permit and Franchise Holders in WSDOT
Right-of-Way**

Attachment 1

Utility Permit & Franchise Holders in WSDOT Right-of-Way

(Milepost 0.0 - 7.2)

Seattle Project Area

Permit/Franchise Holder: King County Department of Metropolitan Services				
MP-Beg	MP-End	Location	Type of Utility	Comments
0.2	0.2	Aerial	Power Cable	Electric Buses

Permit/Franchise Holder: Nextlink Washington				
MP-Beg	MP-End	Location	Type of Utility	Comments
0.34	0.34	Aerial	Telecommunication	

Permit/Franchise Holder: US West Communications Inc				
MP-Beg	MP-End	Location	Type of Utility	Comments
0.13	0.14	Surface	Communications Connections	
0.24	0.25		Vault Installation	

Eastside Project Area

Permit/Franchise Holder: City of Bellevue				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.24	4.83	Buried	Sanitary Sewer Pipeline Crossing	
4.46	4.46	Buried	8" & 12" Sanitary Sewer	
4.47	4.59	Buried	8" Sanitary Sewer	
4.58	4.59	Buried	8" Sanitary Sewer	
4.59	4.59	Buried	8" & 12" Sanitary Sewer	
4.61	4.61	Buried	6" Pressure Reducing Valve	
4.83	4.83	Buried	8" Sanitary Sewer	
5.15	5.19	Buried	8" Watermain System	
5.17	5.17	Bridge	12" Watermain	
5.85	5.96	Buried	12" Sanitary Sewer	
6.01	6.12	Buried	12" Sanitary Sewer	
6.24	6.34	Buried	12" Sanitary Sewer	
6.28	6.3	Buried	Telecommunication	
6.31	6.31	Buried	12" Water	
7.04	7.04	Buried	6" Sanitary Sewer	

Permit/Franchise Holder: City of Medina				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.24	4.34	Buried	18" Storm Sewer	

Permit/Franchise Holder: City of Seattle				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.61	4.61	Buried	8" Sanitary Sewer	

Permit/Franchise Holder: Comcast of Washington				
MP-Beg	MP-End	Location	Type of Utility	Comments
5.17	5.17	Buried	Communications Facilities	Joint trench with Qwest & PSE

Permit/Franchise Holder: Bottello Enterprises				
MP-Beg	MP-End	Location	Type of Utility	Comments
6.22	6.22	Buried	Sanitary Sewer	

Permit/Franchise Holder: Electric Lightwave				
MP-Beg	MP-End	Location	Type of Utility	Comments
6.28	6.3	Buried	Communications Facilities	

Permit/Franchise Holder: Fresh Choice Restaurant				
MP-Beg	MP-End	Location	Type of Utility	Comments
6.27	6.27	Buried	12" Storm Drain Connection	

Permit/Franchise Holder: GTE Northwest				
MP-Beg	MP-End	Location	Type of Utility	Comments
6.29	6.29	Buried	Telephone Cable	
6.3	6.3	Buried	Telecommunication	
7.13	7.31	Buried	Sanitary Sewer	
7.33	7.33	Buried	Sanitary Sewer	

Permit/Franchise Holder: Leason F. Pomeroy Northwest Architect				
MP-Beg	MP-End	Location	Type of Utility	Comments
6.67	6.67	Buried	Storm Drain Connection	

Permit/Franchise Holder: MCI Metro Access Transmission Services				
MP-Beg	MP-End	Location	Type of Utility	Comments
5.97	5.97	Buried	Telecommunication	
6.28	6.3	Buried	Telecommunication	

Permit/Franchise Holder: MFS Network Technologies, Inc.				
MP-Beg	MP-End	Location	Type of Utility	Comments
5.97	5.97	Buried	Telecommunication	

Permit/Franchise Holder: On Fiber Communications				
MP-Beg	MP-End	Location	Type of Utility	Comments
7.12	7.12	Buried	Telecommunication	

Permit/Franchise Holder: Pacific Fiber Link, LLC				
MP-Beg	MP-End	Location	Type of Utility	Comments
6.21	6.33	Buried	Telecommunication	

Permit/Franchise Holder: Puget Sound Energy				
MP-Beg	MP-End	Location	Type of Utility	Comments
5.17	5.17	Buried	Power Cable	
7	7	Buried	Natural Gas Line	
4.19	4.21	Buried	Power Cable	
4.33	4.45	Buried	Power Cable	
4.49	4.59	Buried	Power Cable	
4.57	4.57	Buried	Vault Installation	
4.61	4.63	Buried	Telecommunication	
5.1	5.14	Buried	Power Cable	
5.18	5.18	Surface	Transformer & Power Connection	
6.25	6.32		12.5 kV Power Crossing	
7.03	7.31	Aerial	Power Cable	
7.31	7.31	Buried	Power Cable	

Permit/Franchise Holder: Qwest Corporation				
MP-Beg	MP-End	Location	Type of Utility	Comments
5.17	5.17	Buried	Telephone Cable	Joint trench with Comcast, PSE

Permit/Franchise Holder: Strand, Inc				
MP-Beg	MP-End	Location	Type of Utility	Comments
6.67	6.67	Buried	6" Storm Drain Connection	

Permit/Franchise Holder: TCI Cablevision of Washington				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.58	4.6	Buried	Television Cable	
5.32	5.32	Aerial	Telecommunication	
5.97	5.97	Aerial	Telecommunication	

Permit/Franchise Holder: Town of Hunts Point				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.65	4.65	Buried	Storm Drain Connection	

Permit/Franchise Holder: US West Communications Inc				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.59	4.59	Buried	Cabinet	
5.08	5.18	Buried	Telephone Cable	
4.08	4.08		Telephone Cable	
4.19	4.21	Buried	Telecommunication	
4.59	4.64	Buried	Telecommunication	Joint with TCI
4.64	4.64	Surface	Cabinet	

Permit/Franchise Holder: United Community Antenna Systems, Inc.				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.6	5.13	Buried	Telecommunication	

Permit/Franchise Holder: Viacom				
MP-Beg	MP-End	Location	Type of Utility	Comments
5.91	5.97	Aerial	Telecommunication	
5.9	6.14	Aerial	Television Cable	DBA Comm. Telecable of Bellevue
5.97	5.97	Buried	Television Cable	DBA Comm. Telecable of Bellevue
5.91	5.91	Aerial	Television Cable	DBA Comm. Telecable of Bellevue

Permit/Franchise Holder: Voicestream Wireless				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.61	4.63	Buried	Power Cable	Radio telecommunications facility

Permit/Franchise Holder: Washington Natural Gas Co.				
MP-Beg	MP-End	Location	Type of Utility	Comments
4.59	4.59	Buried	5/8" Natural Gas Connection	
7.05	7.05	Buried	8" Natural Gas Line	
7.13	7.27	Buried	6" Natural Gas Line	

Permit/Franchise Holder: WSDOT Temp. Holder Number				
MP-Beg	MP-End	Location	Type of Utility	Comments
3.98	5.87	Buried	18" Storm Sewer	
7.04	7.09	Buried	Telecommunication	
7.04	12.96	Buried	1.5" Water Line	
7.05	7.05	Buried	12" Storm Sewer	
7.09	7.09	Buried	Telecommunication	

I-5 (Milepost 167.3 to 168.4) Utility Permit & Franchise Holders in WSDOT Right-of-Way

Seattle Project Area

Permit/Franchise Holder: City of Seattle				
MP-Beg	MP-End	Location	Type of Utility	Comments
167.29	167.32	Buried	12" Sanitary Sewer	
167.42	167.42	Buried	20" Water Main	
167.46	167.95	Buried	18" Sanitary Sewer	
167.83	167.83	Buried	15" Sanitary Sewer	

Permit/Franchise Holder: King County Department of Metropolitan Services				
MP-Beg	MP-End	Location	Type of Utility	Comments
167.33	167.33	Buried	Power Cable	
168.4	168.44	Buried	Telephone & Trolley Power	
168.46	168.56	Aerial	Power Cable	

Permit/Franchise Holder: Puget Sound Energy				
MP-Beg	MP-End	Location	Type of Utility	Comments
168.06	168.06	Buried	6" Natural Gas Line	
167.57	167.57	Buried	8" Natural Gas Line	
167.6	167.6	Buried	4" Natural Gas Line	
168.39	168.4	Buried	4" & 6" Natural Gas Line	

Permit/Franchise Holder: Qwest Corporation				
MP-Beg	MP-End	Location	Type of Utility	Comments
167.53	167.53	Buried	Telephone Cable	
167.78	167.78	Buried	Telephone Cable	
168.38	168.38	Aerial	Telephone Cable	

Permit/Franchise Holder: Seattle City Light				
MP-Beg	MP-End	Location	Type of Utility	Comments
167.3	167.3	Aerial	Power Cable	
167.36	167.36	Buried	Power Cable	
167.39	167.39	Aerial	Power Cable	
167.39	167.39	Aerial	Power Cable	
167.45	167.45	Aerial	Power Cable	
167.82	167.82	Aerial	Power Cable	
168.37	168.37	Aerial	Power Cable	
168.4	168.4	Aerial	Power Cable	

Permit/Franchise Holder: TCI Cablevision of Washington, Inc.				
MP-Beg	MP-End	Location	Type of Utility	Comments
167.38	167.38	Aerial	Telecommunication	
167.39	167.39	Aerial	Television Cable	
167.48	167.48	Aerial	Television Cable	

Permit/Franchise Holder: US West Communications, Inc.				
MP-Beg	MP-End	Location	Type of Utility	Comments
167.52	167.52	Buried	Telephone Cable	
167.46	167.46	Buried	Telephone Cable	
167.75	168.28	Aerial	Telephone Cable	
168.03	168.03	Aerial	Telephone Cable	

Permit/Franchise Holder: WSDOT Temp. Holder				
MP-Beg	MP-End	Location	Type of Utility	Comments
165.7	171.77	Aerial	Power Cable	
167.31	167.31	Buried	8" Sanitary Sewer	
167.31	167.31	Buried	42" Sanitary Sewer	
167.44	167.44	Buried	15" Sanitary Sewer	
167.45	167.45	Buried	24" Storm Sewer	