

From: Tom McCormick
To: [Davis, Kris](#)
Subject: Another exhibit -- McCormick, Tom Draft Pt Wells Addm 4May2012
Date: Thursday, May 17, 2018 4:41:16 PM
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Kris, could you please enter the attached document as an exhibit. I will look for the exhibit number on the County's exhibits web page.

Exhibit name ... McCormick, Tom Draft Pt Wells Addm 4May2012

Thank you.

Tom McCormick

*"A small development at Point Wells
with a second public access road,
or no development at all."*

**I-427 McCormick, Tom Draft Pt Wells Addm 4May2012
PFN: 11 101457 LU**

DRAFT - FOR INTERNAL REVIEW

SEPA Addendum to Final SEIS

Final Docket XIII Amendments to the GMA Comprehensive Plan -
Paramount of Washington LLC

Snohomish County

May 4, 2012

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ACRONYMS AND ABBREVIATIONS

ADT	average daily traffic
BMP	best management practice
BRT	bus rapid transit
BSRE	Blue Square Real Estate
Corps	U.S. Army Corps of Engineers
County	Snohomish County
CPPs	Countywide Planning Policies
DAHP	Washington State Department of Archaeology and Historic Preservation
Ecology	Washington State Department of Ecology
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESH	essential fish habitat
GHG	greenhouse gas
GMA	Growth Management Act
GMHB	Growth Management Hearings Board
I-5	Interstate 5
ITE	Institute of Transportation Engineers
LOS	level of service
LUC	land use code
mgd	million gallons per day
MLLW	mean lower low water
MTCA	Model Toxics Control Act
MUGA	Municipal Urban Growth Area
NMFS	National Marine Fisheries Service

NWI	National Wetlands Inventory
PSCAA	Puget Sound Clean Air Agency
PSE	Puget Sound Energy
PSRC	Puget Sound Regional Council
RCW	Revised Code of Washington
RWD	Ronald Wastewater District
SCC	Snohomish County Code
SEIS	Supplemental Environmental Impact Statement
SEPA	State Environmental Policy Act
SR	State Route
ST2 Plan	Sound Transit 2 Plan
TAZ	Traffic Analysis Zone
TIA	Traffic Impact Analysis
UC	Urban Center
UGA	Urban Growth Area
UI	Urban Industrial
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife
WISAARD	Washington Information Systems for Architectural and Archaeological Records Data
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WUTC	Washington Utilities and Transportation Commission

1 Introduction and Purpose

2 Snohomish County (County) is reconsidering the previously adopted Final Docket XIII Comprehensive
3 Plan Amendment and associated rezone that implements the amendment. The County has prepared this
4 addendum to the 2009 Final Supplemental Environmental Impact Statement (SEIS) to meet specific
5 requirements in a Growth Management Hearings Board (GMHB) Central Puget Sound Region Decision.

6 In April 2011, the GMHB issued a Final Decision and Order for Coordinated Case 9-3-0013c and
7 10-3-0011c (Shoreline III and Shoreline IV) (GMHB 2011a). The GMHB made the following rulings
8 relevant to the adequacy of the SEIS and issues in the related ordinances:

9 Ordinance No. 09-038

- 10 1. The Final SEIS is legally inadequate for failure to comply with the Revised Code of Washington
11 (RCW) 43.21C.030(c)(iii) and State Environmental Policy Act (SEPA) requirements for review of
12 reasonable alternatives.
- 13 2. The Final SEIS does not analyze any alternatives that would inform the County Council of the
14 intensity of development that would generate traffic at a reduced level. The County Council has
15 no information about thresholds at which a reduced intensity or different balancing of land uses
16 would require fewer intersection improvements or impose other lesser impacts.

17 Ordinance Nos. 09-051, 09-079, and 09-080

- 18 1. The County Council is required to take Shoreline's transportation study into consideration in order
19 to inform its decision concerning the Point Wells development regulations.
- 20 2. The County Council is required to take Shoreline's transportation study and amendments to
21 Snohomish County Code (SCC) 30.34A.085, Access to Public Transportation, into consideration
22 in order to inform its decision about:
 - 23 • Making vanpools a permanent, not merely interim, substitute for high-capacity transit access.
 - 24 • Assessing whether doubling the walking distance to transit from 0.25 mile to 0.5 mile is likely
25 to significantly decrease use of public transit.

26 In addition to analyzing an additional alternative called the Alternative Action, this addendum updates the
27 information presented in the Final SEIS prepared for Snohomish County's Final Docket XIII
28 Comprehensive Plan Amendment issued on June 12, 2009, and the Draft SEIS issued on February 6,
29 2009 (ICF Jones & Stokes 2009a, 2009b). These documents supplement the EIS issued in 2005 for the
30 10-Year Update of the County's GMA Comprehensive Plan.

31 The docketing process is a procedure for receiving and evaluating citizen-initiated proposals to amend
32 the County's Comprehensive Plan and/or development regulations. The Growth Management Act (GMA)
33 requires counties and cities planning under the GMA to maintain such a procedure for citizens interested

1 in suggesting changes to their GMA-based comprehensive plans. The GMA limits counties and cities to
2 amend their comprehensive plans to once per year with a few exceptions (Snohomish County 2011).

3 This addendum addresses the proposed policy change to the Growth Management Act (GMA)
4 Comprehensive Plan but does not address any developer's plans. The analyses in the Draft SEIS, Final
5 SEIS, and this addendum are not intended to satisfy SEPA requirements for an individual project action
6 such as the review required for future land use and development. Additional detailed reviews of
7 environmental impacts related to development proposals will occur as specific projects are proposed.

8 The Point Wells site, which is the subject of the code and land use designation change in the 2009 docket
9 proposal, is located in the southwest corner of the County adjacent to the City of Shoreline (Shoreline)
10 and Town of Woodway (Woodway) (Figure 1-1). The site was transferred to Blue Square Real Estate
11 (BSRE) Point Wells, LP in 2010. Currently, Paramount Petroleum Corporation uses the site as a
12 petroleum storage and distribution facility.

2 Project Background

The County completed the Final EIS for the GMA Comprehensive Plan 10-Year Update in 2005. The Docket XIII Comprehensive Plan Amendment proposed to change the land use designation for the Point Wells site and to consider policy amendments to elements of the General Policy Plan section. The proposed amendments to the County's Comprehensive Plan were initially analyzed in the Draft and Final SEIS documents published in 2009 (ICF Jones & Stokes 2009a, 2009b). The adoption of this docket proposal is classified under SEPA as a non-project action. The analysis in the Draft SEIS, Final SEIS, and this addendum is not intended to satisfy SEPA requirements for individual project actions, such as reviewing future land use or building permit applications. As specific projects are proposed, detailed reviews will be conducted of the potential environmental impacts. The analysis in these environmental documents is intended to meet the SEPA and GMA requirements for amending the County's Comprehensive Plan and development regulations.

2.1 Growth Management Hearings Board Decision

On August 12, 2009, one month after issuing the Final SEIS, the County Council adopted Ordinance Nos. 09-038 and 09-051 that amended the County's Comprehensive Plan to change the designation of Point Wells from Urban Industrial to Urban Center. Shoreline, Woodway, and Save Richmond Beach filed separate petitions in November 2009 challenging the County's amendments of its Comprehensive Plan and development regulations. These three petitions were consolidated as GMHB Case No. 09-3-0013c Shoreline III.

On May 12, 2010, the County adopted Ordinance Nos. 09-079 and 09-080 amending its development regulations for Urban Centers to accommodate the Point Wells designation. Shoreline, Woodway, and Save Richmond Beach again filed petitions appealing to the GMHB, which were consolidated as GMHB Case No. 10-3-0011c Shoreline IV.

These issues were heard together by the GMHB on March 2, 2011. The GMHB issued its Final Decision and Order for Coordinated Case Nos. 9-3-0013c and 10-3-0011c (Shoreline III and Shoreline IV) on April 25, 2011 (GMHB 2011a). The GMHB remanded Ordinance Nos. 09-038 and 09-051 because they did not fulfill GMA Goals 1, 3, and 12. The GMHB also remanded Ordinance Nos. 09-079 and 09-080 and ordered the County to take action to comply with the requirements of SEPA. A judge ruled on November 23, 2011 that Snohomish County could not process any developer permits for the Point Wells site until the County had taken action to comply with SEPA and the GMHB's Final Decision and Order (GMHB 2011b).

1 The GMHB decision requires the County to consider the following:

2 1. Consistency of the proposal with RCW 36.70A.020 and GMA Planning Goals 1, 3, and 12.

3 RCW 36.70A.020 states:

4 The following goals are adopted to guide the development and adoption of comprehensive plans
5 and development regulations of those counties and cities that are required or choose to plan
6 under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used
7 exclusively for the purpose of guiding the development of comprehensive plans and development
8 regulations:

9 **(1) Urban growth.** Encourage development in urban areas where adequate public facilities and
10 services exist or can be provided in an efficient manner.

11 **(3) Transportation.** Encourage efficient multimodal transportation systems that are based on
12 regional priorities and coordinated with county and city comprehensive plans.

13 **(12) Public facilities and services.** Ensure that those public facilities and services necessary to
14 support development shall be adequate to serve the development at the time the development is
15 available for occupancy and use without decreasing current service levels below locally
16 established minimum standards.

17 2. Consistency with the RCW 36.70A.100 requirement for external consistency.

18 The comprehensive plan of each county or city that is adopted pursuant to RCW 36.70A.040 shall
19 be coordinated with, and consistent with, the comprehensive plans adopted pursuant to RCW
20 36.70A.040 of other counties or cities with which the county or city has, in part, common borders
21 or related regional issues.

22 The GMHB found that:

- 23 • Adoption of the referenced ordinances violates RCW 36.70A.100 by making Shoreline's
24 Comprehensive Plan inconsistent with GMA requirements for capital facilities and
25 transportation planning.
- 26 • No transit service is currently provided or planned by transit agencies.
- 27 • The water and sewer districts now serving the industrial uses on the property have not
28 adopted plans for the infrastructure necessary to support a residential population of perhaps
29 over 6,000.
- 30 • Police, fire, emergency, trash collection, and other service vehicles all face the limitations of
31 the single access road to the site. To support an Urban Center designation at Point Wells,
32 Snohomish County needs to secure commitments from the agencies responsible for the
33 necessary infrastructure and services; where applicable, service provision and facilities
34 should be incorporated in the long-range plans of the responsible agencies.

1 3. Internal consistency with County policies. The GMHB found the Point Wells designation was
 2 inconsistent with the County Comprehensive Plan provisions concerning Urban Centers and was
 3 therefore non-compliant with the internal consistency requirements of RCW 36.70A.070
 4 (preamble).

5 Policy LU 3.A.2

6 Urban Centers shall be compact (generally not more than 1.5 square miles), pedestrian-oriented
 7 areas within designated Urban Growth Areas with good access to higher frequency transit and
 8 urban services. Pedestrian orientation includes pedestrian circulation, pedestrian-scaled facilities,
 9 and pedestrian convenience. These locations are intended to develop and redevelop with a mix
 10 of residential, commercial, office, and public uses at higher densities, oriented to transit and
 11 designed for pedestrian circulation. Urban Centers should also include urban services and reflect
 12 high quality urban design. Urban Centers shall emphasize the public realm (open spaces, parks,
 13 and plazas) and create a sense of place (identity). Urban Centers will develop/redevelop over
 14 time and may develop in phases.

15 The GMHB found that:

- 16 • The proposal does not meet Policy LU 3.A.2's reference to "good access" and results in an
 17 urban center with limited transportation access. Such a center would not be located on a
 18 freeway/highway and a principal arterial, it would not be within 1/4 mile walking distance of a
 19 transit center or park-and-ride lot, and would have no access to higher frequency transit,
 20 although it would be located on a regional high-capacity transit route. Mere adjacency to an
 21 inaccessible transit corridor cannot satisfy the LU 3.A.2 Urban Center requirement for "good
 22 access to higher frequency transit."
- 23 • The proposal does not meet Policy LU 3.A.2's transit requirement that transit usage and
 24 linkages are essential characteristics of Urban Centers.

25 Urban centers are areas where significant population and employment growth can be located, a
 26 community-wide focal point can be provided, and the increased use of transit, bicycling and
 27 walking can be supported. These centers are intended to be compact and centralized living,
 28 working, shopping and/or activity areas linked to each other by high capacity or local transit. The
 29 concept of centers is pedestrian and transit orientation with a focus on circulation, scale and
 30 convenience with a mix of uses.

31 2.2 Regulations and Policies

32 Development in Snohomish County is guided by several federal, state, and county regulations, plans, and
 33 policies. These include the federal Endangered Species Act (ESA), State of Washington GMA, State
 34 Shoreline Management Act, Countywide Planning Policies, Snohomish County GMA Comprehensive

1 Plan and General Policy Plan, SCC Title 18 Zoning, and Snohomish County Shoreline Management
2 Master Program.

3 **2.2.1 Growth Management Act**

4 The Washington State Legislature passed the GMA in 1990 and created three independent GMHBs to
5 resolve land use disputes. In 2010, the three boards were consolidated into one. The GMA seeks to
6 involve the public, cities, and counties in comprehensive land use planning so that unplanned and
7 uncontrolled growth does not threaten the environment, economic development, or health and safety.

8 This addendum addresses the issues raised by the GMHB decision for alternatives (Ordinance No.
9 09-038), transportation (Ordinance Nos. 09-051, 09-079, and 09-080), and GMA Goals 1, 3, and 12 in
10 RCW 36.70A.020, as described in Section 2.1.

11 **2.2.2 Snohomish County**

12 County rules and regulations can be revised through a docketing process, ordinance amendments, and
13 policy plan revisions as described below.

14 **Docketing Process**

15 The docketing process is a procedure for receiving and evaluating citizen-initiated proposals to amend
16 the County's Comprehensive Plan and/or development regulations.

17 The GMA requires counties and cities planning under the GMA to maintain such a procedure for
18 citizens interested in suggesting changes to their GMA-based comprehensive plans. The GMA limits
19 counties and cities to amend their comprehensive plans to once per year with a few exceptions
20 (Snohomish County 2011).

21 In 2008, Paramount of Washington, LLC, now BSRE, initiated the process in order to amend the County's
22 Comprehensive Plan to change the future land use and zoning for the Point Wells site. The Snohomish
23 County Council held two public hearings in June 2008 to receive public testimony on the proposed
24 amendments to the Comprehensive Plan for consideration on the Final Docket XIII.

25 **Code Amendments**

26 Ordinance No. 09-038

27 On August 12, 2009, Ordinance No. 09-038 proposed amendments to the Future Land Use Map in the
28 County's Comprehensive Plan and amendments to the zoning map to implement changes to the Future
29 Land Use Map for the Point Wells site. The ordinance proposed to redesignate the 61-acre site from Urban
30 Industrial to Urban Center and rezone the area from Heavy Industrial to Planned Community Business.

31 Ordinance No. 09-051

32 On August 12, 2009, Ordinance No. 09-051 adopted the amendments to the land use chapter of the
33 County's Comprehensive Plan - General Policy Plan for Urban Centers.

1 Ordinance No. 09-079

2 On May 12, 2012, Ordinance No. 09-079 amended the Urban Center design standards and established a
 3 new a new zone for Urban Centers. This ordinance included the amendment to SCC Section 30.34A.085
 4 - Access to public transportation, which revised the distance from buildings in an urban center to a transit
 5 stop from 0.25 to 0.5 mile.

6 Ordinance No. 09-080

7 On May 12, 2012, Ordinance No. 09-080 adopted the zoning map amendments implementing the new
 8 zoning classification for the Urban Center comprehensive designation.

9 **General Policy Plan**

10 The Land Use section of the General Policy Plan in the County's Comprehensive Plan was updated to
 11 include the ordinances described above. However, all of the ordinances were remanded by the GMHB
 12 until the County complies with the board's ruling.

13 **2.2.3 City of Shoreline**

14 The County is coordinating their Comprehensive Plan amendments to be consistent with Shoreline's as
 15 directed by the GMHB and RCW 36.70A.100. The Shoreline Subarea Plan Policy PW-12 states
 16 (Shoreline 2012):

17 In view of the fact that Richmond Beach Drive between NW 199th St. and NW 205th St. is a local road
 18 with no opportunities for alternative access to dozens of homes in Shoreline and Woodway, the City
 19 designates this as a local street with a maximum capacity of 4,000 vehicle trips per day. Unless and until
 20 1) Snohomish County and/or the owner of the Point Wells Urban Center can provide to the City the
 21 Transportation Corridor Study and Mitigation Plan called for in Policy PW-9, and 2) sources of financing
 22 for necessary mitigation are committed, the City should not consider reclassifying this road segment.

23 Shoreline conducted a Traffic and Safety Analysis for Point Wells in part because the background traffic
 24 estimates in the Draft SEIS were too high (Shoreline 2009). Shoreline's analysis used a 0.25 percent
 25 annual growth rate over existing conditions. The analysis evaluated traffic and safety impacts, as well as
 26 mitigation recommendations. As the basis for developing traffic mitigation, Shoreline proposed that a
 27 multimodal safety and corridor study be prepared. Information from the Shoreline analysis has been
 28 incorporated into the transportation analysis in Section 4.11 of this addendum.

29 **2.3 Proposed Policy Changes**

30 Specific policies proposed to address these deficiencies include the following:

31 **Note:** These policies are being transmitted in a separate memorandum to the County and will be
 32 reviewed concurrently with this addendum. The results will be incorporated in the revised addendum.

3 Description of Alternatives and Current Comprehensive Plan Amendment

The Draft and Final SEISs identified and analyzed two alternatives: the Proposed Action (referred to as 2009 Proposed Action in this addendum), and the No Action Alternative.

This addendum analyzes a third alternative, the Alternative Action, which reduces the number of proposed housing units to 3,081, a 12 percent reduction compared to the 2009 Proposed Action. The size and type of this development would also influence the number of vehicle trips generated. This third alternative examines ways to reduce vehicle trips and compares the transportation analysis to Shoreline's trip limit. To capture the range of development possibilities, two variations of the Alternative Action were also studied.

3.1 Description of Alternatives

3.1.1 No Action Alternative

The No Action Alternative assumes that the individual docket proposal is not adopted and that the existing future land use map and zoning designation continue as under the existing County plans and regulations (ICF Jones & Stokes 2009b).

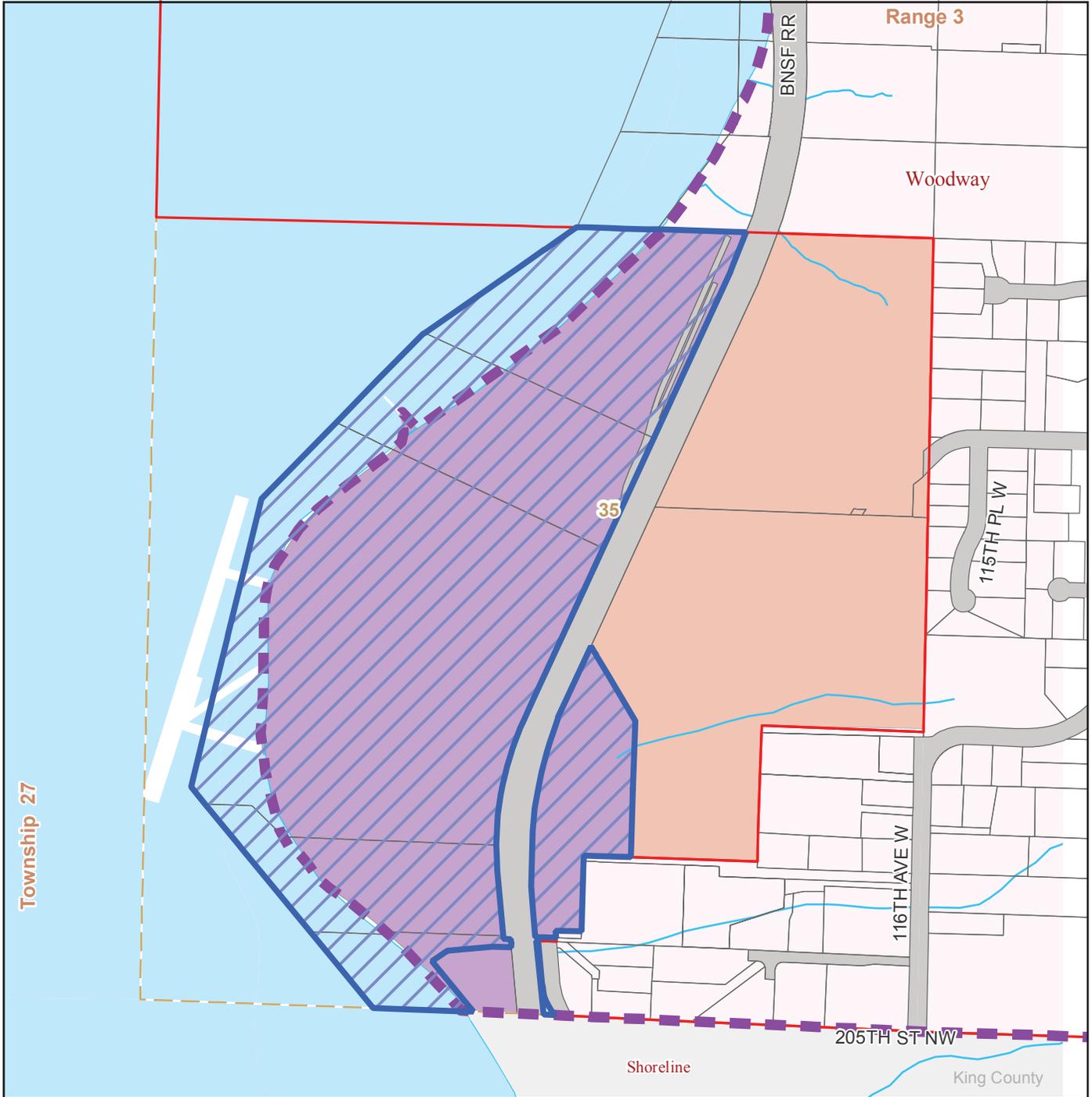
3.1.2 2009 Proposed Action

In 2009, the Proposed Action planned to amend the GMA Comprehensive Plan Future Land Use Map (Figure 3-1) and zoning map to:

- Intensify the Southwest UGA/Woodway Municipal Urban Growth Area (MUGA) by designating Urban Center (UC) instead of Urban Industrial (UI) on an approximate 61-acre site along Puget Sound.
- Provide consistency with the County's GMA Comprehensive Plan elements and policies.

The 2009 Proposed Action included:

- Thirty-three net acres of residential development with 3,500 housing units based on an assumption of 106 units per developable acre, and a population of 6,442 based on 2.0 persons per household;
- Thirty net acres of commercial development, with 802 employees;
- Continued compliance with the GMA and Countywide Planning Policies (CPPs);
- Allowing for a range of housing types affordable to different income levels; and
- Providing for employment growth proportionate to population growth (ICF Jones & Stokes 2009b).



Proposed Plan Amendment:

 Point Wells (SW41)

Redesignate Urban Industrial to Urban Center.

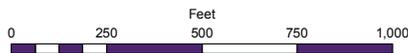
Existing Plan Designations

-  Urban Low Density Residential
-  Urban Medium Density Residential
-  Urban Industrial

-  UGA Boundary
-  Cities
-  Assessor Parcels
-  Section Grid

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Source: Snohomish County 2008

1068.07/SEIS (11/08)

1 The transportation analysis for the 2009 Proposed Action assumed 3,500 housing units would be
 2 developed, which captured the highest range of potential impacts generated by vehicle trips. The 2009
 3 Proposed Action is not the current planned action.

4 **3.1.3 Alternative Action**

5 The Alternative Action would amend the GMA Comprehensive Plan Future Land Use Map and zoning
 6 map as described in the Final SEIS for the 2009 Proposed Action. As part of the revisions, the intensity of
 7 the development has been adjusted. The Alternative Action revises the number of units and the
 8 transportation assumptions associated with the development of an Urban Center on the Point Wells
 9 property.

10 These assumptions were used to examine the proposed policy changes initially analyzed in the Draft and
 11 Final SEISs with the Alternative Action specifically to provide decision makers with information to assist in
 12 evaluating the following:

- 13 • The effects on Shoreline's Comprehensive Plan policies for meeting transportation level of
 14 service goals and ensuring that Transportation Capital Facilities Plans are fully disclosed and
 15 available; and
- 16 • The implications for "good access to higher frequency transit and urban services" in terms of
 17 distance to transit services and use of van pools.

18 The Alternative Action reduces the vehicle trips generated. Under this alternative, the number of housing
 19 units is assumed to be 3,081, which is the maximum number of units that would potentially be developed.
 20 The number of vehicle trips per day is estimated to be 8,020, as determined in the Point Wells Expanded
 21 Traffic Impact Analysis (David Evans and Associates 2011). For analysis purposes, the Alternative Action
 22 considers the following mix of development:

- 23 • 317 senior housing units (10.3 percent)
- 24 • 30,000 square feet specialty retail space
- 25 • 26,300 square feet supermarket space
- 26 • 24,800 square feet general office space
- 27 • 20,000 square feet health/fitness club
- 28 • 18,000 square feet restaurant space
- 29 • 7,500 square feet medical/dental office space

30 In addition, two variations on the type of development are considered.

31 **Variation 1: Alternative Action with 40 Percent Senior Housing**

32 Variation 1 of the Alternative Action assumed the same mix of development, but that 40 percent, or
 33 roughly 1,235 of the housing units, are occupied by residents 55 years and older. Other uses would
 34 remain the same. With this demographic profile, the number of vehicle trips per day would be lower.

1 **Variation 2: Alternative Action with 40 Percent Senior Housing and Minimal Commercial**
2 **and Retail Space**

3 Variation 2 of the Alternative Action also assumed 40 percent of the housing units are occupied by
4 residents 55 years and older, but would only include minimal space for commercial and retail businesses.
5 This variation would eliminate the general office, supermarket, and restaurant space, and two-thirds of the
6 specialty retail space. The mix of development would include:

- 7 • 1,235 of the 3,081 housing units for senior housing
8 • 10,000 square feet specialty retail space
9 • 20,000 square feet health/fitness club (membership only)
10 • 7,500 square feet medical/dental office space

11 **3.2 Description of Current Comprehensive Plan Amendment**

12 These policies are being transmitted in a separate memorandum to the County and will be reviewed
13 concurrently with this addendum. The results of that review will be incorporated in the revised addendum
14 for publication.

4 Changes in Environmental Effects and Mitigation

This addendum presents updated information to identify or address impacts that have changed since the 2009 Draft and Final SEISs were prepared for the County's GMA Comprehensive Plan. Mitigation measures are recommended, where appropriate, and the potential for unavoidable significant adverse impacts is noted.

The County identified areas in which the Paramount docket proposal would be evaluated in this addendum. Elements of the environment that are addressed include Earth, Hazardous Materials, Water Resources, Wetlands, Fisheries, Wildlife and Vegetation, Air Quality, Cultural Resources, Aesthetics, Transportation, Public Services and Utilities, and Land and Shoreline/Recreation Use Patterns. This chapter incorporates text and information from the 2009 Draft and Final SEISs (ICF Jones & Stokes 2009a, 2009b).

Description of the Point Wells Site

The approximately 61-acre Point Wells site is located on the shore of Puget Sound just north of the King-Snohomish county line. The property borders the city of Shoreline and the town of Woodway. The BNSF railroad tracks run north-south along the east edge of this site. The majority of the site formerly consisted of a saltwater marsh that was filled in the early 1900s for industrial use primarily as a petroleum storage and distribution facility. The site is still used as a marine fuel terminal as well as an asphalt plant. A series of steel sheet pile seawalls and rock bulkheads have been constructed along the shoreline to retain the fill and protect the site from wave erosion. About 56 acres are located adjacent to Puget Sound where the land is about 10 to 20 feet above sea level behind the seawall; this area is also referred to as the lower bench. The remaining 5 acres on the east side of the railroad tracks are about 50 feet higher in elevation. There are steep slopes along the east side of this upper bench area.

4.1 Earth and Soil and Groundwater Contamination

4.1.1 Affected Environment

The Puget Sound area is a seismically active region. There are no known faults that run directly through the Point Wells site; however, much of the Point Wells site was a saltwater marsh that was filled in the early 1900s. The fill is highly susceptible to liquefaction in an earthquake.

Steep slopes along the east edge of the site are considered to be a landslide hazard area.

Groundwater beneath the lower bench area of the site is generally 1 to 8 feet below the ground surface. Shallow groundwater flow is interpreted to be from east to west, toward Puget Sound. The groundwater is influenced by precipitation. Tidal influences to groundwater levels have been minimized by the construction of sheet pile seawalls.

1 Further details about the geologic setting, soil types, groundwater conditions, and geologic hazards are
2 described in Section 3.1 of the Draft SEIS.

3 **4.1.2 Impact Analysis**

4 The Alternative Action and the two variations would have similar impacts as the 2009 Proposed Action
5 discussed in the Draft and Final SEISs. These potential impacts would depend on the configuration of
6 future development proposals. The change in the number of housing units and uses in the Alternative
7 Action and variations are not likely to change the potential impacts on earth, soils, or groundwater
8 contamination.

9 The Point Wells site is known to have petroleum contamination in the soil and groundwater. The property
10 is listed on the Washington State Department of Ecology (Ecology) Confirmed and Suspected
11 Contaminated Site List. There is a groundwater pump and remediation system that operates on the
12 property to treat the petroleum contamination in the groundwater. Ecology has also documented four
13 significant spills over the history of the site. Details are described in Section 3.1 of the Draft SEIS.

14 Future site development activities with the Alternative Action, such as excavation and grading, would
15 increase the potential for public exposure to known soil and groundwater contamination during
16 construction. Additionally, any affected soils encountered during construction would require an evaluation,
17 characterization, and possible remediation. Remediation of these soils could include excavation and on-
18 site treatment or off-site disposal erosion. The type of impacts would be the same as described for the
19 2009 Proposed Action in Section 3.1 of the Draft SEIS.

20 No permanent earth, soil, or groundwater impacts are anticipated as a direct result of the Alternative
21 Action or its variations. The requested zoning change would allow for development of housing,
22 commercial space, retail businesses, public recreation areas, and a transit center. This development
23 would occur largely on the area that has been filled. Fill has the potential to liquefy in the event of an
24 earthquake. Landslides are possible along the steep slopes on the east side of the property.

25 Under the No Action Alternative, the proposed zoning changes would not take place. The current land
26 use designations prohibit residential or commercial structures; however, industrial activity at the site
27 would likely increase even if the future land use map designation is not changed (ICF Jones & Stokes
28 2009b).

29 **4.1.3 Mitigation Measures**

30 **Earth**

31 Any project-specific geotechnical and geologic analyses would need to be performed at the time of permit
32 application to evaluate the impact of seismic, erosion, and landslide hazards. The proposed design would
33 need to provide for setbacks from the landslide hazard areas in accordance with County requirements.

34 The potential for seismically induced liquefaction would need to be evaluated and may need to be

1 mitigated through the use of appropriate foundations. Modifications may also need to be made to the
2 existing seawalls and rock buttresses to bring them to current code (ICF Jones & Stokes 2009b).

3 Similarly, if industrial activities under the No Action Alternative include construction of additional
4 structures, project-specific geotechnical and geologic analyses would need to be performed to evaluate
5 the impacts of seismic, erosion, and settlement hazards (ICF Jones & Stokes 2009b).

6 **Soil and Groundwater Contamination**

7 Soil and groundwater contaminants present on the Point Wells site at concentrations above the Model
8 Toxics Control Act (MTCA) cleanup limits include total petroleum hydrocarbons (gasoline, diesel, and oil
9 range); benzene, toluene, ethylbenzene, and xylene compounds; and lead. Soil and groundwater
10 sampling and characterization activities are ongoing.

11 Mitigation measures would be the same as described in Section 3.1.2 in the 2009 Draft and Final SEISs
12 (ICF Jones & Stokes 2009a, 2009b) and could include:

- 13 • Continuing the existing soil sampling program to identify and characterize the extent of soil
14 contamination on the site;
- 15 • Developing a plan to remediate contamination identified by the soil sampling program; depending
16 on conditions encountered at the site, remediation methods such as excavation, segregation,
17 and/or capping of affected soils may be necessary;
- 18 • Evaluating the potential for soil vapor intrusion associated with volatile contaminants, such as
19 benzene, and associated cleanup required by Ecology before development can occur;
- 20 • Assessing the need for an off-gassing or a subsurface vapor collection system;
- 21 • Continuing the existing groundwater extraction and treatment system operations and evaluating
22 technologies to increase cleanup efficiencies; and
- 23 • Instituting controls to prevent future use of site groundwater for drinking water or irrigation
24 purposes.

25 **4.1.4 Significant Unavoidable Adverse Impacts**

26 **Earth**

27 No adverse impacts are anticipated for geologic resources or critical areas.

28 **Soil and Groundwater Contamination**

29 With the Alternative Action or the 2009 Proposed Action, no unavoidable adverse impacts are expected.
30 Ecology would require that soil and groundwater remediation and characterization activities continue
31 under the No Action Alternative (ICF Jones & Stokes 2009a).

1 **4.2 Water Resources (Surface Water, Water Quality, and Drainage)**

2 **4.2.1 Affected Environment**

3 The Point Wells site has approximately 3,500 feet of shoreline along the western boundary of the site.
4 The site is located in the Cedar/Sammamish Water Resource Inventory Area (WRIA), which is WRIA 8.
5 The site drains directly into Puget Sound. There is a small unnamed creek that enters the site near the
6 southern end from the steep hillside to the east and then passes through the site in a culvert and
7 discharges into Puget Sound. A constructed ditch along the northern boundary and the northern half of
8 the eastern boundary discharges to Puget Sound and appears mainly to convey runoff and groundwater
9 seepage from the steep hillside to the east of the site. Figure 4.2-1 shows the topography of the Point
10 Wells site, the unnamed creek that enters the site near the southern end, and the constructed ditch along
11 the northern and eastern boundaries.

12 Along the western edge of the Point Wells site is a strip of tidelands that is located in a special flood
13 hazard area, which is below an elevation of 10 feet. No buildings would be constructed in the
14 tideland area.

15 In the vicinity of the Point Wells site, Puget Sound is on Ecology's 2008 303(d) list of threatened and
16 impaired water bodies due to fecal coliform bacteria (Category 5) (Ecology 2008a). However, samples
17 tested in 2008 did not exceed the criteria for fecal coliform. In addition, Ecology's Proposed 2010
18 Category for this area is a Category 1, which meets tested standards for clean water (Ecology 2010). As
19 of April 16, 2012, the U.S. Environmental Protection Agency (EPA) had not yet approved the 2010 water
20 quality assessments.

21 Most of the site is already developed and has impervious coverage. Stormwater runoff is routed through
22 oil/water separators and then through a Quadricell® Induced Air Flotation Unit prior to discharging
23 into Puget Sound. A flocculant is added to the stormwater runoff during treatment to promote removal
24 of solids.

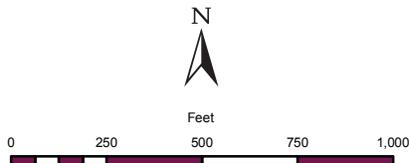
25 The outfall for the Brightwater regional wastewater treatment system is located on the southeast corner of
26 the Point Wells site. King County owns approximately 1 acre of uplands and some adjoining tidelands.
27 King County will be granted a permanent maintenance access easement through the Point Wells site to
28 its outfall property. This would not affect the Snohomish County Comprehensive Plan or code
29 amendments.

30 Further details about the water bodies, flood hazard areas, and Section 303(d) of the federal Clean Water
31 Act are provided in Section 3.2 of the Draft SEIS.



Legend

-  Paramount of Washington, LLC
-  Topo (5' contours)



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Map Document: (W:\plng\carto\doCKET\ Docket_XIII \Preliminary_Maps\Individual\Infill\SW_Infill\SW41_ParamountofWashingtonLLC_FLU.mxd) 2/11/2008

Source: Snohomish County Department of Planning and Development Services, Cartography/GIS Team 2008
 Aerial photograph: 2007

1068.07/SEIS (11/08)

1 **4.2.2 Impact Analysis**

2 Impacts with the Alternative Action would be similar to those discussed for the 2009 Proposed Action in
3 Section 3.2 of the Draft and Final SEISs. The potential impacts would depend on the configuration of
4 future development proposals. The change in the number of housing units and uses with the Alternative
5 Action and the two variations are not likely to change impacts on surface water, water quality, and
6 drainage.

7 Currently, more than half the Point Wells site consists of impervious surface area. With the Alternative
8 Action, changing the land use designation and zoning would allow for future development of up to 3,081
9 residential dwellings, and approximately 126,600 square feet of commercial and retail development. The
10 future development of the site could increase the amount of impervious surface area on the site, which
11 would increase stormwater runoff. All runoff from future development would require stormwater treatment
12 in accordance with SCC 30.63A.210. Stormwater treatment for any future site development would meet
13 the current standards and could improve the quality of the stormwater runoff compared to existing
14 conditions. These standards are substantially more stringent than water quality standards applicable to
15 the current site, which were developed under previous standards.

16 The current treatment standards required by SCC 30.63A.210 for future development remove pollutants
17 more efficiently than the existing best management practices (BMPs) at the site. If the stormwater
18 treatment BMPs for future development are correctly designed according to County standards, less
19 degradation of water quality to the receiving water body would result from the Alternative Action as
20 compared to existing conditions.

21 The site currently discharges directly into Puget Sound with limited water quality treatment. It is expected
22 any future development with the Alternative Action would continue direct discharge, but meet higher
23 treatment standards under SCC 30.63A.210 (1) (b) (iii). This code classifies Puget Sound as a water body
24 in which direct discharge without detention is allowed; however, water quality treatment BMPs are still
25 required to remove pollutants. Because the treated runoff would discharge directly into Puget Sound,
26 there would be no increased flooding in the small stream on the site. The Alternative Action's Variation 2
27 would have less area for commercial and restaurant uses, which may reduce the amount of impervious
28 surface slightly.

29 The No Action Alternative could result in increases in the intensity of the current uses and further
30 development on the site, particularly the less intensively developed southern portion of the site. Only
31 runoff from newly developed impervious surfaces would receive stormwater treatment according to SCC
32 30.63A.210. This treatment would result in lower quality stormwater discharge as compared to
33 redevelopment under any of the Urban Center alternatives.

34 **4.2.3 Mitigation Measures**

35 Any future development must be consistent with the current regulations such as SCC 30.63A (Drainage
36 Regulations) and SCC 30.65.230 (Floodways: Prohibited Uses).

1 Specific impacts and appropriate mitigation measures for any development plans would be addressed by
2 the applicable environmental documentation and follow SEPA regulations.

3 Development under any alternative may require mitigation as identified in the Final EIS for Snohomish
4 County GMA Comprehensive Plan 10-Year Update (Snohomish County 2005a) including:

- 5 • Encouraging the use of drainage systems that mimic natural drainage systems, such as
6 vegetated swales, wet ponds, and created wetlands;
- 7 • Adopting more protective water quality standards, such as more protective requirements for water
8 quality BMPs;
- 9 • Reducing impervious surface area by adopting new development requirements that set maximum
10 limits on the percentage of impervious area allowed and increasing the infiltration of surface water
11 (low impact development regulations); and
- 12 • Implementing stormwater quality monitoring to evaluate the effectiveness of stormwater practices
13 and standards.

14 In addition, mitigation measures associated with any future development may include:

- 15 • Improving the ditch along the north and eastern boundaries of the site to create a channel that
16 mimics a natural creek; and
- 17 • Removing the culvert that conveys the unnamed creek in the southern portion of the site, and
18 restoring the natural channel through the site for that creek.

19 Because of the extensive industrial development already on the site and existing adverse impacts on
20 surface waters, it is likely that mitigation measures associated with development under the Alternative
21 Action would lead to an overall improvement of surface water quality runoff compared to existing
22 conditions.

23 **4.2.4 Significant Unavoidable Adverse Impacts**

24 No significant unavoidable adverse impacts on surface water are anticipated as a result of the Alternative
25 Action or the 2009 Proposed Action.

26 **4.3 Wetlands**

27 **4.3.1 Affected Environment**

28 Two wetland areas mapped by the National Wetlands Inventory (NWI) have been identified in the vicinity
29 of the Point Wells site. The NWI mapped one estuarine intertidal wetland on the western edge of the site.
30 This area is where the tides alternately flood and expose the land surface along the seawall. The second
31 NWI-mapped wetland is a palustrine forested wetland that is temporarily flooded along the northern
32 portion of the site. This wetland is mapped as being outside of the site boundary; however, the actual
33 wetland boundary has not been delineated. Depending on the location of the delineated boundary and the
34 classification of the wetland, the wetland buffer may extend onto the Point Wells site.

1 One additional potential wetland was observed on the northeast portion of the parcel along the railroad
2 tracks during the 2008 field reconnaissance. The potential wetland has not been delineated. This wetland
3 is along a linear drainage ditch that conveys water from the hillside along the eastern side of the railroad
4 tracks into Puget Sound. This ditch is currently routinely excavated to remove accumulated sediment and
5 to prevent flooding of the railroad tracks.

6 Neither the NWI wetlands nor the potential wetland have much natural buffer due to the disturbed site
7 conditions. Any future site-specific development proposal would require a wetland delineation and further
8 environmental review to assess the extent of wetlands on the site, to classify wetlands, and to determine
9 how the critical area regulations would affect the Alternative Action. Prior to site-specific analysis, the
10 wetlands/potential wetland on the site cannot be classified.

11 Information sources, critical area regulations, and buffer requirements for wetlands are described in
12 Section 3.3 of the Draft SEIS.

13 **4.3.2 Impact Analysis**

14 The Alternative Action and the two variations would have similar impacts as the 2009 Proposed Action
15 discussed in the Draft and Final SEISs. The potential impacts would depend on the configuration of future
16 development proposals. The change in the number of housing units and uses in the Alternative Action
17 and variations are not likely to change impacts on wetlands.

18 Under the Alternative Action or 2009 Proposed Action, any future development application would be
19 required to meet the County's critical area regulations (SCC 30.62A) for wetlands or wetland buffers.

20 All alternatives would be required to meet the County requirements for buffer preservation and provision of
21 buffers. The extent of impacts on wetlands would be determined at the time of a project-level
22 environmental review. Wetlands and buffers within the site would limit development in those specific areas.

23 If development is proposed within a wetland or buffer, compensation for resulting impacts would be
24 required by SCC 30.62A.340. Development would probably convert some currently pervious areas to a
25 combination of impervious surfaces, lawn, and non-native ornamental species. Development outside of
26 wetlands and buffers could result in some indirect impacts on wetlands including sedimentation from
27 stormwater runoff, increased nutrient loading from road and lawn runoff, changes in the amount or time
28 water is in the wetland, and associated changes to wetland vegetation and habitat. Higher density
29 development could also increase the probability of non-native plant species invading wetland and buffer
30 vegetation communities.

31 With the No Action Alternative, it is likely that any further development on the site would involve an
32 increase in the present petroleum operation's capacity plus additional related industrial uses on the
33 southern area of the site. The effect of an increase in current operations on the site could result in
34 increased impervious surfaces. Additional impervious areas could possibly lead to additional impacts on

1 the existing wetlands such as increased sedimentation from stormwater runoff, increased nutrient loading
2 from road runoff, or changes in the amount or time water is retained in the wetland.

3 If wetland or stream impacts are identified for future development, compliance may be required with the
4 U.S. Army Corps of Engineers (Corps) Section 404 and Section 401 requirements in the Clean Water Act.

5 **4.3.3 Mitigation Measures**

6 Development under any alternative may require mitigation to address specific direct and indirect wetland
7 impacts. If future development is proposed, specific impacts and appropriate mitigation measures would
8 be addressed by the applicable environmental documentation following SEPA regulations. General
9 mitigation measures identified in the Final EIS for the 2005 GMA Comprehensive Plan 10-Year Update
10 (Snohomish County 2005a) include:

- 11 • Minimizing impervious surface area;
- 12 • Scheduling construction activities to occur during the dry season to reduce impacts on soils near
13 wetlands and streams;
- 14 • Encouraging increased infiltration of stormwater where technically feasible;
- 15 • Encouraging buffer enhancement; and
- 16 • Encouraging enhancement of the buffer where protected stream and wetland buffers are in a
17 degraded condition potentially re-establishing native vegetation and controlling non-native
18 invasive plant species.

19 Additional details about SCC 30.62A and mitigation measures for specific wetland categories and buffer
20 widths are described in Section 3.3.3 of the Draft SEIS.

21 **4.3.4 Significant Unavoidable Adverse Impacts**

22 If potential impacts on wetlands or buffers from future development with the Alternative Action or 2009
23 Proposed Action are avoided or mitigated, then no unavoidable adverse impacts are anticipated for this
24 site. If wetland or buffer areas cannot be avoided or mitigated, then any future development would likely
25 result in significant unavoidable adverse wetland impacts.

26 **4.4 Fisheries**

27 **4.4.1 Affected Environment**

28 One small stream crosses the Point Wells site in a culvert (except for a small portion at the
29 upstream/eastern edge of the site). The stream does not currently provide any fish habitat value due to
30 the gradient, the size of the stream, and the developed state of the property (ICF Jones & Stokes 2009b).

31 Along the western edge of the Point Wells site, the Puget Sound tidelands provide marine habitat for a
32 variety of species. The upper intertidal zone includes armored riprap banks along nearly the entire length
33 of the site, with the exception of the northernmost edge. Below the armored bulkhead, there is a gravelly

1 beach down to about the mean lower low water (MLLW) level. Subtidal habitat west of the site has sandy
2 substrates and supports patchy eelgrass beds down to about the -15 to -20-foot MLLW elevation (King
3 County 2003).

4 Existing fuel docks on the site provide deepwater ship access to the site and are used to transfer
5 petroleum products from ship to shore. The pilings of the dock structures support a community of marine
6 invertebrates and fish that generally differ from the surrounding areas. The docks shade the bottom and
7 attract rockfish and perch, as well as inhibit eelgrass and macroalgae growth on the bottom. In addition,
8 mollusk and barnacle shell fragments often accumulate beneath pilings, influencing the benthic
9 invertebrate community.

10 Clams that inhabit the intertidal areas in the vicinity of Point Wells include heart cockles, gapers (horse
11 clams), and geoducks (Golder and Parametrix 2002). Further details on the marine habitat and species
12 are described in Section 3.4.1 of the Draft SEIS.

13 Eight salmonid fish species (Chinook salmon [*Oncorhynchus tshawytscha*], coho salmon [*O. kisutch*], pink
14 salmon [*O. gorbuscha*] chum salmon [*O. keta*], sockeye salmon [*O. nerka*], steelhead trout [*O. mykiss*],
15 cutthroat trout [*O. clarkii*], and bull trout [*O. confluentus*]) inhabit Puget Sound and may at times be
16 present along the shoreline of the Point Wells site. Of these species, three (Chinook salmon, steelhead
17 trout, and bull trout) have been federally listed as threatened under the ESA (WDFW 2012). Juvenile
18 salmonids likely forage along the shoreline of Point Wells, and adults may be found farther offshore.
19 Essential fish habitat (EFH) at the Point Wells site, which includes all marine waters below mean high tide
20 elevation, is described in Section 3.4 of the Draft SEIS.

21 Critical area regulations, as described in SCC 30.62A, regulate development in these critical tideland areas.

22 **4.4.2 Impact Analysis**

23 The Alternative Action and the two variations would have similar impacts as the 2009 Proposed Action
24 discussed in the Draft and Final SEISs. The potential impacts would depend on the configuration of future
25 development proposals. The change in the number of housing units and uses in the Alternative Action
26 and variations are not likely to change impacts on fisheries.

27 The Alternative Action would change the land use of the site and discontinue the existing ship traffic and
28 associated transfer of petroleum products. This action would reduce the risk of oil spills, which can have
29 extensive detrimental effects on fish and aquatic habitat. Other uses consistent with the proposed rezone
30 may involve recreational boating uses, which involve much lower risks of petroleum discharge.

31 There is currently little or no functioning shoreline buffer along the majority of the shoreline along the
32 Point Wells site. Future development would be required to comply with the County Shoreline Master
33 Program (adopted by the County Council on October 13, 2010 and conditionally approved by Ecology on
34 February 28, 2012), which requires buffers adjacent to marine waters. Any modification of the existing
35 bulkheads on the shoreline to provide additional beach intertidal area or shoreline vegetation is likely to

1 enhance aquatic habitat. The standard 150-foot shoreline buffer may be modified on properties
2 designated as Urban Centers. For the buffer to be reduced, the applicant would have to demonstrate that
3 the development would result in a net improvement in buffer functions and values.

4 Any development proposal at this site that would reduce the shoreline buffer from the standard 150-foot
5 width would have to be evaluated for its effects on buffer functions and values. Restoration opportunities
6 that could be incorporated into buffer enhancement or an innovative development design to improve
7 fisheries habitat conditions could include, but are not limited to:

- 8 • Replacing impervious surfaces with pervious surface areas;
- 9 • Planting native vegetation that can shade the upper beach or contribute wood to the shoreline;
10 shade of the upper beach could benefit forage fish egg incubation because smelt and sand lance
11 spawn in the substrate of the upper beach and their eggs would be less likely to become
12 desiccated during low tide along shaded beach sections; and
- 13 • Replacing a portion of the existing seawall with a more natural shoreline, which could conceivably
14 include pocket beaches or removal of armoring along a more extensive stretch of shoreline;
15 ideally, this option would be combined with native plantings, particularly along the northern side of
16 Point Wells because this area would receive the most shade from trees planted in the buffer area.

17 Impacts would be the same with either of the Alternative Action's variations and similar to the 2009
18 Proposed Action as described in Section 3.4 in the Draft SEIS.

19 Under the No Action Alternative, the Point Wells site would continue to increase operations; fuel storage
20 and distribution operations could be added, and marine fueling operations could increase. The shoreline
21 conditions would be expected to remain the same as they are today.

22 If development of an alternative included any federal funding or permits, compliance with the ESA would
23 be required. This would also involve concurrence from the National Marine Fisheries Service (NMFS) and
24 the U.S. Fish and Wildlife Service (USFWS) for listed species (Puget Sound Chinook salmon, Puget
25 Sound steelhead trout, and Puget Sound or coastal bull trout).

26 **4.4.3 Mitigation Measures**

27 No mitigation measures for fisheries impacts would be required because any development under either
28 the Alternative Action or 2009 Proposed Action would be designed to restore a more natural shoreline.

29 **4.4.4 Significant Unavoidable Adverse Impacts**

30 No significant unavoidable adverse impacts on fisheries are anticipated as a result of either the
31 Alternative Action or the 2009 Proposed Action.

4.5 Wildlife and Vegetation

4.5.1 Affected Environment

There is very little vegetation in the upland portion of the Point Wells site and habitat for wildlife is limited. Along the eastern boundary of the site, a steep wooded bluff rises to the east of the railroad tracks.

A bald eagle (*Haliaeetus leucocephalus*) nesting territory is located approximately 0.5 mile to the northeast of the site in Deer Park Reserve. The shoreline buffer associated with this nesting territory extends south and includes approximately the northern quarter of the Point Wells site. Bald eagles from this nesting territory may perch in trees to the east of the site, forage in Puget Sound offshore of the site, and use undeveloped tidelands for consuming prey or resting. Bald eagles are not expected to regularly use the developed portion of the site due to a lack of suitable habitat features (ICF Jones & Stokes 2009b). Bald eagles were removed from the federal Endangered Species list in 2007, but are classified by the Washington Department of Fish and Wildlife (WDFW) as a State Sensitive species.

None of the Washington State sensitive species identified in SCC 30.62A.410 are expected to be present on the site, although gray whales (*Estrichtius robustus*) may occasionally occur offshore of the site. Other marine mammals may also be found in the vicinity, including the southern resident killer whale (*Orcinus orca*), which is listed as endangered under the ESA (70 Federal Register 69903-69912).

Along the western edge of the site are tidelands, as described in Section 4.4 above. A beach assessment study conducted immediately south of the site identified 31 species of invertebrates and several birds. The most abundant species found was butter clam (*Saxidomus gigantean*) and littleneck clam (*Protothaca staminea*). Invertebrates observed included snails, sea stars, barnacles, crabs, shrimp, and anemones. Birds reported included several types of gulls, the western grebe (*Aechmophorus occidentalis*), Arctic tern (*Sterna paradisaea*) and great blue heron (*Ardea herodias*) (King County 2008). In addition, the study also found several species of algae present. Given the proximity of the surveyed area to the site, it is likely that many of the same species also occur at the site.

Other species that may use the site include harbor seals (*Phoca vitulina*), which may forage near the shore or haul out on the beach; birds such as American crow (*Corvus brachyrhynchos*) and European starling (*Sturnus vulgaris*); and additional species of waterfowl.

Additional details about the wildlife and vegetation are described in Sections 3.5.1 and 3.5.2 of the Draft SEIS.

4.5.2 Impact Analysis

The Alternative Action and the two variations would have similar impacts as the 2009 Proposed Action discussed in the Draft and Final SEISs. The potential impacts would depend on the configuration of future development proposals. The change in the number of housing units and uses in the Alternative Action and variations are not likely to change impacts on wildlife and vegetation.

1 Access to the Point Wells site is currently restricted, which results in a low level of human activity in the tidal
2 area. This would continue to be the case with the No Action Alternative. Impact with the Alternative Action
3 would be the same as described for the 2009 Proposed Action in Section 3.5 of the Draft and Final SEISs.

4 With the Alternative Action, if redevelopment occurred under the new Urban Center land use designation,
5 the level of human activity in the tidal area would increase. Point Wells beach to the south is heavily used
6 by clam diggers and beachcombers (King County 2008); similar use could be expected as a result of
7 allowing public access to the site's beaches. This could reduce the potential for some species to use the
8 site because they may be disturbed by the presence of humans. The increased human access could also
9 disturb marine vegetation.

10 Redevelopment under the Alternative Action could also benefit species that are commonly found in urban
11 areas. Landscaping could provide nesting or foraging habitat for these species. If wetland buffers or
12 shoreline setbacks are restored using native plant species, additional wildlife habitat would be created on
13 the site. If native tree species are planted, in several years they may be suitable for bald eagle use.
14 Redevelopment of the Point Wells site could benefit critical habitat for the species by restoring a shoreline
15 buffer and increasing the amount of vegetation on the site, thereby incrementally improving water quality
16 in the area. However, disturbing soils could allow establishment of non-native invasive plant species,
17 which could affect areas of existing native wetland and marine vegetation.

18 Wildlife currently using the site have acclimated to the noise and activity associated with industrial use
19 and train traffic. Some species may be disturbed by redevelopment, but others would likely not be
20 disturbed because they are used to the noise of the industrial operations and trains. Following
21 redevelopment, noise levels on the site may be lower because of decreased industrial activity and train
22 traffic to the site and increased vegetative cover that would lessen some noise. Impacts would be the
23 similar with either of the Alternative Action's variations.

24 Under the Alternative Action, the dock on the Point Wells site would no longer be used for transferring
25 fuel, which would eliminate the potential risk of water contamination from a spill affecting marine species
26 and birds.

27 The potential risk of a spill could rise under the No Action Alternative if industrial operations increase
28 (although safeguards are in place). If industrial operations increase, it is likely to create additional train
29 traffic. These additional activities could potentially increase noise and disturb wildlife using the site. The
30 site would continue to lack significant vegetation and habitat for most wildlife species.

31 **4.5.3 Mitigation Measures**

32 No mitigation measures for wildlife and vegetation would be required because any development under
33 either the Alternative Action or 2009 Proposed Action would include landscaping and be designed to
34 restore a more natural shoreline with native vegetation where appropriate.

1 **4.5.4 Significant Unavoidable Adverse Impacts**

2 Under both the Alternative Action and 2009 Proposed Action, public access to the shoreline on the Point
3 Wells site would no longer be restricted. Development of the site would increase human activity in the
4 tidal area, which could disturb wildlife and marine vegetation, and reduce the potential for some species
5 to use the site.

6 **4.6 Air Quality**

7 **4.6.1 Affected Environment**

8 Air quality regulations and ambient air quality standards established by EPA, Puget Sound Clean Air
9 Agency (PSCAA), and Ecology are described in Section 3.6 of the Draft SEIS.

10 The Point Wells site is located in both a carbon monoxide and an ozone maintenance area, which are
11 designated by Ecology (Ecology 2012a, 2012b).

12 Air pollutant emissions are currently generated by the following industrial operations on or around the
13 Point Wells site:

- 14 • Tugboats and barges serving the marine terminal;
- 15 • Volatilization (evaporation) losses from fuel loading and fuel storage tanks;
- 16 • Boilers and heaters;
- 17 • Asphalt-loading equipment;
- 18 • Heavy-duty diesel haul trucks shipping fuel and asphalt, which travel along public streets in the
19 area; and
- 20 • Freight and commuter rail traffic at an average of 40 trains per day traveling along the perimeter
21 of the Point Wells site on the BNSF rail line, as well as the limited number of freight trains that
22 enter the site to serve existing industrial customers.

23 **4.6.2 Impact Analysis**

24 Impacts with the Alternative Action would be similar but less than the impacts discussed for the 2009
25 Proposed Action in Section 3.6 of the Draft and Final SEISs. The potential impacts would depend on the
26 configuration of future development proposals. The change in the number of housing units and uses in
27 the Alternative Action and variations are not likely to change impacts on air quality.

28 With the Alternative Action, the anticipated development would result in increased employment and
29 residential growth on the Point Wells site. This type of urban development would increase traffic on local
30 roadways and cause an increase in vehicle emissions. However, it is unlikely that air quality impacts at
31 local intersections would be significant because EPA's ongoing motor vehicle regulations are decreasing
32 emissions from vehicles. This decrease is likely to offset the increase in traffic. In addition, emissions from
33 the current industrial activities would no longer exist. The Alternative Action would have slightly less

1 development and less potential for increasing traffic and vehicle emissions compared to the 2009
2 Proposed Action.

3 Variations 1 and 2 would be expected to generate fewer vehicle trips under the Alternative Action
4 because of the increased amount of senior housing units. Variation 1 would be expected to have slightly
5 fewer vehicle trips compared to variation 2 because there would be more commercial and retail
6 development on the site, such as a grocery store, which is not included in Variation 2. However, with
7 minimal commercial and retail businesses on the site under Variation 2, vehicle trips generated by
8 employees or customers coming from other locations would decrease.

9 Emissions from commercial development or a potential Sounder commuter rail station are unlikely to
10 cause any exceedances of emission standards. PSCAA regulations require all future emission-generating
11 equipment for commercial development to be equipped with best available technology controls to
12 minimize emissions. A potential commuter rail station would not add any additional trains; moreover,
13 EPA's emission control regulations for locomotives mandate future emission reductions.

14 Similar to the 2009 Proposed Action, the Alternatives Action is expected to reduce regional greenhouse
15 gas (GHG) emissions compared to the No Action Alternative. The GHG emission reductions would
16 beneficially contribute to Washington State's goal of reducing statewide GHG emissions to 50 percent
17 below 1990 levels by 2050 (Ecology 2008b). The reduction in GHG emissions from the Point Wells site
18 would be a relatively small fraction of the statewide reduction goal.

19 During construction, BMPs would be implemented to minimize fugitive dust and odors during
20 construction, as required by PSCAA.

21 Under the No Action Alternative, the air pollutant emissions currently generated by industrial operations
22 (listed above in Section 4.6.1) would continue.

23 **4.6.3 Mitigation Measures**

24 Ecology recently provided adaptation strategies and actions as part of their integrated climate change
25 response strategy (Ecology 2012c). Priority Response Strategy 2 includes consideration of climate
26 change when siting new development to ensure that the design accommodates projected impacts and
27 does not increase risks for neighbors. Additional detailed environmental impacts of development
28 proposals will be evaluated as specific projects are proposed.

29 During any construction under the Alternative Action, the contractor would be responsible for preparing an
30 air quality control plan prior to site development. This plan would be used to implement BMPs and to
31 control fugitive dust and odors emitted by diesel construction equipment. During construction, dust from
32 excavation and grading could cause temporary, localized increases in the ambient concentrations of
33 fugitive dust and suspended particulate matter. The following BMPs could be used to control fugitive dust:

- 34 • Using water sprays or other non-toxic dust control methods on unpaved roadways;
- 35 • Minimizing vehicle speed while traveling on unpaved surfaces;

- 1 • Preventing track-out of mud onto public streets;
- 2 • Covering soil piles when practical; and
- 3 • Minimizing work during periods of high winds when practical.

4 **4.6.4 Significant Unavoidable Adverse Impacts**

5 None of the alternatives are anticipated to have significant unavoidable adverse impacts on air quality.

6 **4.7 Noise**

7 **4.7.1 Affected Environment**

8 Noise sources from industrial operations on the Point Wells site currently include:

- 9 • Asphalt-loading equipment;
- 10 • Heavy-duty diesel haul trucks shipping fuel and asphalt, traveling along public streets in
- 11 Woodway and Shoreline;
- 12 • Freight and commuter rail traffic on the BNSF main rail line along the east side of the site, along
- 13 with a limited number of low-speed trains on the rail spur serving the industrial operations at the
- 14 site;
- 15 • Tugs and barges serving the marine terminal; and
- 16 • Boilers and heaters.

17 Noise-sensitive receivers that could be affected by these noise sources include:

- 18 • Residential homes on the hillside east of the existing facility, with line-of-sight exposure to noise
- 19 sources in the properties;
- 20 • Residential homes and businesses along the public streets serving the facility; and
- 21 • Future homes and businesses in the proposed development.

22 Common noise levels and noise regulations are described in Section 3.7 of the Draft SEIS.

23 **4.7.2 Impact Analysis**

24 The Alternative Action could potentially increase noise levels in the area as compared to current levels as
25 a result of increased commercial and residential development both during construction and permanently.
26 Although the mix of development would be different, a similar level of effects would be anticipated for
27 either of the variations under the Alternative Action. Impacts with the Alternative Action would also be
28 similar, but slightly less than impacts described in Section 3.7 of the Draft SEIS for the 2009 Proposed
29 Action because the density of development and traffic would be less.

30 Redevelopment of the Point Wells site would require demolition and construction activities. Nearby
31 homes would temporarily experience increased noise levels. Temporary daytime construction activity is
32 exempted from the County noise ordinance limits; however, daytime construction activity could annoy
33 neighbors. Any construction activity at night would not be exempt from the County's noise ordinance;

1 compliance would be required with the nighttime limits specified by the ordinance. Compliance with the
2 specified limits would ensure nighttime construction activity would not cause significant impacts.

3 Development under the Alternative Action would create residential and commercial uses on the site. The
4 County would require all prospective future developers to use low-noise mechanical equipment adequate
5 to ensure compliance with the County's current daytime and nighttime noise ordinance limits. Compliance
6 with the noise ordinance would ensure that potential noise impacts from new commercial development
7 and mechanical equipment (such as rooftop air conditioning units) would not be significant.

8 The development of residential and commercial uses under the Alternative Action would increase traffic
9 volumes on local streets. These traffic increases would cause higher ambient noise levels at residential
10 housing units adjacent to the streets. Traffic noise would be caused by moving traffic, vehicles idling at
11 intersections, and by transit vehicles at bus stops. Noise caused by the new bus trips would be partially
12 offset by displacement of the existing and future industrial haul truck trips that would occur under the No
13 Action Alternative to support operation of the fuel terminal and asphalt plant. The increases in traffic
14 volume as compared to existing levels are likely to increase noise levels on Richmond Beach Drive by 3
15 to 6 decibels (typically noise levels increase by about 3 decibels for each doubling of traffic volumes). The
16 resulting noise levels are not likely to exceed 60 decibels.

17 Noise from the existing railroad along the shoreline is largely due to its primary use by freight trains.
18 Future noise levels generated by low-speed operations at a potential commuter rail station would likely be
19 lower than the current noise levels generated by high-speed commuter trains traveling past the site. The
20 operation of commuter trains on the rail line, however, is a miniscule contributor of rail noise compared to
21 freight traffic.

22 Under the No Action Alternative, noise currently generated by industrial operations (listed above in
23 Section 4.7.1) would continue and potentially increase if current operations increase, or if rail traffic along
24 the BNSF rail line increases.

25 **4.7.3 Mitigation Measures**

26 Temporary construction noise generated by potential future construction activities could be bothersome.
27 The County could require future construction contractors in the proposed development to follow measures
28 to reduce construction noise. These measures could include the following:

- 29 • Construction at night or on weekends could be prohibited, unless special dispensation was
30 obtained from the County;
- 31 • Use of impact equipment could be discouraged before 8:00 a.m. and after 6:00 p.m.;
- 32 • Loud, stationary equipment could be located as far away as practical from noise-sensitive
33 receivers;
- 34 • Idling trucks could be parked as far away as practical from noise-sensitive receivers and shut off
35 when not active for long periods of time;

- 1 • Contractors could be discouraged from dropping pallets onto the ground or from dragging steel
- 2 items across pavement; and
- 3 • Contractors could be required to train employees to be aware of noise concerns at nearby homes
- 4 and businesses.

5 There are no permanent noise mitigation measures proposed. The increases in traffic volume are not
6 expected to be high enough to cause a significant increase in traffic noise along the major arterials
7 serving the site.

8 **4.7.4 Significant Unavoidable Adverse Impacts**

9 None of the alternatives are anticipated to have significant unavoidable adverse impacts on air quality.

10 **4.8 Cultural Resources**

11 **4.8.1 Affected Environment**

12 The Point Wells site is in the traditional territory of the Sammamish people—a Duwamish subgroup that
13 occupied the area around the Sammamish River from Puget Sound to the eastern shore of Lake
14 Washington (Curtis 1907; Ruby and Brown 1992; Swanton 1968). No historically known village has been
15 identified near the site.

16 A record search was undertaken during preparation of the Draft SEIS at the Washington State
17 Department of Archaeology and Historic Preservation (DAHP). The purpose of this search was to identify
18 previously documented archaeological, ethnographic, and historic resources within 1 mile of the Point
19 Wells site and to help establish a context for resource significance. The following inventories and sources
20 were consulted:

- 21 • DAHP Electronic Database
- 22 • Snohomish County Heritage 2000 Inventory
- 23 • National Register of Historic Places
- 24 • Washington Information System for Architectural and Archaeological Records Data (WISAARD)

25 There are no previously recorded archaeological sites found on or within 1 mile of the site. Details about
26 the prehistoric, ethnographic, and historic setting are described in Section 3.8 of the Draft SEIS.

27 The location of the site on the shores of Puget Sound would have been attractive to hunter-fisher-
28 gatherers in the area that may have intensely used the area for thousands of years. The fill placed on the
29 site for railroad construction and bulk terminal use may have covered cultural resources.

30 **4.8.2 Impact Analysis**

31 The Alternative Action involves minor changes in the type and density of the development presumed
32 to occur on the Point Wells site, but would not change impacts compared to the 2009 Proposed
33 Action discussed in the Draft and Final SEISs. The likelihood that any new development under the

1 2009 Proposed Action would affect cultural resources depends on the proximity of the proposed
2 development to any cultural resources identified at the time of development. If any cultural resources
3 were identified during future development, then it is possible that proposed development projects may
4 affect those resources.

5 **4.8.3 Mitigation Measures**

6 It is possible that intact buried archaeological resources remain in untested sections of the Point Wells
7 site. The use of the site since 1912 for industrial purposes may have destroyed any cultural resources
8 that potentially existed, or it may have protected them. If previously unknown cultural resources were
9 identified during the planning or construction of future development projects, then federal, state, and local
10 laws would apply and would require further review on an individual basis. An archaeological survey and
11 testing would likely be required for projects that involve significant excavation.

12 **4.8.4 Significant Unavoidable Adverse Impacts**

13 No significant unavoidable adverse impacts on cultural resources are anticipated with any of the
14 alternatives.

15 **4.9 Aesthetics**

16 **4.9.1 Affected Environment**

17 Most of the Point Wells site is a relatively flat area of shoreline adjacent to Puget Sound. There is a steep
18 grade change to the east of the railroad tracks. The dominant visual features on the site are the
19 petroleum storage tanks that cover the northern and central portions of the lowland area. These tanks
20 vary in age, physical condition, and size. In addition to the petroleum tanks, the northern and central
21 portions of the lowland area contain a large number of prefabricated metal industrial buildings and
22 equipment storage yards. The maximum allowed height for the tanks and industrial buildings on the site is
23 65 feet. Typical of industrial areas, very little vegetation is present on the site, and groundcover consists
24 primarily of gravel and pavement. The small upland portion of the site on the east side of the railroad
25 tracks is much less intensely developed, containing office buildings and parking areas. The photographs
26 in Figure 4.9-1 show the typical visual character of the area.

27 Extensive exterior illumination is currently used to provide lighting of the property for operational purposes.
28 The on-site railroad siding, in particular, contains a large number of high-intensity lights for worker safety
29 during loading and unloading procedures. Because of the presence of a thickly wooded grade change
30 immediately east of the Point Wells site, development in that area is currently shielded from the ambient
31 light produced on the site. However, the slope becomes less extreme and less heavily forested near the
32 southern end of the site, and development to the southeast has a direct line of sight to a portion of the
33 existing industrial facility. Views of Puget Sound are a valuable amenity to properties surrounding the Point

**Figure 4.9-1.
View of Point Wells site looking northwest from Richmond Beach Road**



View of Point Wells site looking north from Richmond Beach Road



1 Photographs taken by David Sherrard

2

1 Wells site. A number of homes have been constructed at the top of the steep slope immediately to the
2 north and east of the site to take advantage of these views (ICF Jones & Stokes 2009b).

3 Additional information about aesthetics and design guidelines are in Section 3.9 of the Draft SEIS.

4 **4.9.2 Impact Analysis**

5 The proposed amendment to the County's Comprehensive Plan would not directly affect aesthetics. If
6 adopted, this amendment would change the allowed uses and potential future development of an Urban
7 Center on the site. Project-level review would be required for future development proposals. Under the
8 Alternative Action, an aesthetic impact could result from:

- 9 • Increasing building heights or visual bulk significant enough to create obvious conflicts of scale
10 between new and existing nearby development;
- 11 • Altering or obstructing recognized views; and
- 12 • Increasing light and glare that affects views or interferes with public safety.

13 While impacts could occur, proposed land use and zoning regulations would provide greater pedestrian
14 access to the site, and the proposed mixed-use district would be more aesthetically compatible with the
15 residential nature of surrounding development than is the current facility.

16 Under the Alternative Action, future development could include buildings up to 90 feet in height without
17 additional review. A building height increase up to 180 feet may be approved under SCC 30.34A.180
18 when the additional height is documented to be necessary or desirable when the project is located near
19 a high-capacity transit route or station, and the applicant prepares an environmental impact statement
20 pursuant to chapter 30.61 SCC that includes an analysis of the environmental impacts of the additional
21 height.

22 This increases the likelihood that future development on the site may interfere with views from residences
23 at the top of the bluff in Woodway. Project-level design review by the County would be required to
24 determine the exact impacts on views associated with future development under the Alternative Action
25 and to identify if any appropriate mitigation measures are required.

26 Impacts would be the similar with either of the Alternative Action's variations. It is unlikely that either
27 variation would affect the height of residential towers, which are likely to be the highest buildings on the site.
28 The Alternative Action could have fewer impacts to views than the 2009 Proposed Action depending on the
29 configuration of development.

30 **4.9.3 Mitigation Measures**

31 Future development under any of the alternatives may require project-specific mitigation measures to
32 address potential impacts on the built environment, particularly regarding height, bulk, and views. Future
33 impacts would be analyzed and appropriate mitigation measures applied under the County's SEPA
34 review process at the time of application.

1 **4.9.4 Significant Unavoidable Adverse Impacts**

2 The potential exists for future development under the Alternative Action or the 2009 Proposed Action to
3 result in adverse impacts. However, by following the existing regulations, no significant unavoidable
4 adverse impacts on aesthetics are anticipated. A project-level design review would be necessary to
5 identify any specific impacts and appropriate mitigation measures.

6 **4.10 Population, Employment, and Housing**

7 **4.10.1 Affected Environment**

8 **Population and Housing**

9 There are no existing residents or houses on the Point Wells site. The Point Wells site is bordered by
10 Woodway to the north and east, and Shoreline to the south. According to the 2010 U.S. Census data, the
11 population in Woodway is about 1,307 (Washington State Office of Financial Management 2012) and the
12 population in Shoreline is about 53,007 (U.S. Census Bureau 2012). Snohomish County's population in
13 2010 was approximately 713,335 (U.S. Census Bureau 2012).

14 **Employment**

15 Paramount estimated that the asphalt operations on the Point Wells site provide approximately 12 jobs
16 (ICF Jones & Stokes 2009b). In addition, truck drivers and workers associated with distribution operations
17 travel to and from the site.

18 Employment statistics for the County indicated an estimated 255,800 jobs in January 2012 (Washington
19 State Employment Security Department 2012). Woodway is a small residential community with few jobs
20 located in the vicinity of Point Wells. Shoreline contains about 16,000 jobs according to the State of
21 Washington Employment Security Department, as reported in the 2008 King County Annual Growth
22 Report.

23 Additional information about housing and employment in the area are described in Section 3.10 of the
24 Draft SEIS.

25 **4.10.2 Impact Analysis**

26 The proposed amendment changing the land use and zoning designations would allow development
27 under the Alternative Action that would increase the population, employment, and housing capacity
28 compared with the No Action Alternative.

29 The Alternative Action would add up to 3,081 housing units. The future population would depend on the
30 household size. The current average household size in Snohomish County is 2.65 with an average in
31 King County and adjacent Shoreline of 2.3. The presumed average household size for the 2009 Proposed
32 Action discussed in the Draft and Final SEISs was 2.0, which reflects general trends for multi-family
33 housing of a higher percentage of single-person households and fewer families with children. This

1 household size is used in the 2007 Snohomish County Buildable Lands Report (Snohomish County
2 2007a). If 2.0 persons per household are presumed with a 92 percent average occupancy rate, the
3 population would be approximately 5,670 people. Variations 1 and 2 with 40 percent senior housing could
4 result in fewer residents because of generally lower household size for older residents.

5 Compared to the 2009 Proposed Action's plan to add 3,500 housing units and an estimated 6,442 people,
6 the population and housing capacity with the Alternative Action would be less. As a result, impacts with
7 the Alternative Action and the two variations would be less than for the 2009 Proposed Action.

8 Development of an urban center would also include new jobs for office, medical/dental, retail, and
9 facilities staff. The number of new jobs would depend on the mix and density of development. The 2009
10 Proposed Action estimated adding approximately 800 jobs based on a general rate of 27 employees per
11 acre. Employment estimates for the Alternative Action were based on information in the 2007 Snohomish
12 County Buildable Lands Report (Snohomish County 2007a) and the following uses:

- 13 • Retail - 700 square feet per employee for 56,300 square feet of development;
- 14 • Food services - 200 square feet per employee for 18,000 square feet of restaurant space; and
- 15 • Office use - 350 square feet per employee for 32,300 square feet of office space.

16 This results in an estimate of about 300 to 350 employees with the Alternative Action. Variation 2 would
17 have less commercial and retail space; as a result, fewer job opportunities would project an estimated
18 40 to 60 employees.

19 The additional population and job growth would meet or exceed the Woodway MUGA targets. The area is
20 also identified as a potential annexation area for Shoreline and would increase the job and housing
21 capacity for that city. The City of Shoreline Point Wells Subarea Plan does not prescribe the number or
22 type of residential units, or the floor area of various types of commercial uses, but provides the
23 performance standards for parking site design and building form policies that a development must meet.

24 The No Action Alternative would not provide for additional population or housing units. However, the
25 No Action Alternative would be expected to increase employment by 79 to 104 jobs above the 12 existing
26 jobs. These jobs would support increased asphalt operations and a fuel storage and distribution
27 operation.

28 **4.10.3 Mitigation Measures**

29 The increases in population, employment, and housing do not conflict with growth targets or require
30 mitigation measures on their own. Development allowed under any of the alternatives may require
31 mitigation to address potential impacts, such as traffic generated by the additional population, at a non-
32 project level as well as at the time a site-specific application is considered.

1 **4.10.4 Significant Unavoidable Adverse Impacts**

2 Employment may increase under the No Action Alternative, but would have a greater potential to increase
3 under the Alternative Action or 2009 Proposed Action. The Alternative Action would develop up to 3,081
4 housing units and the 2009 Proposed Action would develop up to 3,500 housing units. As a result, the
5 population would grow in this area. Additional development and an increased population on the Point
6 Wells site may result in impacts on the natural and built environment, such as wildlife habitat and public
7 services, which are described above in Sections 4.5 and 4.12.

8 **4.11 Transportation**

9 The following sections present information to identify or address transportation impacts that have
10 changed since publication of the 2009 Draft SEIS and Final SEIS. This includes updates to the affected
11 environment and the No Action Alternative, in addition to new transportation impacts associated with the
12 Alternative Action. These updates were made based on findings described in the Point Wells Expanded
13 Traffic Impact Analysis prepared by David Evans and Associates in March 2011 (hereafter referred to as
14 the Point Wells TIA) and included as Attachment A. The following sections also compare these new
15 findings to the original findings described in the 2009 Draft and Final SEISs for the affected environment,
16 No Action Alternative, and 2009 Proposed Action.

17 **4.11.1 Affected Environment**

18 The affected environment for the Draft SEIS and Final SEIS included descriptions of the following
19 transportation facilities that serve the study area and the existing conditions of those facilities:

- 20 • Study area roadways and intersections;
- 21 • Level of service standards;
- 22 • Traffic safety;
- 23 • Transit service;
- 24 • Pedestrian facilities; and
- 25 • Bicycle facilities.

26 With a few exceptions, existing conditions have not changed since these documents were published. The
27 following section focuses on the few changes to the affected environment that are relevant to the areas
28 evaluated in this addendum. These include updates to existing intersection level of service and changes
29 to transit service in the study area. These updates were made based on information documented in the
30 Point Wells TIA.

31 **Existing Level of Service**

32 Level of service (LOS) is a qualitative measure of congestion that describes the quality of traffic
33 conditions and takes into consideration factors such as volume, speed, travel time, and delay of vehicles
34 traveling on a roadway. All jurisdictions within the study area define roadway LOS according to
35 methodologies presented in the Highway Capacity Manual (Transportation Research Board 2000). LOS is

1 represented by letter grades, A through F. LOS A and B reflect traffic flows with minimal delay; LOS C
 2 and D reflect moderate and stable traffic conditions; LOS E reflects conditions that approach capacity;
 3 and LOS F reflects congested conditions with potential for substantial delays. LOS criteria are established
 4 for signalized intersections as well as for stop-controlled intersections. These criteria are described in
 5 detail in the Draft SEIS.

6 LOS standards are used to evaluate the transportation impacts of long-term growth and concurrency.
 7 Jurisdictions adopt standards by which the minimum acceptable roadway operating conditions are
 8 determined. Deficiencies are identified if operations fall below these standards. LOS standards for
 9 roadways within Shoreline, Edmonds, and Woodway, as well as for Washington State Department of
 10 Transportation (WSDOT) facilities, are described in detail in the Draft and Final SEISs.

11 Existing AM and PM LOS was evaluated for 23 analysis intersections in the Draft and Final SEISs. These
 12 23 intersections, as well as an additional 25 intersections, were evaluated in the Point Wells TIA for the
 13 PM peak hour. Table 4.11-1 compares the LOS analysis results for the PM peak hour from the Point
 14 Wells TIA and the Draft SEIS.

15 **Table 4.11-1.**

16 **Existing PM Peak Hour Intersection Level of Service Comparison**

Intersection	Existing Traffic Control	LOS Standard	Existing (2010) – Point Wells TIA LOS (Delay)	Existing (2009) – DraftSEIS LOS (Delay)
Shoreline				
244th Street SW and Fremont Avenue N	Two-way Stop	D	---	D (30)
NW 196th Street and Richmond Beach Drive	Two-way Stop	D	A (9)	A (9)
NW 196th Street and 20th Avenue NW	All-way Stop-Control	D	---	A (9)
NW 195th Street and 15th Avenue NW	Two-way Stop	D	B (13)	C (18)
Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	D	B (10)	B (11)
Richmond Beach Road and 8th Avenue NW	Signal	D	D (37)	C (26)
Richmond Beach Road and 3rd Avenue NW	Signal	D	A (8)	A (7)
Richmond Beach Road and Dayton Avenue N	Signal	D	B (14)	A (9)
N 185th Street and Fremont Avenue N	Signal	D	C (30)	C (27)
N 175th Street and 6th Avenue NW	Two-way Stop	D	B (10)	B (11)
St. Luke Place N and Dayton Avenue N	Two-way Stop	D	B (13)	B (13)
N 175th Street and Fremont Avenue N	Signal	D	B (15)	A (8)
Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	D	C (21)	C (17)
N Innis Arden Way and Greenwood Avenue N	Two-way Stop	D	B (12.3)	B (11)
N 160th Street and Greenwood Avenue N	All-way Stop-Control	D	B (12)	B (14)
Richmond Beach Drive NW and NW 195th Place	Two-way Stop	D	A (9)	---
24th Avenue NW and NW 196th Street	Two-way Stop	D	A (10)	---
20th Avenue NW and NW 195th Street	All-way Stop-Control	D	A (9)	---

**Table 4.11-1.
Existing PM Peak Hour Intersection Level of Service Comparison (continued)**

Intersection	Existing Traffic Control	LOS Standard	Existing (2010) – Point Wells TIA LOS (Delay)	Existing (2009) – DraftSEIS LOS (Delay)
NW Richmond Beach Road and NW 190th Street	Two-way Stop	D	B (10)	---
100th Avenue W and 244th Street SW	Two-way Stop	D	B (14)	---
Firdale Avenue and 244th Street SW	Two-way Stop	D	B (12)	---
3rd Avenue NW and 244th Street SW	Two-way Stop	D	C (24)	---
Fremont Avenue N and 244th Street SW	Two-way Stop	D	E (40)	---
Meridian Avenue N and N 175th Street	Signal	E	D (44)	---
Dayton Avenue N and N 160th Street	Signal	D	B (12)	---
Westminster Way N and N 155th Street	Signal	D	C (24)	---
Greenwood Avenue N and SR 523 (N 145th Street)	Signal	E	D (44)	---
5th Avenue NE and SR 523 (N 145th Street)	Signal	E	F (143)	---
Woodway				
Algonquin Road and Woodway Park Road	Two-way Stop	A	A (9)	A (9)
238th Street SW and Woodway Park Road	All-way Stop-Control	A	---	A (7)
Timber Lane and 238th Street SW	All-way Stop-Control	A	A (7)	---
114th Avenue W and 238th Street SW	All-way Stop-Control	A	A (7)	---
Edmonds				
Firdale Avenue N and 244th Street SW	Two-way Stop	D	---	B (12)
244th Street SW and 100th Avenue W	Two-way Stop	D	---	B (14)
Firdale Avenue and 238th Street SW	Signal	C	B (14)	---
95th Place W and 228th Street SW	Two-way Stop	C	B (12)	---
3rd Avenue S and Pine Street	Two-way Stop	C	B (11)	---
WSDOT				
244th Street SW and SR 99	Signal	E	D (48)	D (48)
SR 104 and 100th Avenue W	Signal	E	D (39)	C (34)
N 185th Street and SR 99	Signal	E	D (53)	D (43)
N 175th Street and SR 99	Signal	E	D (45)	D (36)
95th Place W and SR 104 (Edmonds Way)	Signal	D	A (5)	---
SB SR 104 (Edmonds Way) and WB 244th Street SW	Signal	D	B (14)	---
SB SR 104 (Edmonds Way) and EB 244th Street SW	Signal	D	B (14)	---
76th Avenue W and SR 104 (Lake Ballinger Way)	Signal	D	E (57)	---
SB I-5 Ramps and SR 104 (Lake Ballinger Way)	Signal	D	B (11)	---
SR 99 and 228th Street SW	Two-way Stop	E	F (82)	---
SR 99 and N 160th Street	Signal	E	D (49)	---
SR 99 and N 155th Street	Signal	E	D (42)	---

1 Note: SW = southbound; WB = westbound; EB = eastbound

1 As shown in Table 4.11-1, all intersections evaluated in the Draft and Final SEISs operated at acceptable
 2 levels at the time of analysis. These same intersections were also shown to operate at acceptable levels
 3 in the Point Wells TIA. While there are minor differences in delay that can be found when comparing
 4 existing LOS analysis results between the Draft SEIS and the Point Wells TIA, these differences can be
 5 attributed to updated traffic volumes and minor changes to signal timing/phasing assumptions. Of the
 6 additional intersections evaluated in the Point Wells TIA, the following four intersections are currently
 7 operating below acceptable LOS standards during the PM peak hour:

- 8 • Fremont Avenue N and 244th Street SW – City of Shoreline, LOS E
- 9 • 5th Avenue NE and SR 523 (N 145th Street) – City of Shoreline, LOS F
- 10 • 76th Avenue W and SR 104 (Lake Ballinger Way) – WSDOT, LOS E
- 11 • SR 99 and 228th Street SW – WSDOT, LOS F

12 **Transit Service**

13 Community Transit

14 Since November 2009, Community Transit has offered the SWIFT bus rapid transit (BRT) along State
 15 Route (SR) 99 between Everett and Shoreline. This fast, frequent, and convenient service provides
 16 reliable transit options along the SR 99 corridor. The purpose is to create efficient bus transportation
 17 along the heavily congested corridor.

18 **4.11.2 Impact Analysis**

19 Transportation impact analysis in the Draft and Final SEISs was completed for the future planning year of
 20 2025. This analysis year was selected for the Draft and Final SEISs to be consistent with the analysis
 21 completed for long-range transportation planning efforts for Snohomish County and Woodway, Shoreline,
 22 and Edmonds. The year 2029 was evaluated for the Alternative Action in the Point Wells TIA.

23 The Draft and Final SEISs identified and analyzed two alternatives: (1) 2009 Proposed Action, and (2) No
 24 Action Alternative. The transportation analysis for the 2009 Proposed Action assumed 3,500 residential
 25 housing units would be developed, which captured the highest range of potential vehicles generated by
 26 the project. The third alternative analyzed in this addendum, the Alternative Action, reduces the number
 27 of residential housing units to 3,081, a 12 percent reduction in units compared to the 2009 Proposed
 28 Action. To capture the range of development possibilities, two variations of the Alternative Action were
 29 also studied. These variations would further reduce vehicle trips to and from the Point Wells site.

30 The transportation impacts identified in the Draft and Final SEISs for the No Action Alternative and 2009
 31 Proposed Action are summarized in the following section. The transportation impacts for an updated No
 32 Action Alternative and the Alternative Action are also described based on the findings in the Point Wells TIA.

33 **No Action Alternative**

34 Future traffic volumes at analysis intersections and on analysis roadway segments for the No Action
 35 Alternative were previously forecasted in the Draft and Final SEISs using Snohomish County's travel
 36 demand model, and reflect conditions expected to result under the adopted Future Land Use Map. Since

1 then, a computer-based travel demand model, specific to the Point Wells development, was developed to
2 further refine the distribution and assignment of project trips to assess project-related impacts. The
3 process used to develop this model and to prepare traffic forecasts is described in the following section.
4 This model and the resulting traffic forecasts were used only for evaluating the Alternative Action.

5 Traffic Forecasts

6 For the Point Wells travel demand model, the VISUM program, a Windows-based multimodal
7 transportation modeling software, was used to help understand the existing traffic flow patterns, distribute
8 the Point Wells site trips throughout the study area in Snohomish and King counties, and evaluate
9 intersection LOS and delay. The built-in intersection capacity analysis methodology in VISUM is
10 consistent with the methodology described in the Highway Capacity Manual (Transportation Research
11 Board 2000).

12 The Point Wells travel demand model development process includes physical network building, four-step
13 modeling, base model validation, and future traffic forecasting.

14 The network building involves the laying out of roadways, intersections, zone structure, and zone
15 connectors. The roadway network, including city and county boundaries, was built by incorporation of
16 NAVTEQ data, which provided all freeways, principal arterials, minor arterials, collectors, and local streets
17 in Snohomish and King counties. Link capacity, speed, and number of lanes are most relevant for
18 roadway coding; intersection control type, configuration, and capacity are most critical for intersection
19 coding. The zone structure was based on the adopted Puget Sound Regional Council (PSRC) Traffic
20 Analysis Zones (TAZs) to cover all of Snohomish and King counties, and the zone connectors were
21 manually added into the Point Wells model.

22 Four-step modeling typically includes trip generation, trip distribution, mode choice, and traffic
23 assignment. The Point Wells model focuses on trip generation, trip distribution, and traffic assignment.
24 Trip generation was only applied for the project development but was not applied for the background
25 traffic modeling. Instead, to be consistent with the PSRC traffic growth forecasting on the roadway
26 network, the background traffic was modeled and interpolated using the PSRC vehicle trip tables for
27 periods between 2006 and 2040 for the existing 2010 conditions, and the No Action Alternative and
28 Alternative Action. The final trip distribution and traffic assignment procedures combine the project-
29 generated trip table and the background growth trip table to distribute trips to each TAZ and assign trips
30 on the roadway network for the Alternative Action. The total regional trips are held constant.

31 Future traffic forecasting was conducted using the base model for the No Action Alternative and
32 Alternative Action. The future traffic volumes are equal to the actual traffic counts plus the background
33 traffic growth for the No Action Alternative. These volumes are equal to the actual traffic counts plus the
34 background traffic growth plus the project-generated trips for the Alternative Action. The background
35 traffic growth was interpolated using PSRC trip tables between 2006 and 2040. The project-generated
36 trips were consistent with the trips estimated using ITE trip generation methodology (Institute of

1 Transportation Engineers 2008), including project trips internalization (Institute of Transportation
2 Engineers 2004).

3 Intersection Operations

4 Table 4.11-2 summarizes projected LOS conditions under the No Action Alternative. Year 2029 traffic
5 analysis results from the Point Wells TIA and year 2025 traffic analysis results from the 2009 Final SEIS
6 are shown for comparison and to serve as a baseline for assessing future project impacts.

7 Table 4.11-2.

8 **PM Peak Hour Intersection Level of Service Comparison – Year 2029 and 2025 No Action Alternative**

Intersection	Existing Traffic Control	LOS Standard	2029 No Action – Point Wells TIA (Delay)	2025 No Action – Final SEIS LOS (Delay)
Shoreline				
244th Street SW and Fremont Avenue N	Two-way Stop	D	---	F (71)
NW 196th Street and Richmond Beach Drive	Two-way Stop	D	A (9)	A (9)
NW 196th Street and 20th Avenue NW	All-way Stop-Control	D	---	B (11)
NW 195th Street and 15th Avenue NW	Two-way Stop	D	B (12)	D (26)
Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	D	A (10)	B (12)
Richmond Beach Road and 8th Avenue NW	Signal	D	D (39)	E (62)
Richmond Beach Road and 3rd Avenue NW	Signal	D	A (8)	A (10)
Richmond Beach Road and Dayton Avenue N	Signal	D	B (17)	B (12)
N 185th Street and Fremont Avenue N	Signal	D	C (31)	D (36)
N 175th Street and 6th Avenue NW	Two-way Stop	D	B (11)	C (17)
St. Luke Place N and Dayton Avenue N	Two-way Stop	D	B (13)	B (14)
N 175th Street and Fremont Avenue N	Signal	D	B (15)	A (8)
Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	D	C (23)	E (46)
N Innis Arden Way and Greenwood Avenue N	Two-way Stop	D	B (12)	B (13)
N 160th Street and Greenwood Avenue N	All-way Stop-Control	D	B (13)	D (26)
Richmond Beach Drive NW and NW 195th Place	Two-way Stop	D	A (9)	---
24th Avenue NW and NW 196th Street	Two-way Stop	D	A (10)	---
20th Avenue NW and NW 195th Street	All-way Stop-Control	D	A (10)	---
NW Richmond Beach Road and NW 190th Street	Two-way Stop	D	A (10)	---
100th Avenue W and 244th Street SW	Two-way Stop	D	C (15)	---
Firdale Avenue and 244th Street SW	Two-way Stop	D	B (12)	---
3rd Avenue NW and 244th Street SW	Two-way Stop	D	D (28)	---
Fremont Avenue N and 244th Street SW	Two-way Stop	D	F (54)	---
Meridian Avenue N and N 175th Street	Signal	E	D (51)	---

**Table 4.11-2.
PM Peak Hour Intersection Level of Service Comparison – Year 2029 and 2025 No Action Alternative
(continued)**

Intersection	Existing Traffic Control	LOS Standard	2029 No Action – Point Wells TIA (Delay)	2025 No Action – Final SEIS LOS (Delay)
Dayton Avenue N and N 160th Street	Signal	D	B (13)	---
Westminster Way N and N 155th Street	Signal	D	C (25)	---
Greenwood Avenue N and SR 523 (N 145th Street)	Signal	E	D (54)	---
5th Avenue NE and SR 523 (N 145th Street)	Signal	E	F (223)	---
Woodway				
Algonquin Road and Woodway Park Road	Two-way Stop	A	A (9)	B (15)
238th Street SW and Woodway Park Road	All-way Stop-Control	A	---	A (9)
Timber Lane and 238th Street SW	All-way Stop-Control	A	A (7)	---
114th Avenue W and 238th Street SW	All-way Stop-Control	A	A (7)	---
Edmonds				
Firdale Avenue N and 244th Street SW	Two-way Stop	D	---	B (14)
244th Street SW and 100th Avenue W	Two-way Stop	D	---	F (53)
Firdale Avenue and 238th Street SW	Signal	C	B (15)	---
95th Place W and 228th Street SW	Two-way Stop	C	B (12)	---
3rd Avenue S and Pine Street	Two-way Stop	C	B (13)	---
WSDOT				
244th Street SW and SR 99	Signal	E	E (58)	F (115)
SR 104 and 100th Avenue W	Signal	E	D (45)	F (133)
N 185th Street and SR 99	Signal	E	D (43)	F (107)
N 175th Street and SR 99	Signal	E	D (45)	E (56)
95th Place W and SR 104 (Edmonds Way)	Signal	D	A (6)	---
SB SR 104 (Edmonds Way) and WB 244th Street SW	Signal	D	B (14)	---
SB SR 104 (Edmonds Way) and EB 244th Street SW	Signal	D	B (15)	---
76th Avenue W and SR 104 (Lake Ballinger Way)	Signal	D	E (79)	---
SB I-5 Ramps and SR 104 (Lake Ballinger Way)	Signal	D	B (10)	---
SR 99 and 228th Street SW	Two-way Stop	E	F (>300)	---
SR 99 and N 160th Street	Signal	E	E (73)	---
SR 99 and N 155th Street	Signal	E	D (50)	---

- 1
- 2 As shown in Table 4.11-2, the following four intersections evaluated in the Point Wells TIA are expected
- 3 to operate below acceptable LOS standards during the PM peak hour in the year 2029:
- 4
- 5
- Fremont Avenue N and 244th Street SW – City of Shoreline, LOS F
 - 5th Avenue NE and SR 523 (N 145th Street) – City of Shoreline, LOS F

- 1 • 76th Avenue W and SR 104 (Ballinger Way) – WSDOT, LOS E
- 2 • SR 99 and 228th Street SW – WSDOT, LOS F

3 The following 8 of the 23 intersections evaluated in the Final SEIS were projected to operate below
4 acceptable LOS standards during the PM peak hour in the year 2025:

- 5 • 244th Street SW and Fremont Avenue N – City of Shoreline, LOS F
- 6 • Richmond Beach Road and 8th Avenue NW – City of Shoreline, LOS E
- 7 • Carlyle Hall Road and Dayton Avenue N – City of Shoreline, LOS E
- 8 • Algonquin Road and Woodway Park Road – City of Woodway, LOS B
- 9 • 244th Street SW and 100th Avenue W – City of Edmonds, LOS F
- 10 • 244th Street SW and SR 99 – WSDOT, LOS F
- 11 • SR 104 and 100th Avenue W – WSDOT, LOS F
- 12 • N 185th Street and SR 99 – WSDOT, LOS F

13 However, most of these intersections were shown to operate at acceptable levels in the year 2029 in the
14 Point Wells TIA due to projected lower 2029 PM peak hour traffic volumes compared to the SEIS year
15 2025 PM peak hour. As described above, the refined traffic volume forecasts were developed based on
16 the Point Wells travel demand model. Of these intersections, only the following two intersections, not
17 evaluated in the Point Wells TIA, could be expected to operate below acceptable LOS standards in the
18 year 2025:

- 19 • 244th Street SW and Fremont Avenue N – City of Shoreline, LOS F
- 20 • 244th Street SW and 100th Avenue W – City of Edmonds, LOS F

21 The 2025 LOS results for the No Action Alternative, as evaluated in the Final SEIS, reflect a conservative
22 estimate of future roadway conditions, based on a build-out of regional land use projected by the County
23 and PSRC. The programmatic Draft and Final SEISs sought to assess the "worst case" cumulative
24 conditions for the purpose of determining an order-of-magnitude effect of the proposed change in land
25 use designation and zoning on the transportation system. Thus, the analysis assumed that historical
26 mode split trends would continue into the future, resulting in a higher proportion of vehicle traffic.

27 However, planned transit enhancements on SR 99 and other demand-oriented strategies planned by the
28 cities within the study area are likely to result in a future No Action Alternative vehicle demand that is
29 lower than the levels reflected in the Draft and Final SEISs. It is appropriate to reflect commitments to
30 enhanced transportation demand management measures in an impact analysis.

31 For this addendum, refinements to the model, as described above under "Traffic Forecasts," were made
32 to provide traffic volume forecasts for the Alternative Action. Implementation of Shoreline's roadway
33 improvements on SR 99 were assumed to be in place for the No Action Alternative. Planned transit
34 investments such as King County's RapidRide E Line (scheduled for completion in 2013) and Sound
35 Transit's North Corridor Transit Project (scheduled for completion in 2023) are also reflected in these
36 forecasts.

1 **2009 Proposed Action**

2 Future traffic volumes at analysis intersections and on analysis roadway segments under the 2009
3 Proposed Action were forecasted using the County's travel demand model, and reflect conditions
4 expected to result from the maximum allowable build-out of the site under the proposed land use
5 designation and zoning. The 2009 Proposed Action is described in detail in Chapter 3 of this addendum.

6 It is important to note that the 2009 Proposed Action analyzed in the Draft and Final SEISs reflected only
7 the proposed change in land use designation and zoning; it did not reflect the actual development that
8 would be built on the site if the zoning change were approved. If the 2009 Proposed Action (proposed
9 land use designation and zoning change) were to be approved, project-level environmental analysis
10 would still be required for the actual development proposed on the site. Because only a programmatic
11 analysis was conducted in the Draft and Final SEISs to evaluate impacts that could potentially occur as a
12 result of the proposed land use designation and zoning change, the transportation analysis conservatively
13 focused on the highest level of development, and thus the highest level of transportation impact, that
14 could reasonably be expected to occur under that proposed designation. Thus, it is possible that future
15 development and transportation impacts under the 2009 Proposed Action could be less intense than what
16 was evaluated in the Draft and Final SEISs.

17 Traffic Forecasts

18 The Draft and Final SEIS travel demand forecasting model (mentioned under the No Action Alternative)
19 was also developed to project future year traffic volumes within the study area under the 2009 Proposed
20 Action. The technical report that documents the model development was provided in Appendix E of the
21 Draft SEIS. Outside the Point Wells site, all land use under the 2009 Proposed Action was the same as
22 the land use identified under the No Action Alternative. Inside the Point Wells site, land use and resulting
23 trip generation projections reflected build-out of development that would be allowed under the proposed
24 land use designation and zoning change.

25 Land Use and Trip Generation

26 Traffic volumes for potential development under the proposed land use designation and zoning were
27 estimated using standard average trip generation rates from the Trip Generation Manual (Institute of
28 Transportation Engineers 2003). Table 4.11-3 summarizes the trip generation rates that were used to
29 analyze land use types that would be expected under the proposed land use designation and zoning.

30 Table 4.11-4 summarizes the mix of land use that was assumed for build-out of the proposed land use
31 designation and zoning, and the projection of trips generated by those land uses. Trips were projected by
32 applying the rates summarized in Table 4.11-3 to the land uses summarized in Table 4.11-4. Commercial
33 development generally tends to result in higher trip generation than residential development for the same
34 geographical area. The proposed mixed use for the 2009 Proposed Action could reflect varying proportions
35 of commercial to residential development. For the Draft and Final SEIS analysis, a proportion of commercial
36 development at the higher end of the potential trip generation range was conservatively assumed.

1 Table 4.11-3.

2 **Institute of Traffic Engineers Trip Generation Rates—2009 Proposed Action**

ITE Land Use Category	ITE Code	Unit	AM Peak			PM Peak			Zoning Use
			ITE Average Rate	% In	% Out	ITE Average Rate	% In	% Out	
Residential Condominium/Townhouse	230	Dwelling Units	0.19 ^a	16%	84%	0.24 ^b	67%	33%	Multiple Residential
General Office Building	710	Employees	0.48 ^c	88%	12%	0.46 ^d	17%	83%	Service
Specialty Retail Center	814	1,000 Square Feet	-	-	-	2.71 ^e	44%	56%	Retail
Shopping Center	820	1,000 Square Feet	1.03	61%	39%	-	-	-	Retail

3 ^a Projected trips are calculated based on the equation, $\ln(T) = 0.80\ln(X) + 0.26$, T = trips and X = land use.4 ^b Projected trips are calculated based on the equation, $\ln(T) = 0.82\ln(X) + 0.32$, T = trips and X = land use.5 ^c Projected trips are calculated based on the equation, $\ln(T) = 0.86\ln(X) + 0.24$, T = trips and X = land use.6 ^d Projected trips are calculated based on the equation, $T = 0.37(X) + 60.08$, T = trips and X = land use.7 ^e Projected trips are calculated based on the equation, $T = 2.40(X) + 21.48$, T = trips and X = land use.

8 ITE = Institute of Traffic Engineers

9 Source: Institute of Transportation Engineers 2003

10 Table 4.11-4.

11 **Trip Generation Projections—2009 Proposed Action**

ITE Land Use Category	ITE Code	Unit ^a	Unit Type	AM Trips ^b		PM Trips ^c	
				Inbound	Outbound	Inbound	Outbound
Residential Condominium/Townhouse	230	3,220	Dwelling Units	121	613	602	295
General Office Building	710	528	Employees	220	28	32	176
Specialty Retail Center/ Shopping Center	814/ 820	136	1,000 Square feet	49	23	75	104
Total Trips				390	664	709	575

^a Retail employees converted at 500 gross square feet per employee.^b AM reductions from total trips for internal trips (2.9%), walk/bike (10%), and pass-by (34% of retail).^c PM reductions for internal trips (5.9%), walk/bike (10%), and pass-by (34% of retail).12 **Trip Generator Adjustments**

13 Traffic generated by the 2009 Proposed Action could potentially travel via automobile, transit, or non-
14 motorized modes. As described previously, trips generated by land use under the 2009 Proposed Action
15 were projected according to standard methods and rates presented in the Trip Generation Manual
16 (Institute of Transportation Engineers 2003). The Institute of Transportation Engineers (ITE) presents
17 rates for vehicle trips, based upon driveway counts of representative sites for different land uses. At the
18 ITE-observed sites, a typical level of transit and non-motorized travel would be presented that is in
19 addition to the vehicle estimates. However, for development that departs from typical observed sites, ITE
20 provides guidelines for making adjustments to these assumptions.

21 Typical ITE sites do not reflect mixed use development. Because development under the 2009 Proposed
22 Action zoning would be mixed use, adjustments were made in the total trips generated by the site to
23 reflect a higher level of trips that would occur between different uses within the site. Multi-family and

1 commercial development would be located close to each other; therefore, a greater number of non-
 2 motorized trips would be expected to occur between them. The ITE Trip Generation Handbook (Institute
 3 of Transportation Engineers 2001) provides guidelines for these adjustments, based on the mix of land
 4 use. Using these guidelines, a 10 percent reduction was applied to the total trip estimate. These reduced
 5 trips are assumed to travel within the site, and thus were not assigned to the surrounding street network.

6 It is expected that at full build-out, the site would have sufficient density to support transit routes to and
 7 from the site. However, because the site is geographically isolated, the analysis assumed that transit use
 8 would reflect typical levels that are already implicit in the ITE trip generation rates, so no additional
 9 reductions were made regarding regional transit access to and from the site.

10 Trip Distribution

11 The distribution of site-generated trips is projected as part of the travel demand modeling process.
 12 Figures 3.11-5 and 3.11-6 in the Draft SEIS showed the general directional distribution of trips under the
 13 2009 Proposed Action during AM and PM peak hours, respectively. These figures indicated that
 14 approximately 60 percent of site-generated trips would have destinations to and from the north in
 15 Snohomish County, and approximately 40 percent of site-generated trips would have destinations to and
 16 from the south in King County.

17 Intersection Operations

18 Table 4.11-5 summarizes projected 2025 intersection LOS under the 2009 Proposed Action. The table
 19 shows that operations at the eight intersections projected to exceed LOS standards for the No Action
 20 Alternative are expected to degrade further under the 2009 Proposed Action.

21 **Table 4.11-5.**
 22 **Year 2025 PM Peak Hour Intersection Level of Service — 2009 Proposed Action (Final SEIS)**

Intersection	Existing Traffic Control	LOS Standard	No Action LOS (Delay)	2009 Proposed Action LOS (Delay)
Shoreline				
244th Street SW and Fremont Avenue N	Two-way Stop	D	F (71)	F (107)
NW 196th Street and Richmond Beach Drive	Two-way Stop	D	A (9)	C (23)
NW 196th Street and 20th Avenue NW	All-way Stop-Control	D	B (11)	F (68)
NW 195th Street and 15th Avenue NW	Two-way Stop	D	D (26)	F (278)
Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	D	B (12)	F (83)
Richmond Beach Road and 8th Avenue NW	Signal	D	E (62)	F (167)
Richmond Beach Road and 3rd Avenue NW	Signal	D	A (10)	B (10)
Richmond Beach Road and Dayton Avenue N	Signal	D	B (12)	B (12)
N 185th Street and Fremont Avenue N	Signal	D	D (36)	D (36)
N 175th Street and 6th Avenue NW	Two-way Stop	D	C (17)	C (18)
St. Luke Place N and Dayton Avenue N	Two-way Stop	D	B (14)	C (15)
N 175th Street and Fremont Avenue N	Signal	D	A (8)	A (8)
Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	D	E (46)	F (55)
N Innis Arden Way and Greenwood Avenue N	Two-way Stop	D	B (13)	B (13)
N 160th Street and Greenwood Avenue N	All-way Stop-Control	D	D (26)	D (29)
Richmond Beach Drive NW and NW 195th Place	Two-way Stop	D	---	---

Table 4.11-5.
Year 2025 PM Peak Hour Intersection Level of Service — 2009 Proposed Action (Final SEIS)
(continued)

Intersection	Existing Traffic Control	LOS Standard	No Action LOS (Delay)	2009 Proposed Action LOS (Delay)
24th Avenue NW and NW 196th Street	Two-way Stop	D	---	---
20th Avenue NW and NW 195th Street	All-way Stop-Control	D	---	---
NW Richmond Beach Road and NW 190th Street	Two-way Stop	D	---	---
100th Avenue W and 244th Street SW	Two-way Stop	D	---	---
Firdale Avenue and 244th Street SW	Two-way Stop	D	---	---
3rd Avenue NW and 244th Street SW	Two-way Stop	D	---	---
Fremont Avenue N and 244th Street SW	Two-way Stop	D	---	---
Meridian Avenue N and N 175th Street	Signal	E	---	---
Dayton Avenue N and N 160th Street	Signal	D	---	---
Westminster Way N and N 155th Street	Signal	D	---	---
Greenwood Avenue N and SR 523 (N 145th Street)	Signal	E	---	---
5th Avenue NE and SR 523 (N 145th Street)	Signal	E	---	---
Woodway				
Algonquin Road and Woodway Park Road	Two-way Stop	A	B (15)	C (18)
238th Street SW and Woodway Park Road	All-way Stop-Control	A	A (9)	A (10)
Timber Lane and 238th Street SW	All-way Stop-Control	A	---	---
114th Avenue W and 238th Street SW	All-way Stop-Control	A	---	---
Edmonds				
Firdale Avenue N and 244th Street SW	Two-way Stop	D	B (14)	C (15)
244th Street SW and 100th Avenue W	Two-way Stop	D	F (53)	F (>300)
Firdale Avenue and 238th Street SW	Signal	C	---	---
95th Place W and 228th Street SW	Two-way Stop	C	---	---
3rd Avenue S and Pine Street	Two-way Stop	C	---	---
WSDOT				
244th Street SW and SR 99	Signal	E	F (115)	F (121)
SR 104 and 100th Avenue W	Signal	E	F (133)	F (166)
N 185th Street and SR 99	Signal	E	F (107)	F (106)
N 175th Street and SR 99	Signal	E	E (56)	E (64)
95th Place W and SR 104 (Edmonds Way)	Signal	D	---	---
SB SR 104 (Edmonds Way) and WB 244th Street SW	Signal	D	---	---
SB SR 104 (Edmonds Way) and EB 244th Street SW	Signal	D	---	---
76th Avenue W and SR 104 (Lake Ballinger Way)	Signal	D	---	---
SB I-5 Ramps and SR 104 (Lake Ballinger Way)	Signal	D	---	---
SR 99 and 228th Street SW	Two-way Stop	E	---	---
SR 99 and N 160th Street	Signal	E	---	---
SR 99 and N 155th Street	Signal	E	---	---

1

2

1 In addition, the following three intersections projected to meet standards under the No Action Alternative
2 are expected to exceed standards under the 2009 Proposed Action:

- 3 • NW 196th Street and 20th Avenue NW
- 4 • NW 195th Street and 15th Avenue NW
- 5 • Richmond Beach Road and 15th Avenue NW

6 All three intersections are located along NW 196th Street/NW 195th Street/Richmond Beach Road in
7 Shoreline, which is the primary route between the Point Wells site and SR 99.

8 **Alternative Action**

9 The Alternative Action is described in Chapter 3 of this addendum. Future traffic volumes at analysis
10 intersections with the Alternative Action were forecasted using the Point Wells travel demand model, and
11 reflects conditions expected to result under full build-out of the proposed project. The results of the
12 intersection analysis conducted in the Point Wells TIA for study area intersections were compared to the
13 No Action Alternative to determine the effects of the Point Wells development on surrounding roadways.
14 The effect of the two Alternative Action variations on trip generation and traffic operations on surrounding
15 roadways is also discussed.

16 Traffic Forecasts

17 The Point Wells travel demand model was also used to project future year volumes within the study area
18 for the Alternative Action. Similar to the 2009 Proposed Action, all land uses outside of the Point Wells
19 site were assumed to be the same as the land uses identified for the No Action Alternative. Inside the
20 Point Wells site, land use and resulting trip generation projections reflect build-out of the development.
21 Trip projections to and from the site assume that the net new trips generated by the site would reflect the
22 reduction of trips from the existing and historical usage of the Point Wells site, as well as internal trips.

23 Land Use and Trip Generation

24 The total on-site and off-site AM peak hour, PM peak hour, and average daily traffic (ADT) trips were
25 determined for the Point Wells site using the methodology outlined in Trip Generation, 8th Edition
26 (Institute of Transportation Engineers 2008). Trip generation for each of the nine separate land use codes
27 (LUC) were calculated following the guidelines described in the ITE report. These values provide the
28 basis for estimating the total gross trip generation, prior to reductions for internal trips.

29 The Point Wells site will offer potential residents a considerable amount of sustainable residential living
30 options and retail and commercial spaces. For the Alternative Action, nine ITE acknowledged LUCs were
31 determined to best represent what may be constructed at the site. Table 4.11-6 indicates the assumed
32 land use type, ITE land use code, unit type (i.e., DU = Dwelling unit, ODU = Occupied Dwelling Unit, and
33 SF = square feet), and corresponding trip generation rates for each component of the Point Wells
34 development included in the Alternative Action.

1 **Table 4.11-6.**
 2 **Institute of Traffic Engineers Trip Generation Rates – Alternative Action**

ITE Land Use Category	ITE Code	Units	Planned Units	ITE Vehicle Trip Generation Rates		
				Weekday	AM	PM
High-Rise Apartment	222	DU	403	4.20	0.30	0.35
High-Rise Residential Condominium/Townhouse	232	DU	1,861	4.18	0.34	0.38
Luxury Condominium/Townhouse	233	ODU	500	6.14	0.56	0.55
Senior Adult Housing – Attached (Condominium)	252	ODU	317	3.48	0.13	0.16
Health/Fitness Club ^a	492	1,000 SF	20	n/a	n/a	n/a
General Office	710	1,000 SF	24,762	11.01	1.55	1.49
Medical-Dental Office Building	720	1,000 SF	7.5	36.13	2.30	3.46
Specialty Retail Center	814	1,000 SF	30	44.32	0.91	2.71
Supermarket	850	1,000 SF	26.3	102.24	3.59	10.50
Quality Restaurant	931	1,000 SF	18	89.95	0.81	7.49

3 ^a The Fitness Center was removed from the trip generation calculation because it has been identified for use only
 4 to site residents.

5 **Gross Cumulative Trip Generation Totals**

6 The Point Wells gross cumulative trip generation was calculated using the appropriate ITE trip generation
 7 rates. The trip generation methodology was completed in accordance with the ITE Trip Generation
 8 Handbook (Institute of Transportation Engineers 2004). Table 4.11-7 shows the cumulative total of daily,
 9 AM peak, and PM peak hour trips generated by the individual uses on the site.

10 **Table 4.11-7.**
 11 **Total Cumulative Trip Generation**

	Total Trips	Entering Trips	Exiting Trips
Total Daily	19,826	9,913	9,913
Total AM Peak Hour	1,267	348	904
Total PM Peak Hour	1,729	1,008	721

12

13 **Trip Generator Adjustments**

14 The trip generation rates and equations contained in the ITE trip generation documentation are derived
 15 from actual measurements of traffic generated by individual sites. These rates and equations represent
 16 vehicles entering and exiting each individual use at its driveway. However, there are instances in a mixed-
 17 use development, such as the Point Wells development, when the total number of gross entering and
 18 exiting trips generated by the site is reduced by the interaction of the mixed uses. The following
 19 reductions are those utilized in the Point Wells development trip generation:

20 Existing and Historical Use Reductions: This project will receive credit for traffic impacts that already
 21 exist from the historical permitted use of the site as an asphalt refinery and petroleum distribution
 22 facility. Data were gathered from the Point Wells development about the existing and historical
 23 usage. This same data were used in the Draft and Final SEISs. A total of 116 AM and PM peak hour

1 trips were historically generated, while a total of 546 daily ADT trips were historically generated.
2 These trips were removed from the gross total as a trip credit. The net new trips will reflect the
3 reduction of trips from the existing and historical usage of the Point Wells site.

4 Internalization Reductions: A key characteristic of a multi-use development, such as the Point Wells
5 development, is that trips between some of the various land uses can be made on site. These
6 internal trips do not affect the surrounding city or county roadway system. These internal trips are
7 often made by alternative means such as walking, biking, or vehicles entirely on internal pathways or
8 internal roadways without using external streets.

9 The development of the Point Wells site was planned as an Urban Center, providing all of the needed
10 amenities and services to allow residents to remain on site instead of traveling off site for their desired
11 goods and services. The Point Wells site is planning on a supermarket, a number of restaurants, office
12 space, medical and dental facilities, and a mix of shops supplying goods and services, in addition to the
13 recreational amphitheater, beachfront, boardwalk, and pier areas.

14 The internal trip reductions were calculated following the ITE Internal Trip Balancing for a Multi-use
15 Development (Institute of Transportation Engineers 2004) and the Internal Trip Capture Estimator for
16 Mixed-Use Developments (Bochner and Sperry 2010). The Bochner and Sperry report studied three
17 similar mixed-use developments in Texas. Results of the study indicate that mixed-use developments,
18 such as the Point Wells development, can have PM peak internalization rates within the range of 30 to 43
19 percent. A combination of the ITE internalization rates, project-specific assumptions, and assumptions
20 from the Bochner and Sperry report were used for the Point Wells site.

21 Internalization reductions were taken for the daily, AM, and PM peak hours. The internalization focused
22 on the residential, office, and retail areas of the development and did not take into account any same land
23 use reductions (i.e., residential to residential, retail to retail, or commercial to commercial).

24 Internalization at the Point Wells site was determined to be 38.8 percent due to the ratios of residential,
25 retail, and commercial areas provided on the site. The Point Wells development offers a higher
26 internalization rate because the total amenities and services provided were specifically designed for fewer
27 trips to leave for similar uses off site. These internalization rates are consistent with ITE and the findings
28 of the Bochner and Sperry report. However, reductions for pass-by/diverted and transit trips were not
29 taken because of the following reasons:

30 Pass-By and Diverted Link Reductions: The Point Wells development is considered to be a
31 "destination site," in that existing roadway trips cannot easily enter the site and exit by continuing on
32 the original path (such as at shopping centers, strip malls, gas stations, etc.) on a heavily traveled
33 arterial. Because of the destination type development, no pass-by or diverted-link trip reductions
34 were taken.

35 Transit Reductions: Although a number of transit resources are available, no specific transit
36 reduction was taken during the trip generation portion of the analysis. The proposed residential land

1 uses are presumed to be near bus or rail lines, while other transit options (Link light rail, etc.) are
 2 not fully operational in the project vicinity (at the current time). As these additional resources are
 3 implemented in the project vicinity, it is expected that the site trip generation would be reduced.

4 ***Net New Trip Generation Based on ITE Average Rates***

5 Upon completion of the trip generation estimates for the Point Wells development (gross trips), and the
 6 reduction of trips through internalization and existing usage reductions, the final “Net New” trips are
 7 determined. These are external trips to and from the site to be distributed via the local, regional, and state
 8 roadway system. The proportions of trips entering and exiting the proposed site under the headings
 9 “Entering Trips” and “Exiting Trips” are based on the ITE Trip Generation Report for each specific land
 10 use. A summary of the trip generation data is included in Table 4.11-8. A detailed breakdown of total and
 11 net new trips generated by each individual use can be found in Appendix B of the Point Wells TIA
 12 (Attachment A of this addendum).

13 **Table 4.11-8.**

14 **Total Trips and Net New Trip Summary**

	Total Trips	Entering Trips	Exiting Trips
Total Daily	19,826	9,913	9,913
Total AM Peak Hour	1,267	348	904
Total PM Peak Hour	1,729	1,008	721
Net New Daily	11,587	5,794	5,793
Net New AM Peak Hour	659	136	523
Net New PM Peak Hour	942	582	360

16 Trip Distribution

17 The project-generated trips were distributed to the study area by utilizing the Point Wells travel demand
 18 VISUM model. The distribution flow pattern shows that most project trips (approximately 75 percent) were
 19 attracted south to the Shoreline and Seattle areas—the employment and commercial generators—via
 20 Richmond Beach Drive NW, NW 196th Street, NW Richmond Beach Road, and Interstate 5 (I-5) or SR
 21 99. In addition, roughly 25 percent of the project trips were attracted north, to areas such as Woodway
 22 and Lynnwood and Everett via the north-south arterials such as SR 99 and I-5.

23 Intersection Operations

24 Table 4.11-9 summarizes projected 2029 intersection LOS under the Alternative Action. The table shows
 25 that the four intersections projected to exceed LOS standards under the No Action Alternative are
 26 expected to degrade further under the Alternative Action.

27 In addition, the following two intersections projected to meet standards under the No Action Alternative
 28 are expected to exceed standards under the Alternative Action:

- 29 • N 185th Street and SR 99 – WSDOT, LOS F
- 30 • SR 99 and N 160th Street – WSDOT, LOS F

1 Table 4.11-9.
 2 Year 2029 PM Peak Hour Intersection Level of Service—Alternative Action (Point Wells TIA)

Intersection	Existing Traffic Control	LOS Standard	No Action LOS (Delay)	Alternative Action LOS (Delay)
Shoreline				
244th Street SW and Fremont Avenue N	Two-way Stop	D	---	---
NW 196th Street and Richmond Beach Drive	Two-way Stop	D	A (9)	A (9)
NW 196th Street and 20th Avenue NW	All-way Stop-Control	D	---	---
NW 195th Street and 15th Avenue NW	Two-way Stop	D	B (12)	D (29)
Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	D	A (10)	D (26)
Richmond Beach Road and 8th Avenue NW	Signal	D	D (39)	D (42)
Richmond Beach Road and 3rd Avenue NW	Signal	D	A (8)	A (8)
Richmond Beach Road and Dayton Avenue N	Signal	D	B (17)	B (16)
N 185th Street and Fremont Avenue N	Signal	D	C (31)	D (35)
N 175th Street and 6th Avenue NW	Two-way Stop	D	B (11)	B (11)
St. Luke Place N and Dayton Avenue N	Two-way Stop	D	B (13)	B (13)
N 175th Street and Fremont Avenue N	Signal	D	B (15)	B (15)
Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	D	C (23)	C (23)
N Innis Arden Way and Greenwood Avenue N	Two-way Stop	D	B (12)	B (12)
N 160th Street and Greenwood Avenue N	All-way Stop-Control	D	B (13)	B (13)
Richmond Beach Drive NW and NW 195th Place	Two-way Stop	D	A (9)	A (9)
24th Avenue NW and NW 196th Street	Two-way Stop	D	A (10)	C (17)
20th Avenue NW and NW 195th Street	All-way Stop-Control	D	A (10)	C (17)
NW Richmond Beach Road and NW 190th Street	Two-way Stop	D	A (10)	B (14)
100th Avenue W and 244th Street SW	Two-way Stop	D	C (15)	C (20)
Firdale Avenue and 244th Street SW	Two-way Stop	D	B (12)	B (14)
3rd Avenue NW and 244th Street SW	Two-way Stop	D	D (28)	D (32)
Fremont Avenue N and 244th Street SW	Two-way Stop	D	F (54)	F (74)
Meridian Avenue N and N 175th Street	Signal	E	D (51)	E (56)
Dayton Avenue N and N 160th Street	Signal	D	B (13)	B (13)
Westminster Way N and N 155th Street	Signal	D	C (25)	C (25)
Greenwood Avenue N and SR 523 (N 145th Street)	Signal	E	D (54)	E (62)
5th Avenue NE and SR 523 (N 145th Street)	Signal	E	F (223)	F (234)
Woodway				
Algonquin Road and Woodway Park Road	Two-way Stop	A	A (9)	A (9)
238th Street SW and Woodway Park Road	All-way Stop-Control	A	---	---
Timber Lane and 238th Street SW	All-way Stop-Control	A	A (7)	A (8)
114th Avenue W and 238th Street SW	All-way Stop-Control	A	A (7)	A (7)
Edmonds				
Firdale Avenue N and 244th Street SW	Two-way Stop	D	---	---
244th Street SW and 100th Avenue W	Two-way Stop	D	---	---
Firdale Avenue and 238th Street SW	Signal	C	B (15)	B (15)
95th Place W and 228th Street SW	Two-way Stop	C	B (12)	B (12)
3rd Avenue S and Pine Street	Two-way Stop	C	B (13)	B (13)
WSDOT				
244th Street SW and SR 99	Signal	E	E (58)	E (74)
SR 104 and 100th Avenue W	Signal	E	D (45)	D (46)
N 185th Street and SR 99	Signal	E	D (43)	F (230)

Table 4.11-9.
Year 2029 PM Peak Hour Intersection Level of Service—Alternative Action (Point Wells TIA)
(continued)

Intersection	Existing Traffic Control	LOS Standard	No Action LOS (Delay)	Alternative Action LOS (Delay)
N 175th Street and SR 99	Signal	E	D (45)	E (69)
95th Place W and SR 104 (Edmonds Way)	Signal	D	A (6)	A (6)
SB SR 104 (Edmonds Way) and WB 244th Street SW	Signal	D	B (14)	B (14)
SB SR 104 (Edmonds Way) and EB 244th Street SW	Signal	D	B (15)	B (15)
76th Avenue W and SR 104 (Lake Ballinger Way)	Signal	D	E (79)	F (98)
SB I-5 Ramps and SR 104 (Lake Ballinger Way)	Signal	D	B (10)	B (10)
SR 99 and 228th Street SW	Two-way Stop	E	F (>300)	F (>300)
SR 99 and N 160th Street	Signal	E	E (73)	F (82)
SR 99 and N 155th Street	Signal	E	D (50)	D (51)

1 Source: Point Wells TIA

2 Alternative Variations

3 Two variations of the Alternative Action were also evaluated in this addendum. The first variation included
4 the same general mix of uses as the Alternative Action, but assumed that 40 percent of the residents
5 would be 55+ years old. The second variation assumed the same general mix of uses as the first
6 variation, but with a minimal commercial/retail component.

7 Daily trip generation estimates were prepared for the two alternative variations for comparison with the
8 Alternative Action. Trip generation estimates for the first variation were prepared assuming that the
9 number of senior adult housing (ITE Code 252) would account for 40 percent of the 3,081 residential
10 units, and that the remaining 60 percent of the residential units would be proportionately distributed
11 among the remaining residential categories. Trip generation estimates for the second variation assumed
12 the same split among residential uses, as well as the following reductions to commercial and retail
13 components:

- 14 • 7,500 square feet medical/dental
- 15 • 10,000 square feet specialty retail
- 16 • Membership only recreation center—assume no change in trip generation for this use
- 17 • General office, most of specialty retail, supermarket, and restaurants eliminated

18 Table 4.11-10 provides a comparison of daily trip generation for the Alternative Action and its two
19 variations based on these assumptions.

1 Table 4.11-10.
2 **Daily and PM Peak Hour Trip Generation Comparison—Variations within the Alternative Action**

ITE Land Use Category	ITE Code	Units	Alternative Action			40% Senior Residents			40% Senior Residents and Minimal Commercial/Retail		
			Planned Units	Weekday Trips	PM Peak Hour Trips	Planned Units	Weekday Trips	PM Peak Hour Trips	Planned Units	Weekday Trips	PM Peak Hour Trips
High-Rise Apartment	222	DU	403	1,693	141	270	1,132	94	270	1,132	94
High-Rise Residential Condominium/Townhouse	232	DU	1,861	7,779	707	1,245	5,203	473	1,245	5,203	473
Luxury Condominium/Townhouse	233	ODU	500	3,070	275	334	2,053	184	334	2,053	184
Senior Adult Housing – Attached (Condominium)	252	ODU	317	1,103	51	1,232	4,289	197	1,232	4,289	197
Health/Fitness Club ¹	492	1,000 SF	20	0	0	20	0	0	20	0	0
General Office	710	1,000 SF	24.762	273	37	24.762	0	37	0	0	0
Medical-Dental Office Building	720	1,000 SF	7.5	271	26	7.5	271	26	7.5	271	26
Specialty Retail Center	814	1,000 SF	30	1,330	81	30	443	81	10	443	27
Supermarket	850	1,000 SF	26.3	2,689	276	26.3	1,022	276	10	1,022	105
Quality Restaurant	931	1,000 SF	18	1,619	135	18	450	135	5	450	37
Total Gross Daily and PM Peak Hour Trips (% Change Compared to Alternative Action)			---	19,826	1,729	---	18,858 (-5%)	1,504 (-13%)	---	14,863 (-25%)	1,144 (-34%)
Net New Daily and PM Peak Hour With Historic Use and Internal Trip Reductions (% Change Compared to Alternative Action)			---	11,587	942	---	9,981 (-14%)	723 (-23%)	---	11,339 (-2%)	799 (-15%)

1 As shown in Table 4.11-10, the first variation, which assumes that 40 percent of residents would be 55+
2 years old, would result in a 5 percent reduction in gross daily vehicle trips and a 13 percent reduction in
3 gross PM peak hour trips. The second variation, which includes the same residential split as the first
4 variation and a minimal commercial/retail component, would result in a 25 percent reduction in gross daily
5 vehicle trips and a 34 percent reduction in gross PM peak hour vehicle trips.

6 Once existing and historical use and internal trip reductions are applied, the total net trips generated by
7 these alternative variations would continue to be lower than generated by the Alternative Action.

8 However, as shown in Table 4.11-10, the first variation would result in a higher internal capture rate
9 (44 percent) compared to the second variation (20 percent) due to the mix of uses. Combined with the
10 historical use reduction, the first variation would therefore result in the lowest net new daily and PM peak
11 hour trips. With lower net trip generation projections than the Alternative Action, both variations are
12 expected to result in impacts on intersection level of service that are lower than the Alternative Action and
13 higher than the No Action Alternative. The net new daily trips for the Alternative Action and both variations
14 would all exceed the City of Shoreline's daily trip threshold of 8,250 daily vehicle trips. For the PM peak
15 hour, the Alternative Action would also exceed the City of Shoreline's PM peak hour trip threshold of 825
16 PM peak hour trips, but both alternative variations would result in net new PM peak hour trips below this
17 threshold.

18 Transit Impacts

19 High-density urban residential projects such as the Point Wells project create significant transit demand
20 by virtue of the lower car ownership rates and travel choices of the owners and tenants of high-rise
21 residential developments.

22 The demand for transit service created by the development would likely exceed the capacity of the
23 current Metro bus service on NW Richmond Beach Road, resulting in overcrowded buses and unserved
24 demand. The BRT service on SR 99 does have additional capacity, but access to this route from the site
25 is constrained by the existing service on NW Richmond Beach Road.

26 Transit service is scaled to match demand as determined by the local transit agency. A transit hub within
27 the Urban Village is proposed as part of the Alternative Action to integrate bus and commuter rail service
28 on site for both residents and the Richmond Beach community.

29 Sounder commuter rail services from the north to Seattle currently have excess capacity; however, there
30 is no stop on the site, with the nearest stop located in Edmonds. The Sounder commuter rail system
31 could accommodate significant demand from the Point Wells development without service expansion.

32 Additional demand could be accommodated with the expansion of the commuter rail service as already
33 planned by Sound Transit. The provision of increased bus transit service on Richmond Beach Drive NW
34 could also increase commuter rail demand by providing access to the station via bus for residents along
35 NW Richmond Beach Road.

1 High-capacity transit service to and from the Point Wells site could also be provided from the planned
2 Link light rail system station at NE 185th Street through a permanent vanpool or transit vehicle
3 connection. In addition, changing the walking distance to transit from 0.25 to 0.5 mile is reasonable,
4 especially for connections to a high-capacity transit system. This change is supported by research and
5 studies, such as “How Far, By Which Route, and Why? A Spatial Analysis of Pedestrian Preference,”
6 conducted by Mineta Transportation Institute (MTI 2007), which indicates that the median trip distance for
7 walk trips to access rail transit is 0.47 mile, and that many pedestrians walk more than 0.5 mile to access
8 rapid transit. A mean rapid transit walk access trip length of nearly 0.5 mile is also cited in the
9 Transportation Research Board’s “TCRP Report 153: Guidelines for Providing Access to Public
10 Transportation Stations” (TCRP 2012).

11 **4.11.3 Mitigation Measures**

12 **2009 Proposed Action**

13 Roadway Improvement Projects

14 Roadway improvement projects were identified in the Draft and Final SEISs at any location at which a
15 potential significant impact on roadway operations had been identified. If improvement projects
16 recommended under the No Action Alternative were not found to be sufficient to accommodate projected
17 future demand under the 2009 Proposed Action, additional mitigation measures were identified as
18 needed. Capacity mitigation measures include changes in traffic controls (such as upgrades from stop
19 control to a traffic signal) or increases to the capacity of an intersection or roadway segment that may
20 involve multiple jurisdictions. Some of the mitigation measures identified to address capacity issues would
21 also improve safety conditions. However, additional safety mitigation measures might be required to
22 address potential safety issues resulting from higher traffic volumes on roadway sections and
23 intersections, such as Richmond Beach Road. Safety improvements are likely to involve traffic calming
24 devices such as improved signing, bulb-outs, speed humps, medians, or traffic circles.

25 Table 4.11-11 summarizes the improvements that have been identified in the Draft and Final SEISs to
26 mitigate impacts under the 2009 Proposed Action and the No Action Alternative.

27 Because this was a programmatic assessment, the projects listed in Table 4.11-11 were intended to
28 provide a conservatively high order-of-magnitude estimate of the level of mitigation that could be needed
29 under full build-out of development that would be allowed under the 2009 Proposed Action and No Action
30 Alternative. These measures were developed for the purpose of illustration, and do not represent
31 commitments by the affected jurisdictions or by the applicant.

32 Also, as described earlier in this chapter, the Draft and Final SEIS No Action Alternative travel demand
33 assumptions were also conservatively high to provide a conservatively high assessment of potential
34 cumulative impacts under the Proposed Action. Future vehicle volumes under the No Action Alternative
35 may end up being lower than those reflected in the Draft and Final SEIS analysis due to regional and
36 local transit enhancements and other demand-oriented strategies. In this case, it is possible that (1) the

1 need for some mitigation measures may not be triggered due to cumulative conditions being lower than
 2 what was programmatically evaluated; or (2) some mitigation measures identified under the No Action
 3 Alternative may alternatively be triggered by the 2009 Proposed Action.

4 It is expected that if the proposed land use designation and zoning were approved, subsequent project-
 5 level environmental analysis would include detailed analysis to identify recommended improvements
 6 needed to support the actual development proposal, and could include demand-oriented measures as
 7 well as capacity improvements. It would also include more detailed analysis to determine the appropriate
 8 agency and applicant commitments to future transportation improvements, based on the actual proposed
 9 development levels and phasing, and provide implementing mechanisms to ensure those commitments.

10 **Table 4.11-11.**

11 **Recommended Mitigation for the 2009 Proposed Action and No Action Alternative**

	Location	Jurisdiction	2009 Proposed Action	No Action Alternative ^a
Intersections				
1	244th Street SW and SR 99	Shoreline/ Edmonds/ WSDOT	No Action Alternative improvement would also address 2009 Proposed Action impacts.	Restripe northbound right-turn lane to through right lane. Add a southbound through lane, a southbound right-turn lane, a 2nd eastbound left-turn lane, and a westbound right-turn lane.
2	244th Street SW and Fremont Avenue N	Shoreline	No Action Alternative improvement would also address 2009 Proposed Action impacts.	Install a signal.
4	244th Street SW and 100th Avenue W	Edmonds	No Action Alternative improvement plus install a signal.	Install all-way stop-control. Add northbound and southbound through lanes.
5	SR 104 and 100th Avenue W	Edmonds/ WSDOT	No Action Alternative improvement plus add a westbound right-turn lane.	Add a northbound through lane, an eastbound right-turn lane, and a 2nd westbound left-turn lane.
6	Algonquin Road and Woodway Park Road	Woodway	No Action Alternative improvement plus add a northbound through lane.	Install all-way stop control.
9	NW 196th Street and 20th Avenue NW	Shoreline	Install a signal and add eastbound and westbound left-turn lanes.	---
10	NW 195th Street and 15th Avenue NW	Shoreline	Install a signal and coordinate with intersection below.	—
11	Richmond Beach Road and 15th Avenue NW	Shoreline	Install a signal and coordinate with intersection above.	—
12	Richmond Beach Road and 8th Avenue NW	Shoreline	Add a southbound right-turn lane, a 2nd eastbound left-turn lane, and northbound right-turn lane.	
16	N 185th Street and SR 99	Shoreline/ WSDOT	No Action Alternative improvement plus add a westbound right-turn lane.	Add eastbound and westbound left turn lanes, an eastbound right turn lane, and a 2nd southbound left-turn lane. Change signal phasing to provide protected left-turn phases for eastbound and westbound approaches.
17	N 175th Street and 6th Avenue NW	Shoreline	No Action Alternative improvement would also address 2009 Proposed Action impacts.	Install a signal.

**Table 4.11-11.
Recommended Mitigation for the 2009 Proposed Action and No Action Alternative (continued)**

	Location	Jurisdiction	2009 Proposed Action	No Action Alternative ^a
20	N 175th Street and SR 99	Shoreline/ WSDOT	No Action Alternative improvement would also address 2009 Proposed Action impacts.	Add a 2nd westbound left-turn lane. Change signal phasing to provide protected left-turn phases for eastbound and westbound approaches.
21	Carlyle Hall Road and Dayton Avenue N	Shoreline	No Action Alternative improvement would also address 2009 Proposed Action impacts.	Install a signal.
23	N 160th Street and Greenwood Avenue N	Shoreline	No Action Alternative improvement would also address 2009 Proposed Action impacts.	Install a signal.
Roadway Segments				
	Richmond Beach Drive, between the site and the Woodway/Shoreline city limits (~2,600 feet)	Shoreline/ Woodway	Widen to urban collector standards with 11-foot lanes and separate pedestrian pathway.	
	NW 196th Street, between Richmond Beach Drive and 24th Avenue NW (~900 feet)	Shoreline	Widen from two lanes to four lanes.	
	NW 190th Street, between NW Richmond Beach Road and 8th Avenue NW (~1,100 feet)	Shoreline	Install traffic calming devices.	

1 ^a No Action Alternative travel demand assumptions were conservative to allow a conservative assessment of
2 potential cumulative impacts under the 2009 Proposed Action. Future vehicle volumes under the No Action
3 Alternative may end up being lower than those reflected in this analysis, due to regional and local transit
4 enhancements and other demand-oriented strategies. In this case, it is possible that (1) the need for some
5 mitigation measures may not be triggered due to cumulative conditions being lower than what was
6 programmatically evaluated; or (2) some mitigation measures identified under the No Action Alternative may
7 alternatively be triggered by the 2009 Proposed Action. Subsequent project-level analysis would be needed to
8 determine the appropriate agency and applicant commitments to future transportation improvements, based on
9 the actual proposed development levels and phasing, and to provide implementing mechanisms for ensuring
10 those commitments.

11 Table 4.11-12 summarizes the intersection LOS projected with the identified capacity improvement
12 projects in place for the 2009 Proposed Action and the No Action Alternative, respectively. The table
13 shows that the recommended measures are expected to fully mitigate identified impacts so that all
14 analysis intersections would operate within the adopted standards of the local jurisdictions.

15 **Table 4.11-12.**
16 **No Action Alternative and 2009 Proposed Action Peak Hour Intersection Level of Service—Mitigated**

Intersection	Jurisdiction	No Action		2009 Proposed Action	
		Mitigated Traffic Control	LOS (delay)	Mitigated Traffic Control	LOS (delay)
244th Street SW and SR 99	WSDOT	Signal	D (50)	Signal	D (50)
244th Street SW and Fremont Avenue N	Shoreline	Signal	A (9)	Signal	B (10)
Firdale Avenue N and 244th Street SW	Edmonds	Two-way Stop-Control	B (14)	Two-way Stop-Control	C (15)
244th Street SW and 100th Avenue W	Edmonds	All-way Stop-Control	C (15)	Signal	A (8)
SR 104 and 100th Avenue W	WSDOT	Signal	D (53)	Signal	D (53)
Algonquin Road and Woodway Park Road	Woodway	All-way Stop-Control	A (10)	All-way Stop-Control	A (10)

Table 4.11-12.
No Action Alternative and 2009 Proposed Action Peak Hour Intersection Level of Service—Mitigated
(continued)

Intersection	Jurisdiction	No Action		2009 Proposed Action	
		Mitigated Traffic Control	LOS (delay)	Mitigated Traffic Control	LOS (delay)
238th Street SW and Woodway Park Road	Woodway	All-way Stop-Control	A (9)	All-way Stop-Control	A (10)
NW 196th Street and Richmond Beach Drive	Shoreline	Two-way Stop-Control	A (9)	Two-way Stop-Control	C (23)
NW 196th Street and 20th Avenue NW	Shoreline	All-way Stop-Control	B (11)	Signal	C (20)
NW 195th Street and 15th Avenue NW	Shoreline	Two-way Stop-Control	D (26)	Signal	B (11)
Richmond Beach Road and 15th Avenue NW	Shoreline	All-way Stop-Control	B (12)	Signal	A (9)
Richmond Beach Road and 8th Avenue NW	Shoreline	Signal	E (62)	Signal	D (53)
Richmond Beach Road and 3rd Avenue NW	Shoreline	Signal	A (10)	Signal	B (10)
Richmond Beach Road and Dayton Avenue N	Shoreline	Signal	B (12)	Signal	B (12)
N 185th Street and Fremont Avenue N	Shoreline	Signal	D (36)	Signal	D (36)
N 185th Street and SR 99	WSDOT	Signal	E (79)	Signal	E (77)
N 175th Street and 6th Avenue NW	Shoreline	Signal	A (8)	Signal	A (8)
St Luke Place N and Dayton Avenue N	Shoreline	Two-way Stop-Control	B (14)	Two-way Stop-Control	C (15)
N 175th Street and Fremont Avenue N	Shoreline	Signal	A (8)	Signal	A (8)
N 175th Street and SR 99	WSDOT	Signal	E (56)	Signal	E (64)
Carlyle Hall Road and Dayton Avenue N	Shoreline	Signal	A (8)	Signal	A (8)
N Innis Arden Way and Greenwood Avenue N	Shoreline	Two-way Stop-Control	B (15)	Two-way Stop-Control	C (16)
N 160th Street and Greenwood Avenue N	Shoreline	Signal	C (23)	Signal	C (24)

1

2 Other Potential Mitigation Considered

3 ***Additional Transit at Site***

4 It is possible that future enhanced transit service between the site and other regional destinations could
5 reduce some of the additional capacity needed as a result of the Point Wells site. As discussed earlier in
6 this section, build-out of mixed-use development under the proposed land use designation and zoning
7 would be expected to provide adequate density to support transit service at the site. Reduction in regional
8 trips as a result of mixed use on the site was included in the analysis assumptions under the 2009
9 Proposed Action. However, the location and characteristics of the site do not provide any basis for
10 assuming that the share of transit demand to regional destinations would be any greater than is typical of
11 similar uses implicit in the ITE trip generation assumptions. Any commitment to enhanced demand-
12 oriented measures is not appropriate at a programmatic level of analysis because there is no mechanism
13 by which to tie such commitments to approval of the 2009 Proposed Action, which is simply the zoning
14 land use designation and change (and not the actual development, which would be covered by
15 subsequent project-level analysis). Thus, an assumption of transit mode share greater than what is
16 already implicit in the ITE trip generation assumptions was not considered to be reasonable at this
17 programmatic level.

1 Also, while commuter rail service extends directly through the site, construction of a train station to allow
2 direct rail service at the site was not considered reasonable in the foreseeable future. Sound Transit
3 proposed a "provisional" station at Point Wells, including up to 120 surface parking stalls, as part of
4 *Sound Move*. A station was estimated to cost approximately \$60 million (Sound Transit 2005). However,
5 this provisional station was not carried into the Sound Transit 2 (ST2) Plan, which is the voter-approved
6 program of Sound Transit improvements through 2023 (Sound Transit 2009). Thus, based on the existing
7 adopted plan, Sound Transit has not indicated any plan to build a station at this location. If a station were
8 to be considered, a detailed feasibility study would be needed to assess not only if the site had adequate
9 demand to justify a commuter rail station, but also the implications of additional demand to the area that
10 would be expected to result. For these reasons, train service at the site was not considered to be a
11 feasible mitigation measure within the 2025 time frame evaluated in the Draft and Final SEISs.

12 Planning-Level Cost of Capacity Improvements

13 Under the GMA, local jurisdictions can require new development to pay the costs of improvements that
14 are triggered by that development, as a condition of approval. Table 4.11-13 presents planning-level cost
15 estimates that were developed for the capacity mitigation projects. The costs presented for the 2009
16 Proposed Action are in addition to the costs identified for the No Action Alternative. The assumptions and
17 calculations for these cost estimates are provided in Appendix F of the Draft SEIS. It should be noted that
18 these estimates are very broad, and are intended to provide a conservatively high order-of-magnitude
19 estimate of the potential improvement costs.

20 As discussed earlier in this chapter, the roadway mitigation measures were developed for the purpose of
21 illustration, and do not represent commitments by the affected jurisdictions or by the applicant. Also,
22 future vehicle volumes under the No Action Alternative may end up being lower than those reflected in
23 this analysis due to regional and local transit enhancements and other demand-oriented strategies. In this
24 case, it is possible that (1) the need for some mitigation measures may not be triggered due to cumulative
25 conditions being lower than what was programmatically evaluated; or (2) some mitigation measures
26 identified under the No Action Alternative may alternatively be triggered by the Proposed Action.

27 Because this is a non-project action, the intent is to provide an order-of-magnitude assessment of
28 potential impacts and mitigation. If the proposed land use designation and zoning were approved, a site-
29 specific development proposal would still need to be provided, which would be subject to detailed project-
30 level environmental analysis. The project-level analysis would include a more detailed assessment of
31 potential impacts based on the actual development proposal, more detailed cost estimates of
32 recommended improvements, the commitments of the applicant and local jurisdictions to fund future
33 improvements, as well as any needed limits on development levels to ensure the balance between travel
34 demand and infrastructure. Mechanisms would also be defined to ensure that the needed mitigation is
35 implemented. It is expected that the County, applicant, and local jurisdictions would work closely together
36 to determine the appropriate level of development, level of improvement needed to address impacts of a
37 development proposal, and commitments required by all involved parties.

1 **Table 4.11-13.**
 2 **Cost Estimates for Recommended Mitigation Projects**

Location/Jurisdiction	2009 Proposed Action Alternative Project Costs ^{a,b}	No Action Alternative Project Costs ^{a,c}
Shoreline		
244th Street SW and Fremont Avenue N		\$580,000
NW 196th Street and 20th Avenue NW	\$2,030,000	
NW 195th Street and 15th Avenue NW	\$580,000	
Richmond Beach Road and 15th Avenue NW	\$580,000	
Richmond Beach Road and 8th Avenue NW	\$2,087,500	
N 175th Street and 6th Avenue NW	---	\$580,000
Carlyle Hall Road and Dayton Avenue N	---	\$580,000
N 160th Street and Greenwood Avenue N	---	\$580,000
NW 196th Street, between Richmond Beach Drive and 24th Avenue NW	\$2,035,000	
NW 190th Street, between NW Richmond Beach Road and 8th Avenue NW	\$100,000	
Edmonds		
244th Street SW and 100th Avenue W	\$580,000	\$3,605,000
Woodway		
Algonquin Road and Woodway Park Road	\$1,800,000	\$5,000
Shoreline and WSDOT		
N 185th Street and SR 99	\$500,000	\$962,500
Shoreline and Woodway		
Richmond Beach Drive, between the site and NW 196th Street	\$1,655,000	
Edmonds and WSDOT		
SR 104 and 100th Avenue W	\$500,000	\$1,587,500
Shoreline, Edmonds, and WSDOT		
244th Street SW and SR 99	---	\$3,447,500
Total Costs	\$12,447,500	\$11,927,500

3 ^a All costs are presented in 2008 dollars.

4 ^b Costs listed under the 2009 Proposed Action are in addition to those listed under the No Action Alternative.

5 ^c No Action Alternative travel demand assumptions were conservative, to allow a conservative assessment of
 6 potential cumulative impacts under the 2009 Proposed Action. Future vehicle volumes under the No Action
 7 Alternative may end up being lower than those reflected in this analysis, due to regional and local transit
 8 enhancements and other demand-oriented strategies. In this case, it is possible that (1) the need for some
 9 mitigation measures may not be triggered due to cumulative conditions being lower than what was
 10 programmatically evaluated; or (2) some mitigation measures identified under No Action Alternative may
 11 alternatively be triggered by the 2009 Proposed Action. Subsequent project-level analysis would be needed to
 12 determine the appropriate agency and applicant commitments to future transportation improvements, based
 13 on the actual proposed development levels and phasing, and provide implementing mechanisms to ensure
 14 those commitments.

1 As part of a project-level assessment, new development may be required to contribute to the cost of
 2 improvements in proportion to its contribution of vehicle trips to the deficiencies being mitigated. In
 3 addition, at the project level, if additional demand-oriented measures were developed as an alternative to
 4 some of the capacity improvement, construction of infrastructure and/or provision of services needed to
 5 implement them could be identified as a condition of development approval.

6 **Alternative Action**

7 Potential Intersection Mitigation

8 Impacts to the intersections have been identified for each phase of the project. The proportion of site-
 9 generated traffic to total intersection traffic has been computed to provide the reader with a sense of the
 10 relative contribution of site traffic to each intersection. Intersections have been identified as to primary
 11 jurisdiction as well. In many cases, the proportion of site-generated traffic to total intersection traffic is
 12 very low. In some cases, particularly near the site access on Richmond Beach Drive, the proportion of
 13 site-generated traffic is extremely high. Some intersections have been shown to fail as a result of
 14 background growth, even without the Point Wells project. The LOS at these intersections will worsen with
 15 the addition of Point Wells traffic. Costs to mitigate impacts should be proportional based upon the
 16 relative benefits to background traffic growth and project-generated traffic.

17 Potential mitigation includes signalization or installation of roundabouts at failing stop sign controlled
 18 intersections, where warranted, and turn lanes or additional through lanes at failing signalized
 19 intersections.

20 Because proportional mitigation of impacts are based on volume, the developer could provide direct
 21 construction of its proportional share of each of the affected projects, or it could pay the proportional
 22 mitigation shares in lieu of direct improvements. Table 4.11-14 estimates the proportional mitigation share
 23 for complete build-out of the Point Wells site. The proportional mitigation share would constitute mitigation
 24 of all ordinary capacity-related traffic impacts at locations away from the site.

25 **Table 4.11-14.**

26 **Intersection Proportional Mitigation Share for Alternative Action**

Intersection	Jurisdiction	Site Trips	Total Volumes	Site Trips Proportional Share	Proposed Proportional Mitigation Share
Fremont Avenue N and 244th Street SW	Shoreline	87	1,708	5.1%	5.1%
5th Avenue NE and SR 523 (N 145th Street)	Shoreline	5	3,988	0.1%	0.1%
76th Avenue W and SR 104 (Lake Ballinger Way)	WSDOT	23	4,554	0.5%	0.5%
SR 99 and 228th Street SW	WSDOT	117	3,831	3.1%	3.1%
SR 99 and N 185th Street	WSDOT	691	4,342	15.9%	15.9%
SR 99 and N 160th Street	WSDOT	155	3,799	4.1%	4.1%
SR 99 and N 130th Street	WSDOT	133	4,578	2.9%	2.9%

Richmond Beach Vicinity Corridor Mitigation

As a result of the proposed Point Wells urban center development, the study has identified two corridors that would require additional study to identify, prepare, and recommend improvements. The two corridors are Richmond Beach Drive NW and NW Richmond Beach Road. These corridor studies will identify where roadway capacity improvements, non-motorized enhancements, traffic calming techniques, safety upgrades, and functionality changes will be required to maintain the roadway for current residents and those of the Point Wells development. The overall goal is to keep the neighborhood character and mitigate impacts, while focusing on safety and functionality.

Overall impacts on the Richmond Beach Drive NW and NW Richmond Beach Road corridors would vary depending on the total amount of site traffic at specific intersections along each corridor. Table 4.11-15 shows the Point Wells full build-out development-generated PM peak hour project trips, the total existing PM peak hour trips, and the percent share of impacts to the corridor.

Table 4.11-15.

Corridor Impacts with Alternative Action

Intersection	Two-Way Total		Percent of Corridor Volumes
	Site Trips	Total Volumes	
Richmond Beach Drive NW: North of NE 196th Street	942	969	97%
NW 196th Street: East of Richmond Beach Drive NW	660	698	95%
NW 196th Street: East of 24th Avenue NW	744	841	88%
NW 195th Street: East of 20th Avenue NW	823	1,490	55%
NW Richmond Beach Road: East of 15th Avenue NW	823	1,698	48%
NW Richmond Beach Road: East of NW 190th Street	819	1,561	52%
NW Richmond Beach Road: East of 8th Avenue NW	707	1,929	37%
NW Richmond Beach Road: East of 3rd Avenue NW	706	2,123	33%
NW Richmond Beach Road: East of Dayton Avenue N	701	1,747	40%
N 185th Street: East of Fremont Avenue N	693	1,568	44%

Richmond Beach Drive NW/NW 196th Street Corridor Study

The Richmond Beach Drive NW corridor is directly adjacent to the Point Wells industrial facility. The desired outcome is to keep this segment of the roadway suited for slow-moving traffic while maintaining safety and access to those currently living along the corridor. The developer has committed that the Point Wells development would not acquire any property along the corridor. Preferred Richmond Beach Drive NW options include creating an extension of the Point Wells site along this corridor.

The limited public right-of-way and existing development along the corridor limit street widening options.

The traffic volumes indicate that a two-lane road section, including pedestrian facilities on at least one side of the road, and on- and off-street parking, could accommodate the project-generated trips.

Additional considerations include maintaining the safe operation of existing driveways and providing

1 sufficient width for emergency vehicles. A variable street section to address the right-of-way and physical
2 constraints could include:

- 3 • Two 14-foot lanes (at intersections and in segments with no parking)
- 4 • Two 11-foot lanes (when parking is present)
- 5 • Street parking on one or both sides

6 A corridor study is proposed for Richmond Beach Drive NW. The study would include direct feedback
7 from the neighborhood directly adjacent and from those who are serviced by the corridor. Planned action
8 items of the corridor study include preliminary conceptual designs and possible roadway layouts;
9 neighborhood meetings/workshops, presentations, and charette sessions to obtain public input; updates
10 to conceptual plans; and final recommendations for the Richmond Beach Drive NW corridor.

11 ***NW Richmond Beach Road Corridor Study***

12 The NW Richmond Beach Road corridor connects the Richmond Beach Drive NW corridor to the SR 99
13 corridor. Additionally, this study is currently planned in the Shoreline 2005 Transportation Master Plan
14 (Shoreline 2005) as the NW Richmond Beach Road Planning Study.

15 The Point Wells development team would work with the City of Shoreline on the NW Richmond Beach
16 Road corridor study. All work on the NW Richmond Beach Road corridor study would be done to
17 supplement projects, plans, and recommendations already in place on the corridor.

18 Projects identified in the Shoreline 2005 Transportation Master Plan that would be incorporated in the
19 Point Wells NW Richmond Beach Road corridor study include:

- 20 • Potential restriping of NW Richmond Beach Road to a three-lane section with bike lanes.
- 21 • Bike lanes along NW Richmond Beach Road that would aid in a more continuous and safer Lake
22 Washington to Sound Trail.
- 23 • Possible intersection improvements at 8th Avenue NW and NW Richmond Beach Road—a
24 potential roundabout location.

25 The analysis would include preliminary conceptual designs and possible roadway layouts, as well as final
26 recommendations for the NW Richmond Beach Road corridor.

27 ***Potential Road Diet on NW 196th Street/NW Richmond Beach Road***

28 A “Road Diet” is not a new concept nationwide. A Road Diet converts the existing multi-lane roadway to
29 fewer lanes to provide multimodal transportation facilities, which create safer and more efficient access
30 for street-crossing pedestrians, bicycle riders, transit riders, and motorists. Research documentation such
31 as Road Diets: Fixing the Big Roads (Burden and Lagerwey 1999) and conference presentations such as
32 the Road Diet Handbook presented at the Northwest Transportation Conference in 2008 (Rosales 2008)
33 state that the Road Diet concept and the road conversion could provide the following benefits:

- 34 • Improve vehicle mobility and access;
- 35 • Improve livability and quality of life;

- 1 • Promote economic and community goals;
- 2 • Provide lower speed and improved safety;
- 3 • Provide safer pedestrian street crossing; and
- 4 • Increase pedestrian, bicyclist, and transit use.

5 Several Road Diets in the Seattle area were studied to determine the impacts of lane reductions on traffic
6 volumes. Table 4.11-16 shows the surveyed ADT before and after street conversions.

7 **Table 4.11-16.**
8 **Annual Daily Traffic Before and After Road Conversion**

Roadway Section	Date Change	ADT (Before)	ADT (After)	Change
Greenwood Ave. N, from N 80th St. to N 50th St.	April 1995	11,872	12,427	4 lanes to 2 lanes plus two-way left-turn lanes (TWLTL) plus bike lanes
N 45th St. in Wallingford Area	December 1972	19,421	20,274	4 lanes to 2 lanes plus TWLTL
8th Avenue NW in Ballard Area	January 1994	10,549	11,858	4 lanes to 2 lanes plus planted median with turn pockets as needed
Martin Luther King Jr. Way, north of I-90	January 1994	12,336	13,161	4 lanes to 2 lanes plus TWLTL plus bike lanes
Dexter Avenue N, East side of Queen Anne Area	June 1991	13,606	14,949	4 lanes to 2 lanes plus TWLTL plus bike lanes
24th Avenue NW, from NW 85th St. to NW 65th St.	October 1995	9,727	9,754	4 lanes to 2 lanes plus TWLTL
Madison St. from 7th Avenue to Broadway	July 1994	16,969	18,075	4 lanes to 2 lanes plus TWLTL
W. Government Way/Gilman Avenue W, from W. Ruffner St. to 31st Avenue W.	June 1991	12,916	14,286	4 lanes to 2 lanes plus TWLTL plus bike lanes
12th Avenue from Yesler Way to John St.	March 1995	11,751	12,557	4 lanes to 2 lanes plus TWLTL plus bike lanes

9 Source: Road Diets: Fixing the Big Roads (Burden and Lagerwey 1999)

10 The study concluded that converting four-lane roads to three-lane roads often increases traffic volumes
11 slightly due to improved efficiency of the three-lane section.

12 The Road Diet concept on NW 196th Street/NW Richmond Beach Road is to convert the existing four-
13 lane and five-lane roadway to a three-lane roadway with a two-way left-turn lane in the center and bike
14 lanes on both sides. The road conversion is expected to provide easy access to the community along the
15 roadside, improve safety, and provide more user-friendly transportation facilities for pedestrians,
16 bicyclists, and transit users; however, the road conversion may also result in traffic diversion from the
17 corridor and possible intersection LOS deficiencies in the corridor. To test the concept, an initial analysis
18 of a Road Diet from Richmond Beach Drive NW to SR 99 was completed. The results of this initial
19 analysis can be found in the Point Wells TIA (Attachment A).

1 **Potential Transit Enhancements**

2 The site requires transit service beyond that currently available on Richmond Beach Drive NW. This
3 project proposes to provide transit facilities within the Urban Center at the site access on Richmond
4 Beach Drive NW to support both bus and commuter rail service. The ability to provide over 3,000 high-
5 density residential units within an easy walk to a commuter rail station and bus transit center (provided by
6 the project) is a unique opportunity in the region.

7 An increase in bus or vanpool service between Richmond Beach Drive NW, SR 99, and the planned
8 N/NE 185th Street Link Light Rail Station would enhance transit accessibility to and from the Point Wells
9 site. Significant bus transit service including BRT is already present on SR 99, so the increased transit
10 service is only necessary to connect the site to SR 99. This increase in transit service could provide
11 additional transit access for existing Shoreline residents along the Richmond Beach corridor as well.

12 **Potential Non-Motorized Enhancements**

13 The increase in traffic on Richmond Beach Drive NW and NW Richmond Beach Road resulting from the
14 Point Wells project warrants consideration of non-motorized enhancements from the site entrance to
15 SR 99. These enhancements are already identified in the City of Shoreline Transportation Master Plan
16 (Shoreline 2005).

17 Existing development patterns create challenges for much of the length of Richmond Beach Drive NW,
18 suggesting that a shared bicycle/automobile roadway with a single pedestrian facility on one side of the
19 roadway may be the only feasible option near the site. This will require a street design that maintains low
20 vehicle speeds. A corridor study to integrate the vehicle and non-motorized elements of the corridor is
21 recommended.

22 Opportunities to enhance non-motorized facilities on NW Richmond Beach Road are less constrained. A
23 Road Diet, or four-lane to three-lane conversion, appears feasible west of Dayton Avenue. The Road Diet
24 would allow for the provision of on-street bicycle lanes within the existing paved roadway. Additional non-
25 motorized benefits include shorter crosswalks and the separation of vehicles from pedestrians by the
26 bicycle lane. Again, a corridor study is recommended to integrate the vehicle and non-motorized elements
27 of the corridor.

28 Non-motorized enhancements also improve access to transit in the Richmond Beach corridor.

29 **Consistency with City of Shoreline Comprehensive Plan Subarea Plan 2 – Point Wells** 30 **Transportation Master Plan**

31 The City of Shoreline submitted several comments on the Draft SEIS transportation analysis. Included in
32 the comments was a basic assumption that the background growth estimates (approximately 1.5 percent
33 annual growth) used in the Draft SEIS transportation analysis were too high, given that Shoreline is
34 already “built out” and traffic counts indicate that traffic volumes have been declining in the past few
35 years. In addition, the City of Shoreline did not agree with the trip distribution assumptions and overall
36 mitigation findings in the Draft SEIS. In response to the Draft SEIS, the City Shoreline conducted a traffic
37 and safety analysis in 2009 using a more realistic 0.25 percent annual traffic growth factor. This analysis,

1 included as Attachment B to this addendum, evaluated eight different residential growth scenarios to
2 explore the transportation effects of various levels of residential development and the associated trips.
3 As an outcome of this analysis, the City of Shoreline presented improvement recommendations in two
4 categories: Mitigation Projects for All Scenarios and Mitigation Projects Required for 825 [PM Peak Hour]
5 Trips and Above. The findings in the traffic and safety analysis, though based on a PM peak hour
6 analysis, led to the conclusion that if more than 8,250 vehicle trips a day enter the City's road network
7 from the Point Wells development, a number of City intersections would degrade to LOS F, which would
8 be an unacceptable impact.

9 As shown in Table 4.11-10, the net new daily trips generated by the Alternative Action and its two
10 variations would exceed the 8,250 daily trip threshold. For the PM peak hour, the Alternative Action would
11 also exceed Shoreline's PM peak hour trip threshold of 825 PM peak hour trips. However, both alternative
12 variations would result in net new PM peak hour trips below this threshold, which, according to the City of
13 Shoreline's 2009 traffic and safety analysis, would result in acceptable LOS impact levels.

14 Although the daily and PM peak hour trips generated by the Alternative Action would exceed the City of
15 Shoreline's daily and PM peak hour trip thresholds, the more recent traffic analysis conducted in the Point
16 Wells TIA indicated that the following intersection, shown to degrade to unacceptable levels at the 825
17 PM peak hour trip threshold in the City of Shoreline study, would operate acceptably with the background
18 growth and refined trip distribution from the Point Wells travel demand VISUM model:

- 19 • NW Richmond Beach Road and 8th Avenue NW

20 In addition, the following two intersections, shown in the Shoreline study to degrade to unacceptable
21 levels once the 825 PM peak hour trip threshold is exceeded, would operate at acceptable levels with the
22 assumptions used in the Point Wells TIA for the Alternative Action:

- 23 • NW 196th Street and 24th Avenue NW
- 24 • NW 196th Street and Richmond Beach Drive

25 Based on the more recent findings in the Point Wells TIA, the mitigation recommendations from the
26 Shoreline traffic and safety analysis would not be required, even though the 825 PM peak hour and 8,250
27 daily trip threshold would be exceeded with the Alternative Action.

28 **4.11.4 Significant Unavoidable Adverse Impacts**

29 Both the 2009 Proposed Action and Alternative Action would be expected to result in increased traffic in
30 the vicinity of the Point Wells site. Although the effects of additional vehicles on traffic congestion can be
31 mitigated to varying degrees through the recommended transportation improvements, the actual increase
32 in traffic is considered a significant unavoidable adverse impact.

33

1 **4.12 Public Services and Utilities**

2 Additional details about public services and utilities are described in Section 3.12 of the Draft SEIS.

3 **4.12.1 Affected Environment**

4 **Emergency Services**

5 The County Sheriff's Office South Precinct has jurisdiction over the Point Wells site. The precinct is
6 headquartered in Mill Creek, approximately 10 miles northeast of the site. The average response time by
7 the Sheriff's Office to this area is 5 to 10 minutes (Ter-Veen pers. comm.). However, the Shoreline Police
8 Department has provided first response police services to the Point Wells site since 2001 because of its
9 proximity. The Shoreline Police Station is approximately 3 miles southeast of the site, and the Department
10 also operates a neighborhood police center, staffed by an officer and community volunteers, in Richmond
11 Beach, approximately 1 mile from the site.

12 According to the Snohomish County Fire Marshall, the Point Wells site is not currently within the
13 boundaries of any of the municipal fire departments or rural fire districts of the County (Snohomish
14 County Fire Marshal pers. comm.). The two municipal fire departments that are close to the site are the
15 Edmonds Fire Department, which serves Woodway, and the Shoreline Fire Department. The Shoreline
16 Fire Department (King County Fire District #4) is contracted to provide fire suppression and emergency
17 medical service to the site. The nearest Shoreline Fire Department response facility is Fire Station 64,
18 located approximately 2.25 miles southeast of the Point Wells site. The station is equipped with one
19 pumper engine, one basic life support vehicle, and one advanced life support vehicle.

20 **Parks**

21 The adopted level of service standard for parks in the County is one additional community park per
22 21,000 additional residents (Snohomish County 2007b). According to the 2007 Snohomish County Parks
23 Comprehensive Plan, no County-owned parks are located in the immediate vicinity of the Point Wells site.
24 The existing parks most conveniently located to the Point Wells site are in the city of Shoreline in King
25 County. Richmond Beach Center Park and Richmond Beach Saltwater Park are located 0.5 mile
26 southeast and 0.9 mile south-southeast, respectively, in Shoreline.

27 In Snohomish County, Point Edwards Park is located approximately 1 mile north of the site in Woodway
28 and City Park is located approximately 1 mile north of the site in Edmonds. The nearest County park is
29 Esperance Park, a community park of 6.2 acres, about a 5-mile drive to the northeast of the Point Wells
30 site.

31 **Schools**

32 The Point Wells site is located within the boundaries of Edmonds School District #15. Students in the
33 area attend Sherwood Elementary, College Place Middle School, and Edmonds-Woodway High School.

1 In recent years, Sherwood Elementary and Edmonds-Woodway High School have been at or above
2 capacity.

3 **Utilities**

4 Utilities infrastructure for water, sewer, solid waste, telecommunications, electricity, and natural gas are
5 limited or are not currently present on the Point Wells site.

6 The Point Wells site is served by the Olympic View Water and Sewer District, which provides water to
7 Woodway and the adjacent unincorporated portion of the County. According to Woodway's 2004
8 Comprehensive Plan (revised in 2008), the District obtains its water from the City of Seattle, but maintains
9 inter-ties with the City of Edmonds to draw on the Everett regional system in case of emergencies
10 (Woodway 2004).

11 Part of the upland section of the Point Wells site, east of the railroad tracks, is currently served by 8-inch,
12 10-inch, and 4-inch ductile iron water lines. The main industrial lowland area of the site is not currently
13 served by existing infrastructure (Olympic View Water and Sewer District 2003). The Olympic View Water
14 and Sewer District would identify capital improvements necessary to adequately serve development on
15 the Point Wells site.

16 The Point Wells site is located in Sewer Basin 24 of the Ronald Wastewater District (RWD). RWD serves
17 Shoreline in King County and the immediate vicinity of the site in unincorporated Snohomish County.
18 RWD's Lift Station 13 is located at 20454 Richmond Beach Drive NW, approximately 0.2 mile south-
19 southwest of the site, and currently handles flows from four upland residential parcels in addition to the
20 facilities on the Point Wells site. The lift station was last upgraded in 1996. Except from the lift station,
21 very little sanitary sewer infrastructure exists in the vicinity of the site.

22 Solid waste collection in the vicinity of the Point Wells site is handled by Allied Waste of Lynnwood, which
23 provides garbage, recycling, and yard waste collection services to the surrounding communities. Allied
24 Waste operates a recycling center south of Seattle and transports non-recyclable materials to the
25 Roosevelt Regional Landfill in Klickitat County.

26 Communication services at the industrial facility on the Point Wells site are currently provided by Verizon
27 under a franchise from the Washington Utilities and Transportation Commission (WUTC). Verizon offers
28 telephone and data service (DSL) to all communities in the County, using a combination of copper and
29 fiber-optic lines. In addition, Comcast Cable and Qwest Communications also offer services in the
30 surrounding communities. All major United States wireless communication companies provide mobile
31 telephone service in the area.

32 Electrical power in the County is provided by the Snohomish County Public Utility District. Natural gas
33 service in the southwest portion of the County is provided by Puget Sound Energy (PSE).

1 **4.12.2 Impact Analysis**

2 Impacts with the Alternative Action would be similar, but less than impacts described in Section 3.12
3 of the Draft SEIS for the 2009 Proposed Action because the density of development and traffic would
4 be less.

5 **Emergency Services**

6 The anticipated development and population increase under the Alternative Action would require
7 additional patrols and more police officers than are currently assigned to the site, and would generate a
8 greater demand for fire protection and emergency medical services.

9 Based on information from the Snohomish County Sheriff's Department, potential development would
10 require approximately six additional deputies and associated equipment to adequately provide 24-hour
11 police protection services and meet national standards for response times. These deputies would be
12 officially based out of the Department's South Precinct in Mill Creek, but would likely make use of a
13 "storefront" in the immediate vicinity of the Point Wells site, similar to Shoreline Police Department's
14 operation in Richmond Beach. This solution would allow the deputies to provide rapid response without
15 requiring the construction of a new police station. The Snohomish County Sheriff's Department estimates
16 that annual costs for this additional service would be approximately \$700,000 for the first year, with costs
17 declining over time as capital expenditures, such as additional patrol cars and equipment, are paid down
18 (Beidler pers. comm.; ICF Jones and Stokes 2009a).

19 If the Point Wells site is redeveloped as an Urban Center, the Shoreline Police Department and Fire
20 Department has indicated that they will discontinue its service to the site because the current service
21 agreement is based on the Paramount site's existing use as an asphalt and petroleum facility (ICF Jones
22 and Stokes 2009a). A new service agreement could be negotiated, however. These impacts would be the
23 same as described for the 2009 Proposed Action in Section 3.12 of the Draft and Final SEISs.

24 Impacts on fire service would depend on the scale of development. Firefighting and protection of
25 residents in high-rise buildings (over 75 feet in height) require specialized equipment, training, and
26 generally a higher number of fire fighters to respond to an incident (FEMA 1996). Additional equipment,
27 personnel, and training would be required of any of the fire service providers in the vicinity that may
28 provide service to the proposed development.

29 **Parks**

30 Changing the designation and zoning to allow redevelopment of the site as an Urban Center would
31 increase population and generate additional demand for parks and recreation facilities in the area. A
32 variety of park facilities would be used by residents. The Snohomish County 2001 Comprehensive Parks
33 Plan has taken a non-traditional approach to level of service, which takes into account projected
34 population growth. Unfortunately, the growth from the proposed development was not included in the
35 current plan projections or facility needs (Snohomish County 2005b). Shoreline uses a service area

1 approach in planning for parks and notes a deficiency for neighborhood parks in many areas of the city
2 (Shoreline 2011).

3 Given its location near the Point Wells site, the parks most likely to be affected include the Kayu Kayu Ac
4 Park about 0.25 mile from the site. Richmond Beach Saltwater Park (approximately 1.5 miles by car) also
5 would be affected by any increase in demand for passive parks activities generated under the Alternative
6 Action. Demand for active recreation, such as sports events using ball fields, is likely to be absorbed by a
7 variety of parks. These parks include Richmond Beach Community Park in Shoreline, about 0.75 mile
8 from the site, and City Park in Edmonds, about 4 driving miles from the site.

9 While this population increase anticipated with the Alternative Action is below the level of service
10 threshold for requiring an additional community park, a variety of additional recreational facilities would be
11 required to serve the additional residents.

12 The impacts would be the similar for the 2009 Proposed Action, which could potentially generate the
13 need for approximately 8.7 acres of additional parkland as described in Section 3.12 of the Draft and
14 Final SEISs.

15 **Schools**

16 Redevelopment under the Alternative Action could support up to 3,081 new housing units. Using a
17 student generation rate of 0.157 per unit could add up to 483 new students in the Edmonds School
18 District. The increased population would contribute to an overall increase in demand for education
19 services. However, under Variations 1 and 2 of the Alternative Action, the number of new students
20 generated by the development is expected to be less because 40 percent of the units would be for senior
21 housing. The 2009 Proposed Action would have similar impacts, but has the potential to add up to 549
22 students, because it would have more housing units.

23 **Utilities**

24 The development of a concentrated residential population and commercial area under the Alternative
25 Action has the potential to generate significant impacts on water and wastewater service. The developer
26 would be responsible for installing the new utility infrastructure on the site.

27 Olympic View Water and Sewer District projections of future population and water demand assume
28 approximately 77.3 gallons per capita per day of residential water consumption. Based on a potential
29 population of 5,670, the Alternative Action could generate an additional demand for 0.44 million gallons
30 per day (mgd), not including commercial demand. The Olympic View Water and Sewer District's supply
31 contract with Seattle allows them to draw as much water as is required to satisfy demand. While
32 adequate supply exists to support future growth, the infrastructure is not adequate to meet the anticipated
33 needs of the high-density development anticipated under the Alternative Action. In addition to domestic
34 supply, fire flows are likely to be the critical factor in determining the infrastructure needs for water supply.

1 In addition, the demand for wastewater transmission and treatment under the Alternative Action would
2 exceed the capacity of both existing infrastructure and currently planned capital improvements for sewer
3 basin 24 of the RWD. A project-level review would be required to determine the precise water and sewer
4 demand needs and cost of extending the infrastructure.

5 The change in land use under the Alternative Action would generate additional demand for
6 communication services, particularly telephone and cable. Additional demand for wireless communication
7 in the area could be satisfied without the construction of project-specific infrastructure. Construction of
8 new residential structures and commercial buildings would require the extension of fiber-optic lines and
9 television/data cables throughout the site. Project-level review and coordination with service providers
10 would be needed to ensure that demand is met.

11 The anticipated development under the Alternative Action would increase the level of solid waste
12 generation. A population increase of 5,670 might generate an estimated 4,000 tons of solid waste per
13 year while the 2009 Proposed Action with a population of 6,442 could generate an estimated 4,500 tons
14 (Snohomish County 2004). Project-level review would be needed to more accurately estimate the
15 additional tonnage and coordinate with solid waste providers. However, the Roosevelt Regional Landfill
16 has substantial unused storage capacity to meet this demand. No significant impacts on solid waste
17 service are anticipated.

18 The variations of the Alternative Action would have similar impacts; however, Variation 2 would generate
19 slightly less demand for utilities because it would have minimal commercial and retail development. The
20 2009 Proposed Action would generate similar but slightly higher demand for utilities because it would
21 have more housing units.

22 **4.12.3 Mitigation Measure**

23 **Emergency Services**

24 Prior to any future development under the proposed Alternative Action, the property owner shall enter into
25 an agreement with the Snohomish County Sheriff's Department stating that the property owner will
26 provide a commercial storefront in the immediate vicinity of the Point Wells site for use by deputies
27 patrolling this area. Depending on the exact market value of the commercial space, cost-free use of this
28 storefront may be considered, and may be associated with the partial or full payment of impact fees.

29 To ensure adequate fire protection and emergency medical services prior to any future development, the
30 Point Wells site would either be assigned to one of the rural fire districts by the County or contract with
31 one of the adjacent municipalities. The developer would provide documentation to the Snohomish County
32 Department of Planning and Development that identifies the municipality or fire district responsible for
33 providing fire and emergency medical services at the site. The County shall verify that the identified
34 agency has an equipment, personnel, and training plan that provides the capacity to respond to
35 emergency calls at the Point Wells site in a timely manner, particularly for the special needs posed by
36 high-rise buildings.

1 **Parks**

2 Future development on the Point Wells site would be required to comply with the Snohomish County
3 Code, which sets forth development impact fees and related park dedication requirements proportionate
4 to the size of the proposed development. These code provisions, however, were developed based on
5 population demand projections that did not include this project.

6 Future development on the site should also include parks and/or open space dedication as integral parts
7 of the urban center design; in addition, both the Snohomish County and Shoreline Parks Departments
8 should be consulted during the design process. Additional parks and open space dedications may be
9 made in lieu of impact fees (ICF Jones & Stokes 2009a, 2009b).

10 Any development may be required to provide parks and open space amenities on site that allow for active
11 recreational activities. Examples include, but are not limited to, ball fields, playgrounds, and tennis courts.
12 The site also has the potential to provide water-oriented public access and recreation on site that would
13 serve a larger geographic area. In that case, other types of recreational facilities could be provided by
14 existing parks or upgraded facilities off site (ICF Jones & Stokes 2009a).

15 **Schools**

16 The school district monitors upcoming development within its jurisdiction and regularly updates its Capital
17 Facilities Plan to adequately reflect anticipated growth. The Edmonds School District projects no
18 unhoused students by the end of the 6-year forecast period, and does not project the need for additional
19 capital facilities to accommodate growth (Edmonds School District 2010).

20 While the school district does not currently collect impact fees, the County should coordinate with the
21 district to ensure that future development under the Alternative Action is included in capital facilities
22 planning efforts and identify potential funding measures for necessary improvements, including collection
23 of impact fees.

24 **Utilities**

25 The anticipated future development under the Alternative Action would require coordination with the
26 Olympic View Water and Sewer District and RWD. The utilities would need to incorporate updates to the
27 Capital Facilities Plan to ensure that future facilities have adequate capacity for the proposed demand.
28 Project-level infrastructure needs and necessary upgrades would need to be identified and appropriate
29 mitigation measures would need to be determined when a specific development plan is proposed.

30 Residential development of the Point Wells site would require extension and connection of water and
31 sewer services to the site. In addition, the water systems may need to be upgraded to meet fire flow and
32 storage requirements. The RWD Comprehensive Sewer Plan indicates that a pre-design study shall be
33 conducted to determine if Lift Station 13 will require additional capacity for future development or if
34 another lift station should be constructed. Potential mitigation could include the preparation of this study

1 by the developer or a designated consultant, construction and dedication of the necessary infrastructure,
2 or payment of impact fees to the RWD to defray the costs of construction (ICE Jones & Stokes 2009b).

3 Future development will incorporate green technologies intended to reduce wastewater volumes and the
4 amount of land required for wastewater treatment. Specific methods and technologies would be evaluated
5 during project-level review.

6 The developer would be required to coordinate with service providers to ensure that adequate
7 communication services are available at the site. The developer would also need to install additional
8 infrastructure, such as transmission lines and transformers, for electrical service. The developer would
9 coordinate with PSE to potentially extend natural gas service into the Point Wells area; although, natural
10 gas service is not required to support development.

11 **4.12.4 Significant Unavoidable Adverse Impacts**

12 The Alternative Action and 2009 Proposed Action would have a similar potential for significant
13 unavoidable adverse impacts. Population growth and development under either alternative would
14 increase the need for police, fire fighting, and emergency medical services. Development of an Urban
15 Center would increase water and energy consumption and create the need for utility infrastructure to
16 serve the site.

17 Development would result in an overall increase in demand for electric and natural gas infrastructure.
18 Future development would undergo project-level review to determine precise power and natural gas
19 consumption and infrastructure requirements and any applicable impact fees. Mitigation measures would
20 reduce these impacts.

21 With mitigation, no significant unavoidable adverse impacts on parks, schools, wastewater, or
22 communication services are anticipated. No mitigation measures or adverse impacts are anticipated for
23 solid waste collection services.

24 The No Action Alternative anticipates a small increase in employment at the site, which has the potential
25 to result in a slight increase in water and sewer demand over existing conditions. Small changes in utility
26 demand are not anticipated to result in any significant unavoidable adverse impacts. However, project-
27 level review would be required to determine water and fire-flow requirements for any new development.

28 **4.13 Land and Shoreline Use Patterns**

29 **4.13.1 Affected Environment**

30 The proposed amendment to the Comprehensive Plan would change the future land use map designation
31 from Urban Industrial to Urban Center and a change of zoning from Heavy Industrial to Planned
32 Community Business. This would change the allowed uses and potential future development on the site.
33 Project-level review would be required for future development proposals.

1 The Point Wells site is located in unincorporated Snohomish County. The site is in the southwest corner
2 of the Snohomish County Urban Growth Area (UGA). The land immediately east of the site in Woodway
3 consists primarily of vacant or undeveloped land and single-family residential development (generally
4 0.25-acre lots or larger). Land to the southeast of the site is in Shoreline, and also consists of primarily
5 single-family residential development. The boundary between Snohomish County and King County is
6 immediately south of the Point Wells property.

7 Woodway's land use goals and policies are designed for single-family residential development that keeps
8 density low to preserve a more rural lifestyle. The land to the east and northeast of the Point Wells site is
9 designated as Forested Residential Park, Suburban Residential, and Conservation on the town's Future
10 Land Use and Zoning map.

11 Shoreline's Comprehensive Plan designates the land southeast of the Point Wells site as Low Density
12 Residential. The area is zoned for six units per acre (R-6).

13 The BNSF railroad right-of-way is the dominant feature along the shoreline to the south of the Point Wells
14 site. The majority of the shoreline in this area is under the direct ownership of BNSF Railway. The
15 shoreline area to the north of Point Wells is mostly undeveloped. The BNSF railroad, which runs between
16 the shore and the base of the bluff to the east, continues to be the primary feature. Land uses at the top
17 of the bluff are primarily single-family residences.

18 The County's Shoreline Management Master Program designates the shoreline on the Point Wells site as
19 Urban, which is intended to absorb higher-density development while protecting and restoring ecological
20 functions, as well as providing appropriate public access to and recreational use of the shoreline
21 environment. Additional details are described in Section 3.13 of the Draft SEIS and Final SEIS.

22 **4.13.2 Impact Analysis**

23 The land zoned and used for industrial purposes would be lost if the future land use and zoning is
24 changed with the Alternative Action. The loss of this industrial property could create additional demand for
25 a similar facility in the region.

26 The presence of high-density residential and commercial uses close to the lower density neighborhoods
27 in Shoreline and Woodway could adversely affect low-density residential uses by creating increased
28 noise, light and glare, and traffic congestion in the area. If the proposed Urban Center is established, the
29 concentration of commercial, office, and residential uses could attract additional development to nearby
30 areas. While the development under the Alternative Action would create a higher density than currently
31 exists in the surrounding areas, the uses proposed would be more compatible with surrounding
32 development than the industrial uses currently on the site.

33 The proposed amendment would not change the shoreline designation. However, the increased density
34 anticipated under the Alternative Action is higher than seen in surrounding shoreline environments. The
35 development would be likely to result in use of the shoreline area for recreation or residential uses, as

1 opposed to industrial use. Residential and recreational uses would be more compatible with the
2 ecological restoration objectives of the adjacent Woodway Urban Conservancy designation.
3 Impacts with the 2009 Proposed Action would be similar as described in Section 3.13 of the Draft SEIS.

4 **4.13.3 Mitigation Measures**

5 Project-specific mitigation measures may be needed to address future development and would be
6 reviewed at the time that an application is processed. Potential mitigation measures to reduce impacts on
7 land use patterns could include:

- 8 • Implementation of traffic calming and noise abatement measures as a condition of development
9 permit approval to reduce vehicular impacts on nearby residential development;
- 10 • Establishment of a medium-density transitional area surrounding the urban center to provide a
11 buffer between high and low densities; and
- 12 • Application of design standards or design review to minimize design incompatibilities with
13 surrounding uses (ICF Jones & Stokes 2009b).

14 Mitigation measures would follow the County's Shoreline Management review process. Potential
15 mitigation measures to reduce incompatibilities with surrounding shoreline designations could include:

- 16 • Locating higher-intensity shoreline uses away from the northern edge of the Point Wells site,
17 which borders Woodway's Urban Conservancy designation.

18 **4.13.4 Significant Unavoidable Adverse Impacts**

19 The Alternative Action and 2009 Proposed Action represent a change of land use for the Point Wells site
20 and a permanent loss of waterfront industrial property. However, there are no significant unavoidable
21 adverse impacts on shoreline use patterns for any of the alternatives.

5 Conclusion

In compliance with the GMHB ruling, the County has taken into consideration an alternative that would generate a reduced level of traffic, the Alternative Action. The County also took Shoreline's transportation study and the Point Wells TIA into consideration to inform decisions about high-capacity transit access.

The change in land use and zoning for the Point Wells site would result in the permanent loss of a waterfront industrial property. Development of an urban center under the Alternative Action has the potential to significantly affect transportation, wildlife and vegetation, and public services and facilities. With mitigation, other elements of the environment are not anticipated to have significant unavoidable adverse effects. Future development under any of the alternatives may require project-specific mitigation measures to address potential impacts.

5.1 Transportation

Under the Alternative Action, the distribution of traffic shows that approximately 75 percent of the projected trips were attracted south to the Shoreline and Seattle areas, while roughly 25 percent of the project trips were attracted north, to Woodway and the cities of Lynnwood and Everett. The 2009 Proposed Action indicated approximately 40 percent of the projected trips would have destinations to and from the south, and approximately 60 percent of trips would have destinations to and from the north.

Four intersections projected to exceed LOS standards under the No Action Alternative are expected to degrade further under the Alternative Action. In addition, two intersections projected to meet standards under the No Action Alternative are expected to exceed standards under the Alternative Action:

- N 185th Street and SR 99 – WSDOT, LOS F
- SR 99 and N 160th Street – WSDOT, LOS F

The 2009 Proposed Action projected to further degrade eight intersections over the No Action Alternative conditions. In addition, three intersections projected to meet standards under the No Action Alternative are expected to exceed standards under the 2009 Proposed Action:

- NW 196th Street and 20th Avenue NW,
- NW 195th Street and 15th Avenue NW, and
- Richmond Beach Road and 15th Avenue NW.

The total number of daily trips to and from the Point Wells site with the Alternative Action is projected to be 11,587; 1,273 less trips than the 2009 Proposed Action. Total net trips generated by the Alternative Action's variations would be lower. However, the first variation would result in higher internal capture rate (44 percent) compared to the second variation (20 percent) due to the mix of uses. Combined with the historic use reduction, the first variation would therefore result in the lowest net new daily trips. With lower net trip generation projections than the Alternative Action, both variations are expected to result in

1 impacts to intersection level of service that are lower than the Alternative Action and higher than the
2 No Action Alternative.

3 No specific transit reduction was taken during the trip generation portion of the analysis. As transit
4 resources are implemented in the project vicinity, it is expected that the site trip generation would
5 be reduced.

6 Transit service would be scaled to match demand as determined by the local transit agency. A transit hub
7 within the Urban Village is proposed as part of the Alternative Action to integrate bus and commuter rail
8 service on site for both residents and the Richmond Beach community.

9 Sounder commuter rail services from the north to Seattle currently have excess capacity; however, there
10 is no station on the site, with the nearest station located in Edmonds. The Sounder commuter rail system
11 has excess capacity to accommodate some new riders from the Point Wells Development without service
12 expansion.

13 Additional new riders could be accommodated with the expansion of the commuter rail service as already
14 planned by Sound Transit. The provision of increased bus transit service on Richmond Beach Drive NW
15 could also increase commuter rail ridership by providing access to the station via bus for residents along
16 NW Richmond Beach Road.

17 High capacity transit service to and from the Point Wells site could also be provided from the planned Link
18 light rail system station at NE 185th Street through a permanent vanpool or transit vehicle connection to
19 the station. In addition, changing the walking distance to transit from 0.25 to 0.5 mile is reasonable,
20 especially for connections to a high capacity transit system.

21 **5.2 Wildlife and Vegetation**

22 With the Alternative Action, public access to the shoreline on the Point Wells site would no longer be
23 restricted. Development of the site would increase human activity in the tidal area, which could disturb
24 wildlife and marine vegetation, and reduce the potential for some species to use the site. Development
25 would include landscaping and be designed to restore a more natural shoreline with native vegetation
26 where appropriate. The impacts and benefits would be similar for the 2009 Proposed Action.

27 **5.3 Public Facilities and Services**

28 The anticipated development of an Urban Center with the Alternative Action would increase the
29 population on the Point Wells site. The developer would be responsible for ensuring public facilities and
30 services are adequately provided to the residents, and that the development would not decrease the
31 current service levels in the adjacent neighborhoods. The need for public facilities and services would be
32 similar for the 2009 Proposed Action.

1 **Emergency Services** - Prior to any future development with the proposed Alternative Action, the property
2 owner shall enter into an agreement with the Snohomish County Sheriff's Department. In addition, to
3 ensure adequate fire protection and emergency medical services prior to any future development, the
4 Point Wells site would either be assigned to one of the rural fire districts by the County or contract with
5 one of the adjacent municipalities.

6 **Parks** – The Snohomish County and Shoreline Parks Departments would be consulted during the design
7 process to make sure the proposed development meets the code requirements for park facilities.

8 **Schools** - The County would coordinate with the Edmonds School District to ensure that future
9 development under the Alternative Action is included in capital facilities planning efforts, and to identify
10 potential funding measures for necessary improvements, including collection of impact fees.

11 **Utilities** – The developer would be required to coordinate with service providers to install additional
12 infrastructure and ensure all required utility services are adequate Service providers include: Olympic
13 View Water and Sewer District, Ronald Wastewater District, Allied Waste, PSE, Verizon, Comcast,
14 Qwest, and others. Adequate public facilities and services would be needed before the development is
15 permitted.

6 References

- 1
- 2 Beidler, Robert. Bureau Chief. Snohomish County Sheriff's Department. May 5, 2009—personal
3 communication with ICF Jones & Stokes.
- 4 Bochner, B.S. and B.R. Sperry. 2010. Internal Trip Capture Estimator for Mixed-Use Developments.
5 Technical, Texas Transportation Institute, College Station.
- 6 Burden, D. and P. Lagerwey. 1999. Road Diets: Fixing the Big Roads. Walkable Communities, Inc. March
7 1999.
- 8 Curtis, Edward S. 1907. The North American Indian. University Press, Cambridge, MA.
- 9 David Evans and Associates, Inc. 2011. Point Wells Expand Traffic Impact Analysis. Prepared for BSRE
10 Point Wells, LP. March 2011.
- 11 Ecology (Washington State Department of Ecology). 2012a. Snohomish County Carbon Monoxide
12 Maintenance Area Map. Available at: [http://www.ecy.wa.gov/programs/air/other/namaps/
13 web_co_snohomish.pdf](http://www.ecy.wa.gov/programs/air/other/namaps/web_co_snohomish.pdf)http://www.ecy.wa.gov/programs/air/other/namaps/web_Ozone_Snoh.pdf.
14 Accessed April 18, 2012.
- 15 Ecology. 2012b. Snohomish County Ozone Maintenance Area Map. Available at:
16 http://www.ecy.wa.gov/programs/air/other/namaps/web_Ozone_Snoh.pdf. Accessed April 18, 2012.
- 17 Ecology. 2012c. Preparing for a Changing Climate, Washington State's Integrated Climate Response
18 Strategy. Available at: http://www.ecy.wa.gov/climatechange/ipa_responsestrategy.htm. Accessed
19 April 19, 2012.
- 20 Ecology. 2010. Candidate 2010 Water Quality Assessment and 303(d) List. Available at:
21 <http://www.ecy.wa.gov/programs/wq/303d/2010/index.html>. Accessed April 16, 2012.
- 22 Ecology. 2008a. 2008 Water Quality Assessment 305(b) and 303(d) List. Approved by EPA on
23 January 29, 2009. Available at: <http://www.ecy.wa.gov/programs/wq/303d/2008/index.html>.
24 Accessed April 16, 2011.
- 25 Ecology. 2008b. Interim Report. Leading the Way on Climate Change: The Challenge of Our Time.
26 Ecology Publication #08-01-008. February.
- 27 Edmonds School District. 2010. Capital Facilities Plan 2010 to 2015. Available at:
28 [http://www.edmonds.wednet.edu/cms/lib02/WA01001167/Centricity/Domain/67/2010-
29 2015CFP%202.pdf](http://www.edmonds.wednet.edu/cms/lib02/WA01001167/Centricity/Domain/67/2010-2015CFP%202.pdf). September 2010.
- 30 FEMA (Federal Emergency Management Agency). 1996. U.S. Fire Administration. Special Report:
31 Operational Considerations for Highrise Firefighting, USFA-TR-082. April 1996.

- 1 Golder Associates, Inc. and Parametrix. 2002. A Geoduck (*Panopea abrupta*) Survey for the Brightwater
2 Marine Outfall. Prepared for King County Department of Natural Resources and Parks, Wastewater
3 Treatment Division. November 2002.
- 4 GMHB (Growth Management Hearings Board). 2011a. Final Decision and Order for Coordinated Case
5 Nos. 9-3-0013c and 10-3-0011c (Shoreline III and Shoreline IV). Issued April 25, 2011.
- 6 GMHB. 2011b. Order Granting Petitioners' Motion for Summary Judgment. Issued November 23, 2011.
- 7 ICF Jones & Stokes. 2009a. Final Supplemental Environmental Impact Statement. Final Docket XIII
8 Amendments to the GMA Comprehensive Plan—Paramount of Washington LLC. June. (ICF J&S
9 00233.09) Seattle, WA. Prepared for Snohomish County Planning and Development Services.
- 10 ICF Jones & Stokes. 2009b. Draft Supplemental Environmental Impact Statement Final Docket XIII
11 Comprehensive Plan Amendment—Paramount of Washington LLC. February. (ICF J&S 01068.07)
12 Seattle, WA. Prepared for Snohomish County Planning and Development Services.
- 13 Institute of Transportation Engineers. 2008. Trip Generation (8th Edition). Washington, D.C.
- 14 Institute of Transportation Engineers. 2004. Trip Generation Handbook (2nd Edition). Washington, D.C.
- 15 Institute of Transportation Engineers. 2003. Trip Generation Handbook (7th Edition). Washington, D.C.
- 16 Institute of Transportation Engineers. 2001. Trip Generation Handbook. 1st Edition. Washington, D.C.
- 17 King County. 2003. Final Environmental Impact Statement—Brightwater Regional Wastewater Treatment
18 System, Appendix 7-F. Eelgrass Survey Results for the Brightwater Marine Outfall Alternatives.
19 Prepared for King County by Parametrix and King County Department of Natural Resources and
20 Parks, Wastewater Treatment Division. September 2003.
- 21 King County. 2008. King County's 1996/1997 Beach Assessment, Point Wells, Shoreline. Last Revised
22 November 2, 1998. Available at: [http://www.kingcounty.gov/environment/waterandland/puget-sound-](http://www.kingcounty.gov/environment/waterandland/puget-sound-marine/beaches/point-wells.aspx)
23 [marine/beaches/point-wells.aspx](http://www.kingcounty.gov/environment/waterandland/puget-sound-marine/beaches/point-wells.aspx). Accessed July 22, 2008.
- 24 MTI (Mineta Transportation Institute). 2007. MTI Report 06-06: How Far, By Which Route, and Why? A
25 Spatial Analysis of Pedestrian Preference. Prepared by Marc Schlossberg, Ph.D., Asha Weinstein
26 Agrawal, Ph.D., Katja IrvinVanessa, and Louise Bekkouche. Available at:
27 <http://transweb.sjsu.edu/mtiportal/research/publications/documents/06-06/MTI-06-06.pdf>. June 2007.
- 28 Olympic View Water and Sewer District. 2003. Comprehensive Water System Plan. Prepared by
29 Penhallegon Associates Consulting Engineers, Inc.
- 30 Rosales, P.J. 2008. Road Diet Handbook. Northwest Transportation Conference.
- 31 Ruby, R.H. and J.A. Brown. 1992. A Guide to the Indian Tribes of the Pacific Northwest. University of
32 Oklahoma Press, Norman, OK.

- 1 Shoreline, City of. 2012. Comprehensive Plan, Subarea Plan 2—Point Wells. Available at:
2 http://cosweb.ci.shoreline.wa.us/uploads/attachments/Comp_Subarea2.pdf. Accessed April 10, 2012.
- 3 Shoreline, City of. 2011. Parks, Recreation and Open Space Plan. Available at:
4 <http://www.cityofshoreline.com/index.aspx?page=682>.
- 5 Shoreline, City of. 2009. Comments on Point Wells Traffic Analysis Memorandum. To Joe Tovar, Director
6 of Planning. From Mark Relph, Director of Public Works. Dated July 23, 2009.
- 7 Snohomish County. 2011. Assistance Bulletin #5, Docketing Process. Available at:
8 <http://www.co.snohomish.wa.us/documents/Departments/PDS/Bulletins/5DocketingProcess1011.pdf>.
9 Published October 2011.
- 10 Snohomish County. 2007a. 2007 Buildable Lands Report for Snohomish County. Available at:
11 [http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/PlanningandTechnology/LR_Planning/](http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/PlanningandTechnology/LR_Planning/Information/Demographics/Buildable_Lands/blr07_Adopted_Report.htm)
12 [Information/Demographics/Buildable_Lands/blr07_Adopted_Report.htm](http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/PlanningandTechnology/LR_Planning/Information/Demographics/Buildable_Lands/blr07_Adopted_Report.htm). Accessed April 24, 2012.
- 13 Snohomish County. 2007b. Snohomish County Comprehensive Park & Recreation Plan. Available at:
14 http://www.co.snohomish.wa.us/Documents/Departments/Parks/Comp_Plan_Jan_07-adopted.pdf.
15 Accessed April 23, 2012.
- 16 Snohomish County. 2005a. Final Environmental Impact Statement for Snohomish County GMA
17 Comprehensive Plan 10-Year Update. Available at: [http://www1.co.snohomish.wa.us/Departments/](http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/PlanningandTechnology/LR_Planning/Projects_Programs/Comprehensive_Plan/Final)
18 [PDS/Divisions/PlanningandTechnology/LR_Planning/Projects_Programs/Comprehensive_Plan/Final](http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/PlanningandTechnology/LR_Planning/Projects_Programs/Comprehensive_Plan/Final)
19 [EIS.htm](http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/PlanningandTechnology/LR_Planning/Projects_Programs/Comprehensive_Plan/Final). Published December 2005. Accessed April 5, 2012.
- 20 Snohomish County. 2005b. Capital Facilities Plan/Year 2005. Available at:
21 http://www.co.snohomish.wa.us/documents/Departments/pds/10_year_update/3.%20CAPITAL%20F
22 [ACILITIES%20PLAN.pdf](http://www.co.snohomish.wa.us/documents/Departments/pds/10_year_update/3.%20CAPITAL%20F). Accessed April 24, 2012.
- 23 Snohomish County. 2004. Snohomish County Comprehensive Plan 10-Year Update Draft Environmental
24 Impact Statement.
- 25 Snohomish County Fire Marshall. General assistance line. September 22, 2008—personal
26 communication with ICF Jones & Stokes.
- 27 Sound Transit. 2005. Regional Long-Range Plan Final SEIS. June.
- 28 Sound Transit. 2009. Sound Transit 2—Plan Summary. Available at:
29 <http://www.soundtransit.org/x9991.xml>. Accessed May 11, 2009.
- 30 Swanton, John R. 1968. Indian Tribes of Washington, Oregon, and Idaho. Ye Galleon Press,
31 Fairfield, WA.

- 1 Ter-Veen, William, Deputy. Technology/Background Investigator. Snohomish County Sheriff's Office. April
2 21, 2008—personal communication with ICF Jones & Stokes.
- 3 TCRP (Transit Cooperative Research Program). 2012. TCRP Report 153: Guidelines for Providing
4 Access to Public Transportation Stations. Sponsored by the Federal Transit Administration,
5 Washington, D.C. Available at: http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_153.pdf.
- 6 Transportation Research Board. 2000. Highway Capacity Manual. Special Report 209. National Research
7 Council. Washington, D.C.
- 8 WDFW (Washington State Department of Fish and Wildlife). 2012. Federally ESA Listed Fish Species for
9 Washington State. Available at: [http://wdfw.wa.gov/conservation/endangered/esa/
10 federally_listed_esa_fish.pdf](http://wdfw.wa.gov/conservation/endangered/esa/federally_listed_esa_fish.pdf). Accessed April 18, 2012.
- 11 Washington State Office of Financial Management. 2012. 2010 Census Data, City Summary File 1 Data.
12 Available at: <http://www.ofm.wa.gov/pop/census2010/data.asp>. Accessed April 19, 2012.
- 13 Washington State Employment Security Department. 2012. Labor Area Summaries, Snohomish County.
14 Available at: <https://fortress.wa.gov/esd/employmentdata/eeis-tools/labor-area-summaries>.
15 Accessed April 19, 2012.
- 16 Woodway, Town of. 2004. Comprehensive Plan, 2004 Update. Town of Woodway Planning Commission.
17 Revised November 17, 2008. Woodway, WA.
- 18 U.S. Census Bureau. 2012. State and County QuickFacts. Available at:
19 <http://quickfacts.census.gov/qfd/states/53000.html>. Accessed April 19, 2012.

ATTACHMENT A

POINT WELLS TRAFFIC IMPACT ANALYSIS

The Point Wells Expanded Traffic Impact Analysis is not included in this PDF due to its size.

ATTACHMENT B
SHORELINE TRAFFIC ANALYSIS



Memorandum

Date: July 23, 2009

To: Joe Tovar, Director of Planning

From: Mark Relph, Director of Public Works 

Subject: Comments on Point Wells Traffic Analysis

Following is a summary of the analysis undertaken by Public Works to evaluate the Draft SEIS, and the subsequent FEIS. The analysis was undertaken by staff with the assistance of HW Lochner and Associates and DKS and Associates. Lochner assisted with the synchro model analysis and the evaluation and cost estimation of mitigation for the full build-out scenario. We also asked DKS and Associates to review the modeling work to verify that our assumptions, scenario development and synchro analysis were solid.

FEIS Responses

Shoreline submitted several comments on the Draft SEIS. Included in these comments was a basic assumption that the background traffic growth estimates were too high. Our comment was based on the fact that, with the exception of commercial areas, Shoreline is close to being "built out" and our traffic counts indicate that we have been experiencing negative traffic growth for the past four years. Assuming a 2% growth rate does not make sense. In our traffic analysis of the build-out scenario, we utilized a 0.25% annual traffic growth factor. Overestimation of background traffic growth may equate to a lowered level of impact from the proposed development, and therefore potentially a lower estimated mitigation cost and responsibility.

Traffic Analysis

Attached to this memo is a table summarizing our Level of Service analysis for the build-out scenario using our background data (0.25% annual growth). It indicates that four intersections would reach LOS (Level of Service) "F" (failure) by 2025 with the Point Wells build-out project. In addition, two intersections would reach LOS-E. Attached to this memo is also a summary of mitigation needs to address intersections with LOS problems, intersections with safety issues, and street segments needing sidewalks to ensure pedestrian safety and to encourage transit usage.

Collision rates are fairly high on this corridor, with the intersection of 3rd Avenue NW and NW Richmond Beach Road, ranked as the intersection with the highest collision rate in Shoreline. In this location, we believe the high collision rates can be mitigated by the addition of left-turn pockets on the east and west legs of the intersection.

Cost to Mitigate Build-out Scenario

The conclusion of our analysis indicates the build-out scenario will require mitigation on nine intersections or street segments. The total cost of mitigation is approximately \$32 million. There are four sidewalk projects and four signal/intersection improvements to address both safety, efficiency and to encourage multi-modality. The three sidewalk projects include sidewalks on Richmond Beach Drive NW from NW 196th Street to NW 205th Street, NW 196th Street from Richmond Beach Drive NW to 24th Avenue NW, and NW 196th Street from 24th Avenue NW to 20th Avenue NW. The intersection projects include NW 195th Street at 20th Avenue NW and 24th Avenue NW, and NW Richmond Beach Road at 15th Avenue NW, 8th Avenue NW and 3rd Avenue NW.

Because of the many challenges in this corridor, as well as its unique characteristics, we recommend that the developer fund a Richmond Beach Corridor study of the NW Richmond Beach Road/Drive corridor, spanning from the NW 205th Street entrance to Point Wells to Aurora Avenue N at N 185th Street. This study should examine and identify safety enhancements, roadway efficiencies and accommodation and promotion of alternative modes. The study should include input from the neighborhood residents, as well as transit providers and the developer representatives. Shoreline Public Works staff should manage the study. It would result in a corridor plan that would be approved by the City Council and would identify specific projects, with scope and costs to mitigate the Point Wells proposed project. We estimate that this study would cost approximately \$200,000.

Conclusion

I have several attachments to supplement the above. They include a level of service analysis summary table and summarized project planning level cost estimates. Please keep in mind that, with a corridor study, the project descriptions could change, as well as the cost estimates.

Point Wells Traffic and Safety Analysis

Introduction

This analysis was prepared in response to the draft SEIS prepared for Snohomish County's exploration of a rezone of the Point Wells site to accommodate redevelopment at a higher density. The purpose of this analysis is to evaluate traffic and safety impacts, as well as mitigations required of the proposed rezone and redevelopment.

Background

An initial analysis was conducted in 2006 by David Evans and Associates, a consultant for the developer group exploring the feasibility of redeveloping the Point Wells site. That analysis was limited in scope to the NW Richmond Beach Rd corridor. In order to understand the impacts and address early issues raised by residents, Snohomish County decided to take a more comprehensive look at a larger area. A draft and final SEIS were subsequently prepared by IFC Jones & Stokes.

Modeling Assumptions and Analysis

City of Shoreline staff and consultants initially reviewed the draft SEIS and expressed a number of concerns with the traffic analysis (see attachment A). In particular, Shoreline did not agree with some of the conclusions in the draft SEIS traffic analysis (such as growth rate, trip distribution, and overall mitigation). Therefore, utilizing many of the assumptions from the draft SEIS, Shoreline developed its own models to that take a more detailed look at Point Wells redevelopment impacts within the City of Shoreline.

In order to develop the more detailed City model, several of assumptions were made. The first assumption is that the PM peak hour resulted in the most significant impacts in the draft SEIS, and therefore the Shoreline model focused on the PM peak hour impacts in the updated model.

The next assumption is that Shoreline's Aurora Phase II project will break ground during the fourth quarter of 2009. The Aurora Phase III project, currently in design, will most likely be completed by 2025, the future target year in the draft SEIS. The Shoreline models were configured to incorporate the changes planned through these projects.

The volumes used in the future 2025 base model were taken from the draft SEIS when available. Since the Shoreline analysis modeled additional intersections, the future 2025 background volumes were developed using a 0.25% annual growth rate over existing conditions. The IFC Jones and Stokes model assumed a sustained annual growth rate of approximately 1.5% with some areas even higher. This higher growth rate assumption dilutes the impact of new trips being generated by the proposed development, therefore under estimating mitigation for the development.

Once the model was developed for the year 2025, eight different residential growth scenarios were created to explore the effects of various levels of residential development and the associated vehicle trips.

Residential vehicle trip generation was determined by using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th edition. Vehicle trip generation was estimated for the proposed project using ITE Land Use Code 230, Residential/Townhouse. All scenarios assumed the same trip generation corresponding to the full build-out of the proposed office and retail for the development, which equated to a 528-employee general office building and a 136-employee retail space.

The eight different residential scenarios evaluated were chosen based on increasing numbers of residential units in increments of 500 units as follows (again, with office and retail assumption remaining constant through the scenarios):

Total Residential Trips			Total w/ Proposed Office/Retail Trips		
Units	Entering	Exiting	Entering	Exiting	Combined Trips
500	131	64	225	325	550
1000	231	114	325	375	700
1500	322	159	410	415	825
2000	408	200	495	455	950
2500	489	241	590	510	1,100
3000	568	280	675	550	1,225
3220	602	297	710	576	1,286
3500	645	318	760	590	1,350

The results of the eight different Point Wells scenarios, in addition to the existing and future 2025 base conditions, are summarized in attachment B, and the mitigation is discussed below.

Evaluation and Mitigation

Any redevelopment at the Point Wells site will have impacts along the Richmond Beach Road corridor. These impacts include the increased risk to pedestrians where sidewalks do not exist, and improvement to intersections to maintain an adequate level of service and to maintain safe travel through the intersection. Shoreline’s analysis and recommendation below are divided into two categories: Mitigation Projects for All Scenarios and Mitigation Projects Required for 825 Trips and Above. The mitigation costs are summarized in Attachment D.

Mitigation Projects for All Scenarios

1. Multimodal Safety and Corridor Study:

The City of Shoreline Transportation Master Plan, in anticipation of a future development of Point Wells, has identified the need for a corridor study from the Point Wells site, down Richmond Beach Drive NW, then up the corridor to Aurora. This analysis should be funded by the developer and undertaken in cooperation with the City of Shoreline, and the residents and business community on the Richmond Beach Road corridor. The study needs to address multimodal usage (buses, bikes and pedestrians), capacity and traffic flow, as well as safety improvements and impacts. This analysis should ultimately be approved by the Shoreline City Council and would form the basis for developer mitigation.

2. NW 196th Street between Richmond Beach Drive NW and 24th Avenue NW – Sidewalk and Safety:

NW 196th Street is a collector arterial with a speed limit of 25 MPH. It consists of two 12-foot wide lanes, one in each direction. The terrain between Richmond Beach Road NW and 24th Avenue NW is made up of a generally uniform grade sloping down towards Richmond Beach Drive NW. There are no sidewalks.

Improvements shown include, at a minimum, sidewalks on both sides of the street. Should more than 825 trips (fourth scenario) be approved, a continuous two-way center turn lane should also be required to help maintain traffic flow and improve pedestrian access across NW 196th Street. This is a more effective and less expensive mitigation than the four-lane option in the draft SEIS.

3. NW 196th Street between 24th Avenue NW and 20th Avenue NW – Sidewalk and Safety:

NW 196th Street is a collector arterial with a speed limit of 25 MPH. It consists of two 12-foot wide lanes in each direction. The terrain between Richmond Beach Road NW and 24th Avenue NW is made up of a generally uniform grade sloping down towards 24th Ave NW. There is a sidewalk on the north side of the roadway, and part of the south side. A complete continuous sidewalk will be needed for any development at the Point Wells site.

4. NW 195th Street & 20th Avenue NW – Intersection Improvement:

This intersection is currently controlled by stop signs on all approaches. The model assumes this intersection will be signalized as per recommendations in the SEIS.

5. NW Richmond Beach Road & 15th Avenue NW – Intersection Improvement:

This intersection has offset north and south approaches. The south approach is currently controlled by stop signs on all approaches. The model assumes this intersection will be signalized as per recommendations in the SEIS. However, an option in lieu of a traffic signal may be twin roundabouts.

6. NW Richmond Beach Road & 3rd Avenue NW – Intersection Improvement:

NW Richmond Beach Road has four lanes without room for separate left turn lanes. This is a contributing factor to a number of reported collisions. Widening of NW Richmond Beach Road will be required to accommodate any increase in trips from the Point Wells development.

7. Richmond Beach Drive NW between NW 196th Street and NW 205th Street – Sidewalks and Safety:

Richmond Beach Drive NW is a collector arterial with a speed limit of 25 MPH. It is the only road to serve the Point Wells site, and would carry all trips entering and exiting the development. It consists of two 12-foot wide lanes, one in each direction. The terrain between NW 196th Street and NW 205th Street is made up of a number of horizontal and vertical curves. There are no sidewalks, and only the east side has some areas wide enough to park. The current 50 afternoon peak-hour trips (averaging one car every 72 seconds) allow for numerous gaps in traffic to allow easy pedestrian access along and across Richmond Beach Drive NW. Under existing conditions, even with the lack of sidewalks and pedestrian amenities, the low volume of vehicles can make the area seem friendlier to walkers and bicyclists.

Staff reviewed the impacts of the eight different scenarios, and the increase in PM peak hour volumes in all the scenarios will require roadway safety improvements to mitigate the impacts of the development. *Adding just 550 trips as stated in the SEIS equates to an average of one car every 6.5 seconds in the peak hour.*

Improvements should include, at a minimum, a sidewalk on one side of the street. If more trips are approved, additional widening will be required to help maintain traffic flow and improve pedestrian access across Richmond Beach Drive NW.

8. NW Richmond Beach Road & 8th Avenue NW – Intersection Improvement:

This intersection is controlled by a traffic signal. It has five approaches, which adds to overall intersection delay. Should 550 trips or more be approved, this intersection will operate at a LOS (Level of Service) “E” or worse. Additional mitigations will be required, such as an intersection reconfiguration to eliminate the Southwest approach, or possibly a roundabout.

Mitigation Projects Required for 825 Trips and Above

9. Richmond Beach Drive NW & NW 196th Street – Intersection Improvement:

The model assumes this intersection will utilize additional stop signs to reduce overall driver delay. However, should more than 825 trips (fourth scenario) be approved, additional mitigations may be required, such as a channelized westbound to northbound right turn, an intersection reconfiguration, or even a roundabout. The draft SEIS recommends widening NW 196th Street to four lanes. However, given the movements to and from the Point Wells site, the extra lanes may not be of much benefit at this intersection.

10. NW 196th Street & 24th Avenue NW – Intersection Improvement:

The model assumes this intersection will utilize additional stop signs to reduce overall driver delay. However, should more than 825 trips (4th Scenario) be approved, additional mitigations may be required, such as an intersection reconfiguration, or even a roundabout.

Safety Analysis

Residents in the Richmond Beach community have raised concerns about the number of vehicle collisions on NW Richmond Beach Road, especially between 12th Avenue NW and 15th Avenue NW. A review of the City of Shoreline collision records for a three-year period (2006, 2007, and

2008) revealed 13 reported collisions, five reported injuries, and one fatality. *This equates to a collision rate of 2.99 crashes per million vehicle miles (MVM), making this roadway segment rank 39th in Shoreline for this time period.* In comparison, WSDOT's 2007 "Annual Collision Data Summary" report shows that the collision rate for minor arterial routes in urban areas within the Northwest region is 3.79 collisions per MVM.

An analysis of the collision record for the intersection of 3rd Avenue NW and NW Richmond Beach Road for the three-year period (2006, 2007 and 2008) revealed a collision rate of 0.81 per million entering vehicles. This location ranks #1 in the City of Shoreline among intersections for reported frequency of collisions and by collision rate. The operation and safety of the intersection of 3rd Avenue NW & NW Richmond Beach Road can be improved by building separate left-turn pockets. Of the 19 reported collisions, 13 are the type correctable by the addition of signalized left turn lanes.

Attachment C is the City of Shoreline reported collision report from 1/1/2006 to 12/31/2008, sorted by rate.

Shoreline's collision data are based on collision data provided by Washington Department of Transportation (WSDOT); however, there is a difference between the two databases as to how the collision data are assigned to the databases. The City of Shoreline, as do most municipalities, records intersection collisions as those *that actually occur within the intersection area*; in comparison, WSDOT's *includes all collisions occurring within 20 feet of all approaches and within the entire length of any of the turn pockets for all approaches.*

When comparing results of the collision records from WSDOT's and Shoreline's data bases, it is important to understand these differences between how collisions are recorded in the two systems. For example, a collision history request for Richmond Beach Road NW would generate a higher number from WSDOT's database than from Shoreline's for the reasons stated above.

Collision patterns and types are influenced by factors other than traffic volumes, such as roadway geometry, speed, number of lanes and compliance with regulatory signs and rules of the road. While increased traffic generated by the Point Wells development would likely result in a proportionate increase in the number of traffic collisions, those increases would not necessarily mean an increase in severity. As congestion and the proportionate number of collision increase, there would tend to be more of a change in collision *types*, such as an increase in rear-end collisions.

Appendix

- Attachment A – Initial City comments on draft SEIS
- Attachment B – Summarized results of Models
- Attachment C – Collision Data
- Attachment D – Mitigation Planning Level Cost Estimates

APPENDIX A

City Comments of Draft SEIS



March 23, 2009

Mr. Steve Skorney
Snohomish County Planning and Development Services M/S #604
3000 Rockefeller Ave
Everett, WA 98201-4201

Subject: Paramount Docket XIII DSEIS Comment

The City of Shoreline appreciates the opportunity to comment on the DSEIS. This comment letter is a follow up to our comments presented at the February 25 Planning Commission hearing orally and in writing; those comments are incorporated into this letter by reference.

The City's comments in this letter will focus solely on the contents of the DSEIS issued on February 6, 2009. It will not focus on the merits of the proposal. Our additional comments on the merits of the proposal will be offered prior to or at the County Council Public Hearing which has not yet been scheduled.

Shoreline's DSEIS comments focus on three areas:

1. Transportation
2. Police and Fire Provision
3. Other Service Provision

Transportation

Transportation Model Assumptions Are Flawed

1. Model assigns too high a proportion of trips coming from and going to Snohomish County

Figures 3.11-5 & 6 – the study assumes that 60% of all trips generated for Point Wells are related to Snohomish County, and only 40% for King County, including Seattle. Of these, perhaps 5% to the north and 5% to the south may be destined for the eastside. Given that the major population and employment center for the region lies to the south of Point Wells, it appears that the trip distribution assumption should be more 50%-50%, or even 40%-60% instead. By designating only 40% of the trips to the south, the model does not adequately address impacts in King County and the City of Shoreline.

2. Assumption about Background Traffic Growth is High

It appears that one of the assumptions used to develop the future scenario uses a sustained background traffic growth rate of approximately 1.5%, with some areas even higher. This may not be valid for a couple reasons. First, the City of Shoreline is essentially "built-out", with development occurring either on scattered lots throughout the city, through sub-division of individual parcels, or demolition of existing structures. Second, the City of Shoreline has been experiencing a decline in traffic volumes over the last 4 years (2004 to 2008) in the range of -6%. While there may be some years of positive traffic growth, it is unlikely that there will be sustained growth for 18 years, especially given the current economic outlook.

The impact of the lower traffic growth is very important in understanding the significances of the Point Wells development. With little traffic growth, the need for some of the future capacity and safety projects is focused not on background growth but rather the redevelopment of Point Wells itself as the major trigger.

Perhaps stated differently, the DSEIS traffic modeling overstates the background growth, thereby diluting the true impact of the proposed development as the traffic disperses through the network of streets. Therefore, the mitigation for the development is likely to be understated.

3. Assumption about future Bus Service are optimistic

The DSEIS references the Community Transit and Metro routes located in the study area. However, as the DSEIS correctly identifies, the nearest part of the project site is approximately ½ mile from the nearest transit route. Metro is the only transit provider this close to the site. Currently, Metro has two routes that provide service in the vicinity of the proposed project. One is an all day, local route that travels from Richmond Beach to the Northgate Transit center. The other route is a weekday, peak only route that travels from Richmond Beach to downtown Seattle. (The DSEIS incorrectly identifies only one route in this area – the all day, local route.) While the proposed zoning may result in density sufficient to support transit, there are no assumptions made in the DSEIS that transit service to the site will increase.

On a side note, there are reasons to believe that it is unlikely that transit service would be extended to the site. Community Transit provides no service in the area and would not travel through Shoreline to serve this site. Metro's service is overwhelmingly located within King County, with only three routes that cross very slightly into Snohomish County. The development may be able to fund some service extensions but, there is no description of how this will be accomplished and for how long. Over the past few years, King County has trended toward removing their service in Snohomish County. As an agency that is primarily supported by King County tax dollars and facing significant budget constraints, it is highly unlikely that Metro would extend any routes to serve Snohomish County, solely because there is a large population concentration nearby.

4. Model assumes a greater dispersion of traffic onto local streets than is likely to occur

Appendix C lists the existing and assumed future traffic volumes assigned to each turning movement at study intersections. It appears that the model assumptions allocate too many trips onto local streets and collectors instead of using the minor and principal arterials. For example, in following the eastbound PM trips from Point Wells, 87% of the traffic disbursts off of NW Richmond Beach Rd before Fremont Ave N. The traffic modeling in the DSEIS assumes that only 13% of the trips make it to SR99, where 4% turn north, 2% turn south, and 9% continuing east. SR 99 is a state highway and a principal arterial and a significant north/south connector. Our modeling shows and staff concurs that a more reasonable assumption is that a much higher percentage of trips, perhaps 60%, will reach SR 99 and use it to travel both north and south and to make connections to I-5. This may trigger a need for additional roadway improvements that is not recognized in the modeling done for the DSEIS.

5. Planned transportation improvements in King County are not included in the model; staff is unsure of the effect on the model if these improvements were to be included.

Appendix E – The travel demand forecasting report lists the highway improvement projects in the pipeline for 2015 and 2025. However, only Snohomish county projects are listed, most with little to no significance to the Point Wells proposal. Absent are any projects in King County, especially those that are significant to the DSEIS, such as the Aurora Corridor Improvement Project, phases II and III.

6. Zonal analysis of traffic flow south of Richmond Beach Road is lacking, leading to less accuracy in traffic forecast

Appendix E, Figure 2 shows the zones used to develop the model. The main corridor for access to the site is NW Richmond Beach Road in Shoreline. There were a number of new split zones created north of NW Richmond Beach Rd to help improve the accuracy of the forecasting model. However, there was only one split created to the south. If splitting up the zones improves the accuracy of the model, then the lack of this attention in the region of the most impact brings into question the accuracy of the forecast in the area.

Traffic Safety is not adequately addressed

In the area of traffic safety, the report mentions the intersection of 3rd Ave NW and NW Richmond Beach Rd along with the roadway segments of NW Richmond Beach Road between 15th Ave NW and 12th Ave NW, and between 8th Ave NW and 3rd Ave NW as having some of the highest collision rates in the study area. However, there does not appear to be any discussion on the impacts of the development on safety nor offer mitigation to improve safety. A significant increase in volumes associated with the Point Wells development may decrease safety and increase congestion in the corridor, and specifically at 3rd Ave NW and NW Richmond Beach Rd. It is likely that more projects to improve safety and traffic flow will be required in addition to those listed in the study

Conclusion

The DSEIS does a reasonable job considering the Snohomish County impacts, but does not achieve a thorough analysis of the impacts and mitigation needed along the only access route, primarily through the City of Shoreline. Considering that the effect of some of the assumptions in the traffic model that understate the vehicle trips along the roadway system in the City of Shoreline, it is our staff conclusion that full development of the Point Wells site will result in greater impacts than discussed in the study. Corrections to the present and future conditions need to be made to improve confidence in the model output and conclusions.

With current information, it is difficult to estimate the true impacts of increased traffic on Shoreline's streets with the information in the DSEIS.

Staff's initial analysis suggests that the impacts of a development of 3500 units on Shoreline's streets would result in impacts that will be impossible to mitigate.

There will be considerable impact to Richmond Beach Dr NW. Current daily traffic volumes are 790 vpd, with 50am and 50pm peak hour trips. The study indicates that the am peak hour volume will increase to 1,085, and the pm peak hour to 1,310 vehicles. Given the narrow, winding geometry of this roadway, it may not be able to handle this traffic without considerable congestion and delay.

This leads to the following conclusions:

- Development of this area will need to be significantly scaled back for the concepts identified in the DSEIS.
- Traffic model should be modified to address its failings, especially related to trip distribution, and to the background traffic assumptions. The model needs to be re-run to account for these unrealistic assumptions. The analysis should identify unavoidable significant impacts if the property is developed at the levels assumed in the DSEIS, and if impacts can be mitigated to an acceptable level and an acceptable cost, identification of mitigations, their cost, and who should be responsible for bearing the cost.
- If significant impacts cannot be mitigated or if the cost of mitigation is unreasonably high, alternative (less intense) growth scenarios should be identified and analyzed to learn if the reduced growth scenario can be adequately mitigated.
- When considering mitigation measures, traffic and pedestrian safety measures should be taken into account and costs defined.

Shoreline staff would be pleased to assist in reviewing assumptions and outputs of the traffic modeling to make sure that it reflects an accurate representation of reality.

Police and Fire Provision

The Point Wells properties owned by proponent Paramount of Washington, Inc. connects to the regional road network only via Richmond Beach Road in the City of Shoreline. Neither Snohomish County nor the Town of Woodway currently provide vehicular access, police, fire, or emergency medical services to the Paramount property, nor have they indicated their ability to provide such urban services or facilities in the future.

In DSEIS comment letters from Shoreline Fire Department (dated March 9, 2009) and King County Police (dated March 11, 2009), these departments clearly stated that they will not be providing service to Point Wells if it develops as an urban center and is not annexed to Shoreline. If these two entities do not provide service and the Point Wells site is redeveloped as a mixed use center, it is important to identify in the Final SEIS where Police and Fire services come from, and how long the response times will be. It is important to know this information to determine whether the response times should be considered to be significant adverse impacts.

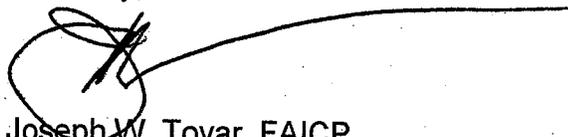
We have enclosed a map of the closest County Police and Fire facilities and their approximate distance to Point Wells.

Other Service Provision

In addition to not providing police or fire protection to this area, neither Snohomish County nor the Town of Woodway current provide parks, code compliance, or sewer service to the Paramount property. These services are integral to a creating and maintaining a residential community. We request that the Final SEIS address these issues in some detail – for example, given the proximity of Snohomish County parkland and library facilities, where are they located and what is the likelihood that Point Wells residents would use Snohomish County facilities when Shoreline facilities are much closer?

Our staff is available to answer questions or assist with analysis. Please contact Steven Cohn at 206-801-2511 or scohn@shorelinewa.gov

Sincerely,



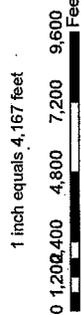
Joseph W. Tovar, FAICP
Director, Planning and Development Services

Attachment: Map of Police and Fire Stations

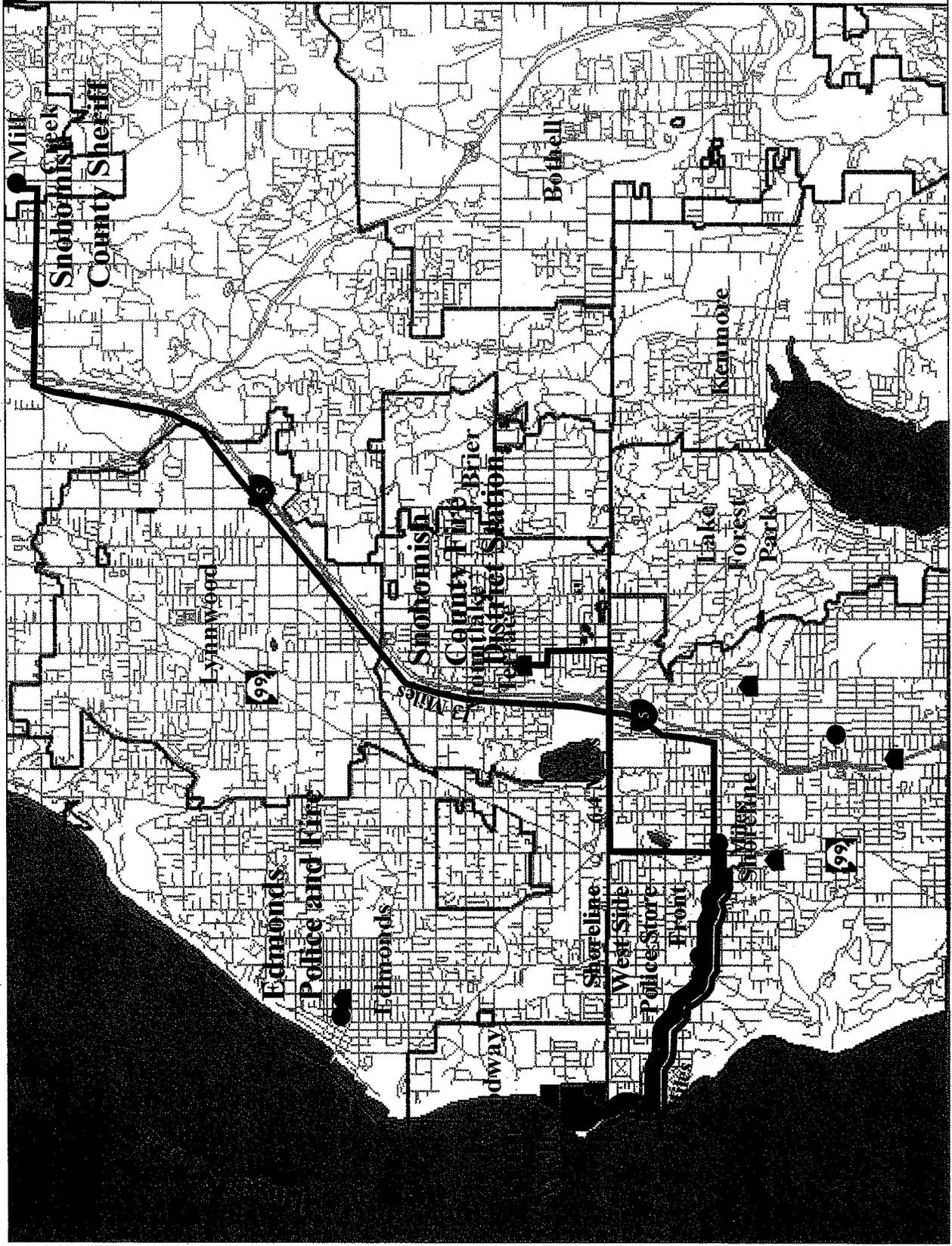
Fire and Police Stations Distance to Pt. Wells

Public Facility

-  Fire Department
-  Police
-  City
-  Point Wells



No warranties of any sort including accuracy, fitness, or merchantability, accompany this product.



APPENDIX B

Analysis Model Summary

Richmond Beach Rd - Point Wells Impact Analysis Model

Intersection Analysis	2007 Base - Shoreline						2025 Base - Shoreline							
	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization
		EB	WB	NB	SB				EB	WB	NB	SB		
Richmond Beach Dr NW/NW 196th St	A		A			6.5	18.9	A		A	A	A	7.4	21.1
NW 196th St/24th Ave NW	A	A	A	A	A	7.3	25.3	A	A	A	A	A	7.7	26.3
NW 196th St/20th Ave NW	A	A	A	A	B	9.1	39.6	B	B	B	A	A	11.9	47.2
NW Richmond Bch Rd/15th Ave NW (w)	A				B	1.5	27.3	A	A	A		C	3.6	32.2
NW Richmond Bch Rd/15th Ave NW (e)	A	A	B	A		9.8	38.1	A	A	A	C		3.6	45.5
NW Richmond Bch Rd/8th Ave NW	C	C	C	D	D	30.5	61	D	D	D	E	D	52.9	86
NW Richmond Bch Rd/3rd Ave NW	A	A	A	B	B	5.5	62.2	A	A	A	B	C	9.2	66.5
N Richmond Bch Rd/Dayton Ave N	B	B	A	C		12.2	41.6	B	B	A	C		12.5	50
N 185th St/Fremont Ave N	C	C	C	D	D	33.4	59.4	C	C	B	D	D	33.3	73.3
N 185th St/Linden Ave N	C	C	B	D	D	21.9	42.4	B	A	B	D	D	16.8	49.4
N 185th St/Midvale Ave N	A	A	A	A	A	6.1	47.7	B	B	B	C	C	18.9	61.8
Aurora Ave N/N 205th St	D	F	E	B	D	42.3	90	E	F	F	E	E	74.7	110.8
Aurora Ave N/N 200th St	C	E	E	B	B	29.2	85.9	C	F	F	C	B	33.7	95.6
Aurora Ave N/N 192nd St	A	E	E	A	A	8.7	61.7	B	F	E	A	B	14	75.4
Aurora Ave N/N 185th St	C	E	E	C	B	29.6	77.6	D	E	F	D	C	54.2	94.7
Aurora Ave N/N 175th St	C	E	D	C	C	34.2	75.3	D	E	E	D	D	50.7	98.1
Midvale Ave N/N 175th St	B	A	A	E	E	10.6	48.4	B	B	A	C	C	11.8	63.8
Fremont Ave N/N 175th St	A	B	B	A	A	7.4	55.9	A	B	B	A	A	8.1	63.4
Arterial Route Analysis	Travel Time	Distance (mi)			Ave Speed	Arterial LOS	Travel Time	Distance (mi)			Ave Speed	Arterial LOS		
EB Richmond Bch Rd btwn 15th Ave NW/Dayton Ave N	217.2	1.4			22.9	C	252.3	1.4			20.3	C		
EB N 185th St btwn Dayton Ave N/Midvale Ave N	193.5	0.6			11.3	E	193.5	0.6			11.3	E		
WB N 185th St btwn Midvale Ave N/Fremont Ave N	178.1	0.4			8.9	E	202.8	0.4			7.8	E		
WB Richmond Bch Rd btwn Fremont Ave N/20th Ave NW	170.4	1.1			22.5	C	280.2	1.7			21.7	C		
NB Aurora Ave N btwn N 205th St/N 175th St	257.1	1.7			24	C	363.1	1.7			17	D		
SB Aurora Ave N btwn N 205th St/N 175th St	240.6	1.7			24.8	C	276.9	1.7			21.6	D		

Richmond Beach Rd - Point Wells Impact Analysis Model

Intersection Analysis	2025 Point Wells - 0550 trips							2025 Point Wells - 0700 trips								
	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization		
		EB	WB	NB	SB				EB	WB	NB	SB				
Richmond Beach Dr NW/NW 196th St	B		B	A	B	12.8	52.1	C		B	A	C	16.6	61		
NW 196th St/24th Ave NW	B	C	B	B	A	13.2	45.5	C	C	C	B	A	17.6	45.7		
NW 196th St/20th Ave NW	A	A	A	A	A	8.2	62.6	A	A	A	A	B	8.7	66.8		
NW Richmond Bch Rd/15th Ave NW (w)	A	A	A		E	5.8	40.8	A	A	A		C	3.2	42.1		
NW Richmond Bch Rd/15th Ave NW (e)	A	A	A		E	4	60.2	A	A	A		C	3	64.2		
NW Richmond Bch Rd/8th Ave NW	E	E	D		F	D	66	91.2	E	E	E	F	E	78	93.5	
NW Richmond Bch Rd/3rd Ave NW	A	A	A		C	C	9.9	71.3	B	A	A	C	C	11.3	73.7	
N Richmond Bch Rd/Dayton Ave N	B	B	A		C		13.3	58	B	B	A	C	13.4	59.4		
N 185th St/Fremont Ave N	D	C	D		D	D	37.8	78.4	D	C	B		E	E	37.2	80.5
N 185th St/Linden Ave N	A	A	A		C	C	9.7	55	B	A	A		D	D	12.4	55.9
N 185th St/Midvale Ave N	C	B	B		D	D	21.5	63	B	B	B		C	C	19.1	63.6
Aurora Ave N/N 205th St	E	F	F		E	E	79.2	112.4	E	F	F		E	E	79.3	112.8
Aurora Ave N/N 200th St	C	F	F		C	B	34.9	97.6	D	F	E		D	B	38.3	98
Aurora Ave N/N 192nd St	B	F		E	A	B	14.6	77.2	B	F	E		A	B	13.9	77.5
Aurora Ave N/N 185th St	D	F	F		D	C	53.8	98.7	D	F	F		D	D	54.5	99.5
Aurora Ave N/N 175th St	D	F	F		D	C	50.8	101.1	D	F	F		D	C	50.7	102.2
Midvale Ave N/N 175th St	B	A	A		F	F	14.5	64.9	B	A	A		F	F	14.4	65.1
Fremont Ave N/N 175th St	A	B	B		A	A	8.1	64.5	A	B	B		A	A	9.5	64.7
Arterial Route Analysis	Travel Time	Distance (mi)		Ave Speed		Arterial LOS		Travel Time	Distance (mi)		Ave Speed		Arterial LOS			
EB Richmond Bch Rd btwn 15th Ave NW/Dayton Ave N	251.4	1.4		20.3		C		276.2	1.4		18.5		C			
EB N 185th St btwn Dayton Ave N/Midvale Ave N	207.6	0.6		10.5		E		193.6	0.6		11.3		E			
WB N 185th St btwn Midvale Ave N/Fremont Ave N	234.5	0.4		6.7		F		210.6	0.4		7.5		E			
WB Richmond Bch Rd btwn Fremont Ave N/20th Ave NW	274.1	1.7		22.2		C		301.5	1.7		20.2		C			
NB Aurora Ave N btwn N 205th St/N 175th St	366.9	1.7		16.8		E		380.5	1.7		16.2		E			
SB Aurora Ave N btwn N 205th St/N 175th St	272.5	1.7		21.9		D		281.5	1.7		21.2		D			

Richmond Beach Rd - Point Wells Impact Analysis Model

Intersection Analysis	2025 Point Wells - 0825 trips						2025 Point Wells - 0950 trips							
	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization
		EB	WB	NB	SB				EB	WB	NB	SB		
Richmond Beach Dr NW/NW 196th St	C	C	A	D	22.9	68.5	E	D	A	E	36.6	76		
NW 196th St/24th Ave NW	D	D	D	B	B	25.3	45.9	E	E	F	B	B	43.2	49
NW 196th St/20th Ave NW	A	A	A	A	B	9.2	70.2	A	A	B	B	B	9.6	73.8
NW Richmond Bch Rd/15th Ave NW (w)	A	A	A		C	3.4	43.1	A	A	A		C	3.1	44.2
NW Richmond Bch Rd/15th Ave NW (e)	A	A	A	C		3	67.5	A	A	A	C		3.1	70.8
NW Richmond Bch Rd/8th Ave NW	E	E	E	F	E	76.6	95.5	F	E	F	F	E	83.6	97.4
NW Richmond Bch Rd/3rd Ave NW	B	A	A	C	D	12.3	76.8	B	A	A	C	D	13.7	78.7
N Richmond Bch Rd/Dayton Ave N	B	B	A	C		13.5	60.5	B	B	A	C		13.6	61.7
N 185th St/Fremont Ave N	D	C	C	E	E	38.8	82.3	D	C	C	E	E	40.8	84.1
N 185th St/Linden Ave N	B	A	A	D	D	11.8	56.6	B	A	A	D	D	11.9	57.4
N 185th St/Midvale Ave N	B	B	B	C	C	18.6	64	B	B	B	C	C	18.7	64.5
Aurora Ave N/N 205th St	F	F	F	E	E	80.5	113	F	F	F	F	E	82.4	113.3
Aurora Ave N/N 200th St	D	F	F	C	B	35.7	98.3	D	F	F	C	B	36	98.6
Aurora Ave N/N 192nd St	B	F	E	A	B	14.8	77.7	B	F	E	A	B	14.8	77.9
Aurora Ave N/N 185th St	E	F	F	D	D	59.5	100.1	E	F	F	D	D	62.2	101.7
Aurora Ave N/N 175th St	D	F	F	D	C	51.3	102.9	D	F	F	D		54	103.8
Midvale Ave N/N 175th St	B	A	A	F	F	14.3	65.2	A	A	A	D	D	9.6	65.4
Fremont Ave N/N 175th St	A	B	B	A	A	8.1	64.9	A	B	B	A	A	8.1	65.2
Arterial Route Analysis	Travel Time	Distance (mi)			Ave Speed	Arterial LOS	Travel Time	Distance (mi)			Ave Speed	Arterial LOS		
EB Richmond Bch Rd btwn 15th Ave NW/Dayton Ave N	255.3	1.4			20	C	259.5	1.4			19.7	C		
EB N 185th St btwn Dayton Ave N/Midvale Ave N	194.8	0.6			11.2	E	195.8	0.6			11.1	E		
WB N 185th St btwn Midvale Ave N/Fremont Ave N	229.8	0.4			6.9	F	239.9	0.4			6.6	F		
WB Richmond Bch Rd btwn Fremont Ave N/20th Ave NW	312.2	1.7			19.5	C	322.7	1.7			18.9	C		
NB Aurora Ave N btwn N 205th St/N 175th St	376.6	1.7			16.4	E	384.4	1.7			16.1	E		
SB Aurora Ave N btwn N 205th St/N 175th St	291.4	1.7			20.5	D	292.3	1.7			20.4	D		

Richmond Beach Rd - Point Wells Impact Analysis Model

Intersection Analysis	2025 Point Wells - 1100 trips							2025 Point Wells - 1225 trips						
	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization
		EB	WB	NB	SB				EB	WB	NB	SB		
Richmond Beach Dr NW/NW 196th St	F		F	A	F	71.6	84.9	F		F	A	F	101.6	92.4
NW 196th St/24th Ave NW	F	F	F	B	B	77.8	54	F	F	F	B	B	113.2	58.4
NW 196th St/20th Ave NW	B	A	B	B	B	10.1	78	B	A	B	B	B	10.4	81.5
NW Richmond Bch Rd/15th Ave NW (w)	A	A	A		C	3.2	46.3	A	A	A		C	3	48.6
NW Richmond Bch Rd/15th Ave NW (e)	A	A	A	C		3.8	74.8	A	A	A	C		3.4	78.2
NW Richmond Bch Rd/8th Ave NW	F	E	F	F	E	88.1	99.6	F	E	F	F	E	94.5	101.6
NW Richmond Bch Rd/3rd Ave NW	B	A	A	C	D	14.5	80.9	B	B	A	C	D	15.8	82.9
N Richmond Bch Rd/Dayton Ave N	B	B	A	C		14.1	63.2	B	B	A	C		14.5	64.3
N 185th St/Fremont Ave N	D	C	C	E	E	43.8	86.2	D	C	D	E	E	47.7	88
N 185th St/Linden Ave N	B	A	A	D	D	11.6	58.9	B	A	A	D	D	11.3	60.2
N 185th St/Midvale Ave N	B	B	B	C	C	19.2	64.9	B	B	B	C	C	19.4	65.4
Aurora Ave N/N 205th St	F	F	F	F	E	81.5	113.6	F	F	F	F	E	82.2	113.9
Aurora Ave N/N 200th St	D	F	F	D	B	40.8	99.1	D	F	F	D	B	41.9	99.4
Aurora Ave N/N 192nd St	B	F	E	A	C	15.7	78.2	B	F	E	A	C	15.5	78.5
Aurora Ave N/N 185th St	E	F	F	D	E	65.4	103.7	E	F	F	D	E	69.2	105.5
Aurora Ave N/N 175th St	D	F	F	D	C	54	104.8	E	F	F	D	C	55.5	105.6
Midvale Ave N/N 175th St	B	A	A	D	D	10.5	65.6	A	A	A	D	D	9.6	65.7
Fremont Ave N/N 175th St	A	B	B	A	A	8.1	65.4	A	B	B	A	A	8.2	65.6
Arterial Route Analysis	Travel Time	Distance (mi)			Ave Speed	Arterial LOS	Travel Time	Distance (mi)			Ave Speed	Arterial LOS		
EB Richmond Bch Rd btwn 15th Ave NW/Dayton Ave N	261.6	1.4			19.6	C	260	1.4			19.7	C		
EB N 185th St btwn Dayton Ave N/Midvale Ave N	196.6	0.6			11.1	E	198.1	0.6			11	E		
WB N 185th St btwn Midvale Ave N/Fremont Ave N	249.7	0.4			6.3	F	264.9	0.4			6	F		
WB Richmond Bch Rd btwn Fremont Ave N/20th Ave NW	328.3	1.7			18.6	C	342.4	1.7			17.8	D		
NB Aurora Ave N btwn N 205th St/N 175th St	403	1.7			15.3	E	407.5	1.7			15.2	E		
SB Aurora Ave N btwn N 205th St/N 175th St	301.2	1.7			19.8	D	311.3	1.7			19.2	D		

Richmond Beach Rd - Point Wells Impact Analysis Model

Intersection Analysis	2025 Point Wells - 1286 trips							2025 Point Wells - 1350 trips						
	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization	Overall LOS	Approach LOS				Ave Intersect Delay	Intersect Capacity Utilization
		EB	WB	NB	SB				EB	WB	NB	SB		
Richmond Beach Dr NW/NW 196th St	F		F	A	F	120.7	96	F		F	A	F	142	99.9
NW 196th St/24th Ave NW	F	F	F	B	B	130.8	60.2	F	F	F	B	B	154.5	62.9
NW 196th St/20th Ave NW	B	A	B	B	B	10.6	83.2	B	A	B	B	B	11	85
NW Richmond Bch Rd/15th Ave NW (w)	A	A	A		C	3	49.5	A	A	A		C	4.3	50.8
NW Richmond Bch Rd/15th Ave NW (e)	A	A	A	C		3.5	79.8	A	A	A	C		4.6	81.5
NW Richmond Bch Rd/8th Ave NW	F	E	F	F	E	97.6	102.4	F	E	F	F	F	97.3	103.6
NW Richmond Bch Rd/3rd Ave NW	B	B	A	C	D	16.6	83.7	B	B	B	C	D	15.8	84.8
N Richmond Bch Rd/Dayton Ave N	B	B	B	C		14.8	65	B	B	B	C		15	65.5
N 185th St/Fremont Ave N	D	C	D	E	E	49.3	88.7	D	C	C	E	F	49.8	89.8
N 185th St/Linden Ave N	B	A	A	D	D	10.8	60.8	B	A	A	D	D	11.1	61.7
N 185th St/Midvale Ave N	B	B	B	C	C	19.4	65.6	B	B	B	C	C	19.4	65.8
Aurora Ave N/N 205th St	F	F	F	F	E	82.6	114.1	F	F	F	F	E	82.9	114.2
Aurora Ave N/N 200th St	D	F	F	D	B	42.3	99.6	D	F	F	D	B	43	99.7
Aurora Ave N/N 192nd St	B	F	E	A	C	16.1	78.6	B	F	E	A	C	16	78.7
Aurora Ave N/N 185th St	E	F	F	D	E	71.6	106.3	E	F	F	D	E	71	107.2
Aurora Ave N/N 175th St	E	F	F	D	C	56.1	105.9	E	F	F	D	C	56.5	106.5
Midvale Ave N/N 175th St	A	A	A	D	D	9.6	65.8	A	A	A	D	D	9.6	65.9
Fremont Ave N/N 175th St	A	B	B	A	A	8.2	65.7	A	B	B	A	A	8.2	65.8
Arterial Route Analysis	Travel Time	Distance (mi)			Ave Speed	Arterial LOS	Travel Time	Distance (mi)			Ave Speed	Arterial LOS		
EB Richmond Bch Rd btwn 15th Ave NW/Dayton Ave N	261.5	1.4			19.6	C	259.4	1.4			19.7	C		
EB N 185th St btwn Dayton Ave N/Midvale Ave N	198.7	0.6			11	E	199.5	0.6			10.9	E		
WB N 185th St btwn Midvale Ave N/Fremont Ave N	270.9	0.4			5.8	F	267.9	0.4			5.9	F		
WB Richmond Bch Rd btwn Fremont Ave N/20th Ave NW	350.8	1.7			17.4	D	347.9	1.7			17.5	D		
NB Aurora Ave N btwn N 205th St/N 175th St	410.7	1.7			15.1	E	410.1	1.7			15.1	E		
SB Aurora Ave N btwn N 205th St/N 175th St	316.2	1.7			18.9	D	311.6	1.7			19.2	D		

APPENDIX C
Collision Reports

City of Shoreline - Intersection Collision Report

Reported Collisions from 1/1/2006 to 12/31/2008 sorted by Rate

Crash Rate per million entering vehicles per year

	Location	Signal	# of Crashes	# of Injuries	# of Fatal	Crash Rate	Injury Rate	Fatal Rate
1	3rd Ave NW & NW Richmond Beach Rd	y	19	11	0	0.81	0.47	0
2	10th Ave NE & NE 175th St	y	14	14	0	0.72	0.72	0
3	Meridian Ave N & N 155th St	y	15	7	0	0.70	0.33	0
4	25th Ave NE & NE 150th St		5	4	0	0.69	0.55	0
5	Linden Ave N & N 175th St		7	4	0	0.58	0.33	0
6	Linden Ave N & N 185th St	y	10	6	0	0.58	0.35	0
7	Greenwood Ave N & Carlyle Hall Rd N		5	0	0	0.58	0.00	0
8	15th Ave NE & NE Perkins Way	y	10	8	0	0.54	0.43	0
9	Fremont Ave N & N 200th St		5	0	0	0.50	0.00	0
10	Linden Ave N & N 160th St		5	2	0	0.46	0.18	0
11	Meridian Ave N & N 200th St	y	7	6	0	0.43	0.37	0
12	Midvale Ave N & N 185th St	y	6	4	0	0.42	0.28	0
13	Ashworth Ave N & N 185th St		6	8	0	0.42	0.55	0
14	5th Ave NE & NE 155th St	y	7	5	0	0.40	0.28	0
15	15th Ave NE & NE 155th St	y	8	6	0	0.36	0.27	0
16	Meridian Ave N & N 175th St	y	15	7	0	0.35	0.16	0
17	Fremont Ave N & N 185th St	y	8	5	0	0.34	0.21	0
18	5th Ave NE & NE 175th St	y	8	3	0	0.33	0.12	0
19	Meridian Ave N & N 185th St	y	8	3	0	0.33	0.12	0
20	15th Ave NE & NE 168th St		6	6	0	0.31	0.31	0
21	15th Ave NE & NE 150th St	y	6	6	0	0.31	0.31	0
22	19th Ave NE & Ballinger Way NE	y	9	6	0	0.28	0.19	0
23	15th Ave NE & NE 146th St		5	2	0	0.27	0.11	0
24	19th Ave NE & NE 205th St	y	5	1	0	0.24	0.05	0
25	Midvale Ave N & N 175th St	y	6	2	0	0.23	0.08	0
26	Westminster Wy N & N 155th St	y	5	3	0	0.23	0.14	0
27	Aurora Ave N & N 182nd St		8	4	0	0.19	0.10	0
28	Aurora Ave N & N 200th St	y	6	3	0	0.15	0.07	0
29	Aurora Ave N & N 165th St	y	6	1	0	0.14	0.02	0
30	Aurora Ave N & N 195th St		5	6	0	0.14	0.17	0
31	Aurora Ave N & N 192nd St	y	5	2	0	0.14	0.06	0
32	Aurora Ave N & N 185th St	y	7	3	0	0.14	0.06	0
33	Aurora Ave N & N 155th St	y	7	5	0	0.12	0.09	0
34	Aurora Ave N & N 160th St	y	5	5	0	0.11	0.11	0
35	Aurora Ave N & N 175th St	y	5	2	0	0.09	0.03	0

City of Shoreline - Mid-Block Collision Report

Reported Collisions from 1/1/2006 to 12/31/2008 sorted by Rate

Crash Rate per million vehicle-miles per year

	<u>Location</u>	<u># of Crashes</u>	<u># of Injuries</u>	<u># of Fatal</u>	<u>Crash Rate</u>	<u>Injury Rate</u>	<u>Fatal Rate</u>
1	N 175th St from Linden Ave N to Aurora Ave N	14	7	0	35.06	17.53	0.00
2	Aurora Ave N from Westminster Way N to N 160th St	19	4	0	28.10	5.92	0.00
3	Meridian Ave N from N 175th St to N 176th St	9	9	0	22.49	22.49	0.00
4	N 167th St from Aurora Ave N to Stone Ave N	5	2	0	18.62	7.45	0.00
5	N 185th St from Aurora Ave N to Midvale Ave N	17	6	0	18.22	6.43	0.00
6	N 155th St from Aurora Ave N to Midvale Ave N	14	4	0	17.33	4.95	0.00
7	N 185th St from Meridian Ave N to Meridian Ct N	5	4	0	17.32	13.86	0.00
8	Aurora Ave N from N 184th St to N 185th St	18	8	1	12.45	5.53	0.69
9	3rd Ave NW from NW Richmond Beach Rd to NW 189th St	6	1	0	11.79	1.96	0.00
10	19th Ave NE from NE 199th St to Ballinger Way NE	7	3	0	10.63	4.56	0.00
11	Aurora Ave N from N 199th St to N 200th St	22	9	1	9.87	4.04	0.45
12	Meridian Ave N from N 203rd St to N 205th St	10	1	0	9.11	0.91	0.00
13	N 160th St from Linden Ave N to Aurora Ave N	10	3	0	8.81	2.64	0.00
14	15th Ave NE from NE 154th St to NE 155th St	7	4	0	7.73	4.42	0.00
15	5th Ave NE from NE 145th St to 145th St I-5 rp	5	1	0	7.29	1.46	0.00
16	15th Ave NE from NE 172nd St to NE 175th St	16	8	0	7.20	3.60	0.00
17	Aurora Ave N from N 175th St to Ronald PI N	54	21	0	6.98	2.71	0.00
18	Aurora Ave N from N 185th St to N 192nd St	33	20	0	6.98	4.23	0.00
19	15th Ave NE from NE 146th St to NE 147th St	7	2	0	6.78	1.94	0.00
20	N 175th St from Aurora Ave N to Ronald PI N	6	1	0	6.00	1.00	0.00
21	N 200th St from Aurora Ave N to Aurora Vill Mall N	8	7	0	5.94	5.20	0.00
22	Aurora Ave N from N 152nd St to N 155th St	37	16	0	5.80	2.51	0.00
23	Aurora Ave N from Ronald PI N to N 175th St	19	10	0	5.52	2.90	0.00
24	15th Ave NE from NE 175th St to NE 177th St	10	7	0	4.82	3.38	0.00

City of Shoreline - Mid-Block Collision Report

Reported Collisions from 1/1/2006 to 12/31/2008 sorted by Rate

Crash Rate per million vehicle-miles per year

	<u>Location</u>	<u># of Crashes</u>	<u># of Injuries</u>	<u># of Fatal</u>	<u>Crash Rate</u>	<u>Injury Rate</u>	<u>Fatal Rate</u>
25	NE 175th St from 12th Ave NE to 15th Ave NE	9	7	0	4.42	3.44	0.00
26	Aurora Ave N from N 167th St to N 170th St	22	8	0	4.21	1.53	0.00
27	NW Richmond Beach Rd from 1st Ave NW to 2nd Ave NW	5	2	0	4.14	1.66	0.00
28	Aurora Ave N from N 198th St to N 199th St	8	6	0	3.66	2.74	0.00
29	Aurora Ave N from N 149th St to N 152nd St	20	14	0	3.61	2.53	0.00
30	Aurora Ave N from N 160th St to N 163rd St	18	6	0	3.47	1.16	0.00
31	19th Ave NE from Ballinger Way NE to NE 205th St	6	1	0	3.19	0.53	0.00
32	N 185th St from Linden Ave N to Aurora Ave N	6	2	0	3.19	1.06	0.00
33	N 175th St from Corliss Ave N to 175th St RAMP SB	6			3.17	0.00	0.00
34	Aurora Ave N from N 182nd St to N 184th St	14	10	0	3.15	2.25	0.00
35	N 175th St from Midvale Ave N to Ashworth Ave N	14	7	0	3.10	1.55	0.00
36	15th Ave NE from Forest Park Dr NE to NE 205th St	7	4	0	3.07	1.76	0.00
37	Aurora Ave N from Ronald PI N to N 182nd St	9	5	0	3.03	1.68	0.00
38	Aurora Ave N from N 145th St to N 149th St	21	4	0	3.01	0.57	0.00
39	NW Richmond Beach Rd from 12th Ave NW to 15th Ave NW	13	5	1	2.99	1.15	0.23
40	Ballinger Way NE from 19th Ave NE to NE 205th St	23	11	0	2.96	1.41	0.00
41	N 175th St from Wallingford Ave N to Meridian Ave N	9	3	0	2.94	0.98	0.00
42	N 175th St from Meridian Ave N to Corliss Ave N	17	4	0	2.90	0.68	0.00
43	Aurora Ave N from N 165th St to N 167th St	15	11	0	2.78	2.04	0.00
44	Aurora Ave N from Firlands Way N to N 198th St	8	7	0	2.76	2.42	0.00
45	Aurora Ave N from N 170th St to Ronald PI N	18	13	0	2.71	1.96	0.00
46	NW Richmond Beach Rd from 3rd Ave NW to 8th Ave NW	13	7	0	2.61	1.41	0.00
47	Aurora Ave N from N 192nd St to N 195th St	17	9	0	2.57	1.36	0.00
48	NE 175th St from 8th Ave NE to 10th Ave NE	5	1	0	2.46	0.49	0.00

City of Shoreline - Mid-Block Collision Report

Reported Collisions from 1/1/2006 to 12/31/2008 sorted by Rate

Crash Rate per million vehicle-miles per year

	<u>Location</u>	<u># of Crashes</u>	<u># of Injuries</u>	<u># of Fatal</u>	<u>Crash Rate</u>	<u>Injury Rate</u>	<u>Fatal Rate</u>
49	Aurora Ave N from N 155th St to Westminster Way N	17	13	0	2.39	1.82	0.00
50	Ballinger Way NE from NE 195th St to 23rd Ave NE	11	3	0	2.11	0.58	0.00
51	NE 205th St from Ballinger Way NE to 19th Ave NE	6	4	0	1.99	1.33	0.00
52	Aurora Ave N from N 163rd St to N 165th St	10	3	0	1.93	0.58	0.00
53	Aurora Ave N from N 200th St to N 205th St	16	1	0	1.84	0.12	0.00
54	N Richmond Beach Rd from 1st Ave NW to Dayton Ave N	6	1	0	1.66	0.28	0.00

APPENDIX D

Mitigation Planning level Cost Estimates

**Point Wells Mitigation
Planning Level Cost Estimates**

<u>Location</u>	<u>Description of Improvement</u>	<u>Estimate</u>
1 Richmond Beach Corridor Study	Safety, Efficiency, Multimodal Plan	\$200,000.00
2 NW 196th Street Richmond Beach Drive NW to 24th Ave NW	Sidewalk on both sides of roadway	\$2,053,773.00
3 NW 196th Street 24th Avenue NW to 20th Avenue NW	Sidewalk on the east side of roadway	\$300,000.00
4 NW 195th Street & 20th Avenue NW	Traffic Signal with additional EB-WB left turn lanes	\$1,330,973.00
5 NW Richmond Beach Road NW & 15th Avenue NW	Traffic Signal and additional EB-WB left turn lanes	\$2,208,156.00
6 NW Richmond Beach Road NW & 3rd Avenue NW	Widen & replace traffic signal for EB-WB left turns	\$2,316,775.00
7a Richmond Beach Drive NW NW 196th Street to NW 205th Street	Sidewalk on the east side of roadway	\$1,557,414.00
7b Richmond Beach Drive NW NW 196th Street to NW 205th Street	Sidewalk & Street Improvements on the west side of roadway	\$16,683,236.00
8 Richmond Beach Road NW & 8th Avenue NW	Intersection Safety and Capacity Improvements	\$2,131,458.00
9 Richmond Beach Road NW & 24th Avenue NW	Intersection Improvements	\$1,527,870.00
10 NW 196th Street & 24th Avenue NW	Intersection Improvements	<u>\$1,882,294.00</u>
	TOTAL	\$32,191,949.00