

# MUKILTEO MULTIMODAL PROJECT

## Draft Environmental Impact Statement

### Hazardous Materials Discipline Report



JANUARY 2012



**MUKILTEO MULTIMODAL PROJECT  
DRAFT ENVIRONMENTAL IMPACT STATEMENT**

**Hazardous Materials  
Discipline Report**

**Prepared for:**



**U.S. Department of Transportation  
Federal Transit Administration**



**Washington State  
Department of Transportation**



**January 2012**



# **Hazardous Materials Discipline Report**

## **Mukilteo Multimodal Project Draft Environmental Impact Statement**

Prepared by:

**Northwest Region Environmental Program  
Washington State Department of Transportation**

For:

**Federal Transit Administration and  
Washington State Department of Transportation**

January 2012



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- A Report Methodology
- B Laws, Regulations, Guidance Documents, and Policies Governing Handling, Disposal, and Remediation of Hazardous Materials
- C Table C-1. Hazardous Materials Sites Unrelated to the Mukilteo Tank Farm; and  
Table C-2. Mukilteo Tank Farm Hazardous Materials Site, Site 13
- D Environmental Data Resources Inc. Radius Map™ Report with GeoCheck®
- E Environmental Data Resources, Inc.-City Directory Abstract
- F Ecology's April 21, 2005, Letter of Partial Satisfaction of Enforcement Order No. DE 93TC-N268; and  
Ecology's May 22, 2006, Letter of Satisfaction of Enforcement Order No. DE 93TC-N268

## ABBREVIATIONS AND DEFINITIONS

<b>Term</b>	<b>Meaning</b>
AAI	All Appropriate Inquiries, 40 CFR Part 312, are specific regulatory requirements and standards that must be met to qualify for certain landowner liability protections under CERCLA.
ACM	Asbestos-containing material
AHERA	The Federal Asbestos Hazard Emergency Response Act
Analysts	The team of people that developed this hazardous materials discipline report
AST	Above ground storage tank
ASTM	American Society for Testing and Materials
BGS	Below ground surface
BMP	Best management practice
Bridge seat	Pile supported concrete platform to which the hinge point for the transfer span is attached
BTEX	Benzene, toluene, ethylbenzene, and xylenes
Bulkhead	A retaining wall along the waterfront
CAA	The Federal Clean Air Act
CERCLA	The Federal Comprehensive Environmental Response, Compensation, and Liability Act (the Superfund Law), 42 U.S.C. §§ 9601- 9675
CERCLIS List	Comprehensive Environmental Response, Compensation and Liability Information System List, a list that contains data on potentially hazardous waste sites that have been reported to EPA by states, municipalities, private companies, and private persons pursuant to Section 103 of CERCLA. CERCLIS contains sites either proposed for listing or listed on the NPL and sites in the screening and assessment phase for possible inclusion on the NPL. The CERCLIS list contains sites reported from 1983 to the present.

<b>Term</b>	<b>Meaning</b>
CERCLIS-NFRAP List	Comprehensive Environmental Response, Compensation and Liability Information System–No Further Remedial Action Planned List, a list of sites formerly on the CERCLIS list and for which no further remedial action is planned. This includes sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration.
CFR or C.F.R.	Code of Federal Regulations
CORRACTS	Corrective Action Report Sites, hazardous waste handling facilities subject to corrective action under RCRA
cPAHs	Carcinogenic polycyclic aromatic hydrocarbons
CSCSL	Confirmed and Suspected Contaminated Sites List (also known as the State Hazardous Waste Sites List or SHWS List), a list of sites in Washington State that Ecology’s records list as being confirmed as, or as being suspected of, having contaminated soil, sediment, surface water, groundwater, or air. These sites may or may not be included on the CERCLIS List.
CWA	Federal Clean Water Act
DESC	Defense Energy Support Center
DFSP	Defense Fuel Support Point
Discipline report	This Hazardous Materials Discipline Report
DLA	Defense Logistics Agency
DMMP	Dredged Material Management Program
Dolphin	A fixed or floating structure used to help guide a vessel into the docking structure. A fixed dolphin is an assemblage of piles. A floating dolphin is secured to the seabed through anchors.
Ecology	Washington State Department of Ecology
EDR	Environmental Data Resources, Inc.
EDR Report	The report prepared by EDR and contained in Attachments D and E of this Report

<b>Term</b>	<b>Meaning</b>
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ERNS List	Emergency Response Notification System List, a list of reported releases of oil and hazardous substances
ESA	The Federal Endangered Species Act
Fixed dolphins	Fixed navigational dolphins located inside the slips, near the loading area at the outboard sides of each slip. Typically constructed with driven steel piles and a concrete cap.
Floating dolphins	Concrete or wooden barge structures located offshore, clad with perimeter fendering systems, and anchored to the seabed. Used to help guide the ferry into the slip.
FSII	Fuel system icing inhibitor
FTA	Federal Transit Administration
GIS	Geographic Information System
Hazardous materials impacts	Impacts related to hazardous materials that existing conditions could have on the project as well as impacts related to hazardous materials that the project could have on the natural and built environment.
Hazardous Materials Site	A site in the study area that could be contaminated with hazardous materials in such a way as to affect the project area
Hazardous Sites List	A list that is a subset of the CSCSL Report. The Hazardous Sites List includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).
HOV	High-occupancy vehicle, generally a vehicle that carries at least one person besides the vehicle driver
HSWA	The Federal Hazardous and Solid Waste Amendments of 1984
HWS	Hazardous Waste Site; see CSCSL

<b>Term</b>	<b>Meaning</b>
ICR list	Independent Cleanup Reports list, a list of reports Ecology has received from a site's owner or operator concerning remedial actions that were conducted on site without Ecology oversight or approval. Owners and operators of such sites are not under an order or decree to conduct these remedial actions. The ICR list is a predecessor to the VCP site list and is no longer updated by Ecology.
JP-4	Jet propellant number 4, a jet fuel
L&I	Washington State Department of Labor and Industries
LBP	Lead-based paint
LUST	Leaking underground storage tank
Methodology	The report methodology set forth in Attachment A of this report and used by analysts in preparing this report.
MTCA	Washington State Model Toxics Control Act, RCW 70.105D
Mukilteo Tank Farm	The approximately 20-acre property east of the existing Mukilteo ferry terminal that is owned by the U.S. Air Force and that holds a research facility operated by NOAA and includes a large pier known as the Tank Farm Pier
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants, 40 CFR Parts 61 to 71
NFRAP	No Further Remedial Action Planned. Sites that were on the CERCLIS list and for which no further remedial action is planned. This includes sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration.
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System, a permit program established under the Federal Clean Water Act to regulate the discharge of pollutants to surface water

<b>Term</b>	<b>Meaning</b>
NPL	National Priorities List, a list that is a subset of the CERCLIS list. NPL sites are hazardous waste sites designated for priority cleanup under the Federal Superfund Program. NPL sites are also included on the Washington State CSCS list.
OSHA	Federal Occupational Safety and Health Act
PAHs	Polycyclic aromatic hydrocarbons
PCBs	Polychlorinated biphenyls, a class of organic compounds
ppm	Parts per million
Project	The Mukilteo Multimodal Project
Project Area	The footprint of all four project alternatives taken together.
PVC	Polyvinyl chloride
RA	Risk Assessment
RCRA	The Federal Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 – 6992k
RCRA CORRACTS List	Resource Conservation and Recovery Act Corrective Action Sites List, a list of hazardous waste handlers that are subject to corrective action under RCRA
RCRA-LQG	RCRA large-quantity generators
RI/FS	Risk Assessment and Feasibility Study
RCRA non-CORRACTS TSD List	Resource Conservation and Recovery Act “non Corrective Action Sites” that Treat, Store or Dispose of Hazardous Waste” list, a list of facilities that treat, store, or dispose of hazardous waste and are not subject to corrective action under RCRA
RCRA-SQG	RCRA small-quantity generators
RCW	Revised Code of Washington
Report	This Hazardous Materials Discipline Report
SARA	Federal Superfund Amendments and Reauthorization Act
Sensitive Receptors	Areas typically containing populations that could be particularly sensitive to hazardous materials released by project-related activities occurring within the project area.
SEPA	Washington State Environmental Policy Act

<b>Term</b>	<b>Meaning</b>
SHWS	State Hazardous Waste Site; see CSCSL
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SR	Washington State Route
Study Area	The area within which hazardous materials, if released, might affect the project area by flowing over the ground surface, migrating through soils or groundwater, or being drawn into the project area by project construction activities such as dewatering. This is the area that WSF studied for this report
SVOCs	Semi-volatile organic compounds
Tank Farm Pier	The pier that is part of the Mukilteo Tank Farm and that was used by the U.S. Air Force for fuel transfers.
Tank Farm	The portion of the Mukilteo Tank Farm in which the 10 bulk fuel tanks were located.
TESC Plan	Temporary erosion and sediment control plan
Tower	A structure that houses and supports the cable and counter weight system that supports, raises, and lowers the outboard end of the transfer span.
TPH	Total petroleum hydrocarbons
Transfer span	Movable bridge that allows the vehicles and pedestrians access on and off of the ferry; the link between the ferry and the trestle. Pedestrians use this bridge unless overhead pedestrian loading is available.
Trestle	Overwater stationary pile-supported bridge structure that serves as a connection between land and the near shore end of the transfer span for both vehicle and pedestrian traffic. Pedestrians use this structure unless overhead pedestrian loading is available.
TSCA	Federal Toxic Substances Control Act
TSD facility	Hazardous waste treatment, storage or disposal facility
US or U.S.	United States
USAF or U.S.A.F	United States Air Force
USC or U.S.C.	United States Code
USGS	United States Geological Survey

<b>Term</b>	<b>Meaning</b>
UST	Underground storage tank
UST site	Underground Storage Tank site, a site in Washington State with an UST that is registered with Ecology. Generally, USTs used for commercial purposes must be registered with Ecology.
VCP site	Voluntary Cleanup Program site, a contaminated site in Washington State that has entered Ecology's Voluntary Cleanup Program, a program under which a site's owner or operator submits reports concerning site contamination and remedial actions, where the remedial actions were conducted without Ecology oversight or approval. Owners and operators of such sites are not under an order or decree to conduct these remedial actions.
VOCs	Volatile organic compounds
WAC	Washington Administrative Code
WARM	Washington State Ranking Method
Wingwalls	A structural steel frame typically comprising vertical and batter piles that provide support to a fendering system in front. Used to align the bow of the ferry with the centerline of the transfer span and to brace the vessel to allow the loading of vehicles and passengers.
WISHA	Washington Industrial Safety and Health Act (RCW 49.17)
WSDOT	Washington State Department of Transportation
WSF	Washington State Ferries, a division of WSDOT



# 1. THE MUKILTEO MULTIMODAL PROJECT

The Washington State Department of Transportation (WSDOT), Ferries Division (also known as Washington State Ferries [WSF]) proposes the Mukilteo Multimodal Project to improve the operations and facilities serving the mainland terminus of the Mukilteo-Clinton ferry route in Washington State. The Federal Transit Administration (FTA) may fund part of the proposed project.

WSDOT and FTA are preparing this Environmental Impact Statement (EIS) for the project in compliance with the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA). FTA is the federal lead agency for the NEPA environmental review process. WSDOT is the state lead agency for SEPA.

The ferry route is part of State Route (SR) 525, the major transportation corridor across Possession Sound, which separates Island County (Whidbey Island) from the central Puget Sound mainland. The Mukilteo-Clinton route is the second-busiest in terms of vehicle traffic in the state ferry system, and it has the third-largest annual ridership. Figure 1 shows the regional setting and Figure 2 shows the general project area.

## 1.1 The Mukilteo Ferry Terminal Area

The existing Mukilteo ferry terminal is located in the city of Mukilteo in Snohomish County, Washington, west of the Mukilteo/Everett city line. The shoreline in this area faces north to northwest and runs primarily east-west within the project area. West of the existing terminal are Elliot Point and Mukilteo Lighthouse Park. To the east is a 20-acre property, currently owned by the U.S. Air Force (Mukilteo Tank Farm). The property includes a research facility operated by the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service; the research facility is also known as the NOAA Mukilteo Research Station. The U.S. Air Force property also includes lands and a large pier formerly used for fuel storage and loading. The Mukilteo/Everett city line is at the eastern end of the Mukilteo Tank Farm. The Mount Baker Terminal, a marine-to-rail intermodal facility operated by the Port of Everett, is located just east, in the city of Everett.

The BNSF Railway owns and operates a railroad that runs south of the Mukilteo ferry terminal and adjacent to the southern boundary of the Mukilteo Tank Farm. The BNSF tracks mostly follow the shoreline between Seattle and Everett. East of where the railroad crosses under SR 525, it borders the Mukilteo Tank Farm, and a rail spur connection extends to the Mount Baker Terminal. Sound Transit's Sounder commuter rail also uses the BNSF tracks. Its Mukilteo Station is located southeast of Park Street, between the Mukilteo Tank Farm and the BNSF railroad tracks.

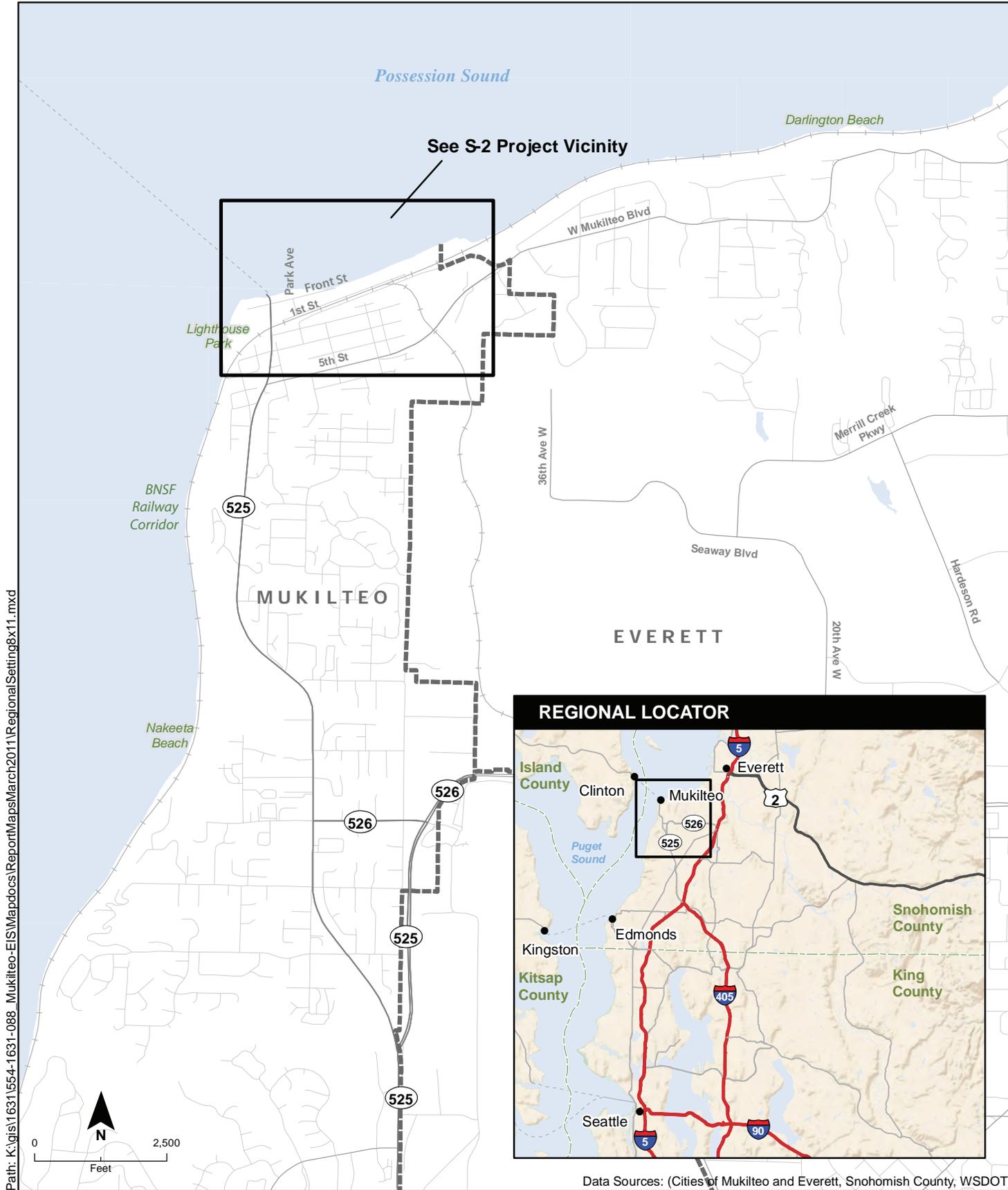


Figure 1. Regional Setting

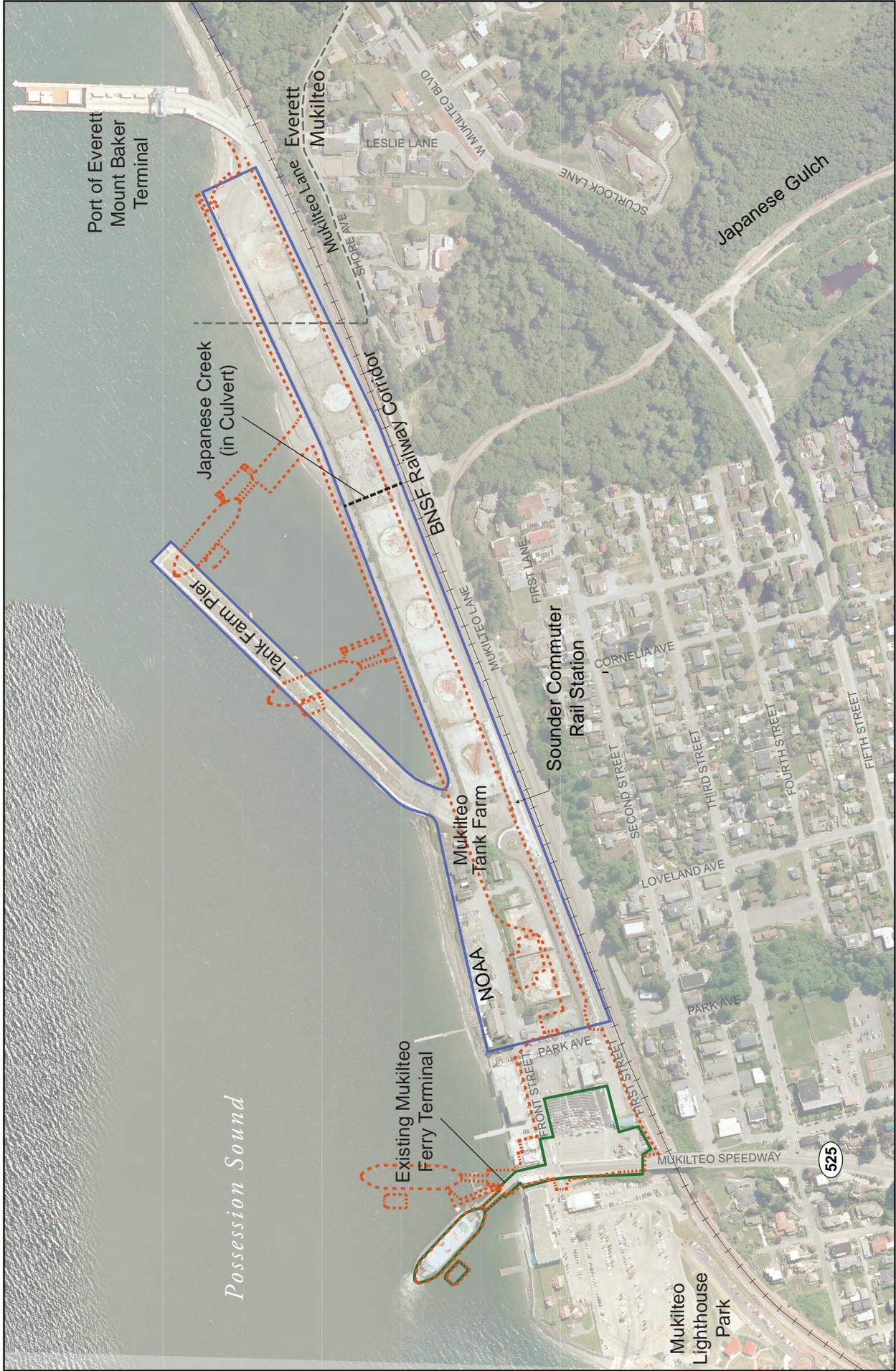


Figure 2. Project Vicinity

## 1.2 Purpose and Need

The following purpose and need statement will guide decisions about the project.

### 1.2.1 Project Purpose

The purpose of the Mukilteo Multimodal Project is to provide safe, reliable, and efficient service and connections for general-purpose transportation, transit, high-occupancy vehicles (HOVs), pedestrians, and bicyclists traveling between Island County and the Seattle-Everett metropolitan area and beyond. The project is intended to:

- Reduce conflicts, congestion, and safety concerns for pedestrians, bicyclists, and motorists by improving local traffic and safety at the terminal and the surrounding area that serves these transportation needs.
- Provide a terminal and supporting facilities with the infrastructure and operating characteristics needed to improve the safety, security, quality, reliability, and efficiency of multimodal transportation.
- Accommodate future demand projected for transit, HOV, pedestrian, bicycle, and general-purpose traffic.

### 1.2.2 Project Need

The existing facility is deficient in a number of aspects, including safety, multimodal connectivity, capacity, and the ability to support the goals of local and regional long-range transportation and comprehensive plans, including future growth in travel demand. Those factors, which are further described below, demonstrate the need for an improved multimodal facility.

#### Safety and Security

Safety is WSDOT's top priority, and security at transportation facilities is a national concern. Safety and security come into play with this project in several ways: at the pedestrian/vehicle interface, with the general traffic flow in the SR 525/Front Street vicinity, and in maintaining safety and security for the facility itself.

- The Mukilteo ferry terminal has received few improvements since it was built in 1957. The existing timber structures, including the docking facilities, are beyond the end of their useful lives.
- The existing terminal does not meet current seismic standards. The existing facility is underlain by deep, potentially liquefiable soils that are highly susceptible to lateral spreading during an earthquake.

- Changed U.S. Coast Guard and U.S. Department of Homeland Security protocols now require the ability to secure terminal areas when there is a natural disaster, heightened security alert, or other emergency. The existing facility has city streets within the terminal area and does not allow for a physical separation between the terminal and open public areas, which increases safety and security concerns, and could require WSDOT to interrupt service or close the terminal to respond to an emergency or a heightened security alert.
- Collisions near the SR 525/Front Street intersection have included sideswipes, vehicle/pedestrian collisions, and collisions with parked vehicles.
- Because of congestion caused by ferry traffic, pedestrians often make high-risk decisions to cross the SR 525/Front Street intersection during breaks in ferry traffic; near misses between vehicles and pedestrians are common. Pedestrians who access the terminal area, transit facilities, surrounding businesses, and Mukilteo Lighthouse Park compete with vehicles for access to this intersection.
- Other inadequate facilities include a lack of passenger drop-off/pickup areas and poor bus access to the bus bay; both increase congestion and the risk of accidents.
- Passengers who are loading and unloading from the ferry or going between the toll booth and the terminal building must traverse routes that do not meet the requirements of the Americans with Disabilities Act (ADA).

### **Transit Connectivity and Reliability**

The current facility provides poor connections between transit, rail, and ferry modes, which significantly hamper the quality and reliability of the transportation system in this area and add to the overall transportation and safety problems related to the terminal. The major concerns are:

- Transit connections at the Mukilteo ferry terminal cannot adequately serve current or future needs. There are only two bus bays, located 200 feet away, uphill and across a major local street. The limited transit facilities are inadequate to support the current service, including staging and layover needs for transit operations, and they have limited boarding areas and amenities for transit riders. The current configuration would not allow bus service to be expanded. In addition, the Sounder commuter rail stops at the Mukilteo Station, approximately 2,000 feet from the existing terminal, and the streets between the ferry terminal and the station have missing or substandard pedestrian and bicycle facilities.
- Keeping the ferry on schedule is integral to multimodal connectivity and the ability of the system to meet growing demand by allowing passengers to make on-time connections to scheduled bus and train service. Inefficient vehicle staging slows fare collection, which delays departures. Lack of a dedicated HOV

access lane makes it difficult to implement WSDOT's preferential program for carpools, and worsens operating efficiency. Also, pedestrians walking on and off the ferry use the same span that vehicles use. This requires passengers and vehicles to be loaded at separate times, which leads to system inefficiency and can cause delays that last throughout the day.

### **Growth in Travel Demand**

The Mukilteo-Clinton route connects the two segments of SR 525, the major transportation corridor between Island County (Whidbey Island) and the Seattle-Everett metropolitan area. SR 525 is classified as a Highway of Statewide Significance. In addition to serving ongoing travel demand, SR 525 is needed to connect the communities and military facilities on the island for evacuations, disaster relief, and medical emergencies.

WSDOT's travel forecasts highlight the higher future demand for improved multimodal facilities serving the Mukilteo-Clinton route: WSDOT predicts a 73 percent increase in annual passengers (1,840,000 to 3,175,000) on the Mukilteo-Clinton route from 2006 to 2030.

The Mukilteo-Clinton route serves a high number of commuter trips, and growth in employment on both Whidbey Island and on the mainland is a primary reason for the predicted growth in trips by ferry. In response, the WSF Long-Range Plan calls for meeting the growing travel needs at the Mukilteo ferry terminal primarily through increasing the share of walk-on trips. This reinforces the need for improved connections and facilities between ferries and other modes, including transit, bicycle, and walking (WSDOT 2009).

### **Other Related Objectives**

Through its public planning and outreach efforts, including public scoping comments, WSDOT has also identified environmental and project development goals to help guide the project.

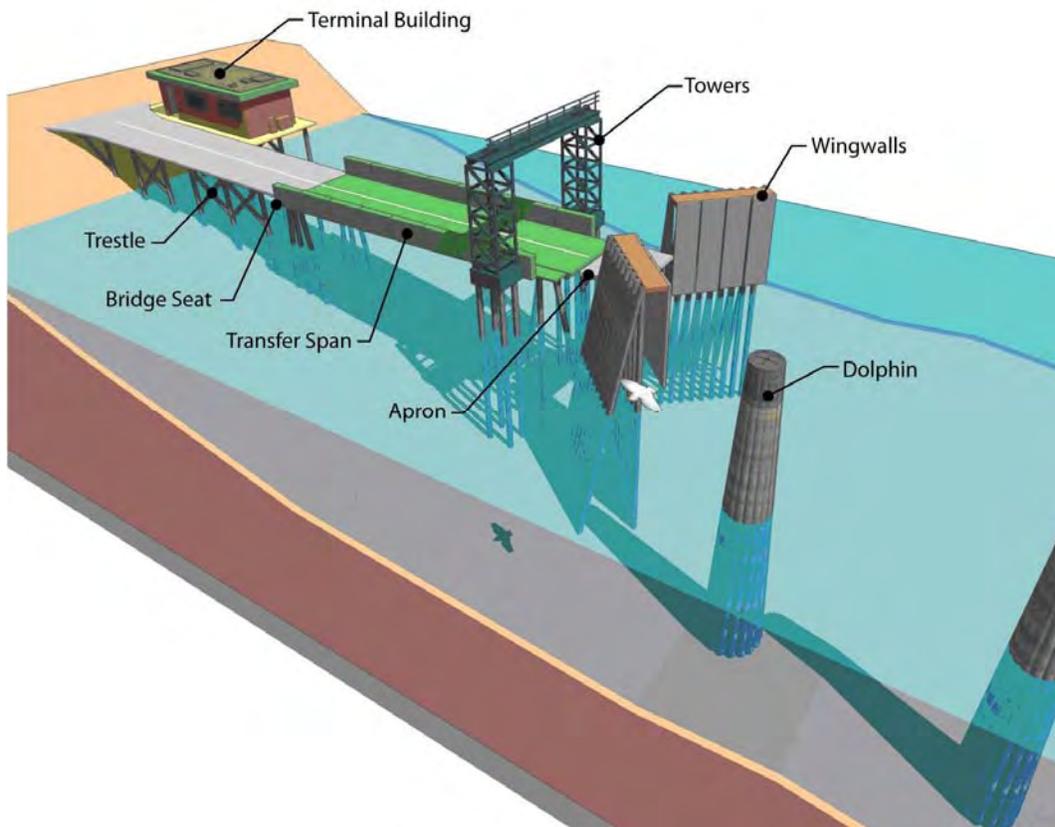
- The project should be fiscally responsible and supportive of state, regional, and local transportation plans including, but not limited to, the *Washington State Department of Transportation Ferries Division Final Long-Range Plan: 2009–2030* (WSDOT 2009), as well as regional and local land use plans.
- The project should be sensitive to the rich cultural and environmental resources of the vicinity in a manner that respects and enhances these resources.

- The project should not preclude development of a second slip at the terminal in the future to provide operational flexibility or additional capacity.

### 1.3 Alternatives

The project is considering four alternatives:

- The No-Build Alternative, which maintains the existing facility but does not improve it; this alternative provides a basis against which to compare the effects of the “Build” alternatives
- The Existing Site Improvements Alternative, which would construct an improved multimodal facility by replacing the existing Mukilteo ferry terminal with an expanded terminal and multimodal center at the current site
- The Elliot Point 1 Alternative, which would relocate the terminal to the eastern portion of the Mukilteo Tank Farm as part of an integrated multimodal center and remove the existing terminal
- The Elliot Point 2 Alternative, which would relocate the terminal to the western portion of the Mukilteo Tank Farm as part of an integrated multimodal center and remove the existing terminal



**Key Parts of a Typical Ferry Terminal**

### 1.3.1 No-Build Alternative

The No-Build Alternative provides a baseline against which to compare the effects of the Build alternatives. It includes what would be needed to maintain the existing ferry terminal at a functional level. Maintenance and structure replacements would occur in accordance with legislative direction to maintain and preserve ferry facilities, but WSDOT would make no major investments for improvements. Figure 3 illustrates the planned maintenance and preservation activities currently assumed.

Nearly all of the ferry docking, loading, and unloading facilities would need to be replaced because they will have reached the end of their lifespan by 2040. The existing vehicle holding area would remain at its current location. The terminal supervisor's building, passenger and maintenance building, and the three existing toll booths would be replaced at their current locations. This alternative would not improve substandard conditions related to congestion, vehicular and pedestrian conflicts, poor sight distance, and security.

#### Key parts of a typical ferry terminal

**fixed dolphin** – an assembly of steel piles or concrete drilled shafts supporting a concrete cap and a fendering system.

**floating dolphin** – concrete or wooden barge structures located offshore clad with a perimeter fendering system and anchored to the seabed; used to help guide the ferry into the slip.

**wingwall** – an assembly of steel piles or concrete drilled shafts supporting a steel or concrete cap and a fendering system to guide and stop the ferry at its loading and unloading position.

**tower** – currently used to house and support the cable and counter weight system that supports, raises, and lowers the outboard end of the transfer span. (the tower system will be replaced by hydraulic lifts regardless of the alternative chosen.)

**apron** – adjustable ramp at the end of the transfer span that accommodates varying water heights.

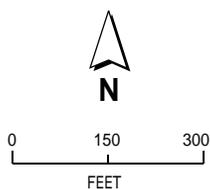
**transfer span** – movable bridge that allows the vehicles and pedestrians access on and off the ferry; it is the link between the ferry and the trestle.

**trestle and bridge seat** – over-water stationary pile-supported bridge structure that serves as a connection between land and the nearshore end of the transfer span for both vehicle and pedestrian traffic (pedestrians do not use the trestle if overhead pedestrian loading is available).



Possession Sound

Figure 3. No-Build Alternative



- No-Build Alternative
- Elements to be replaced
- Ferry Traffic Control Light

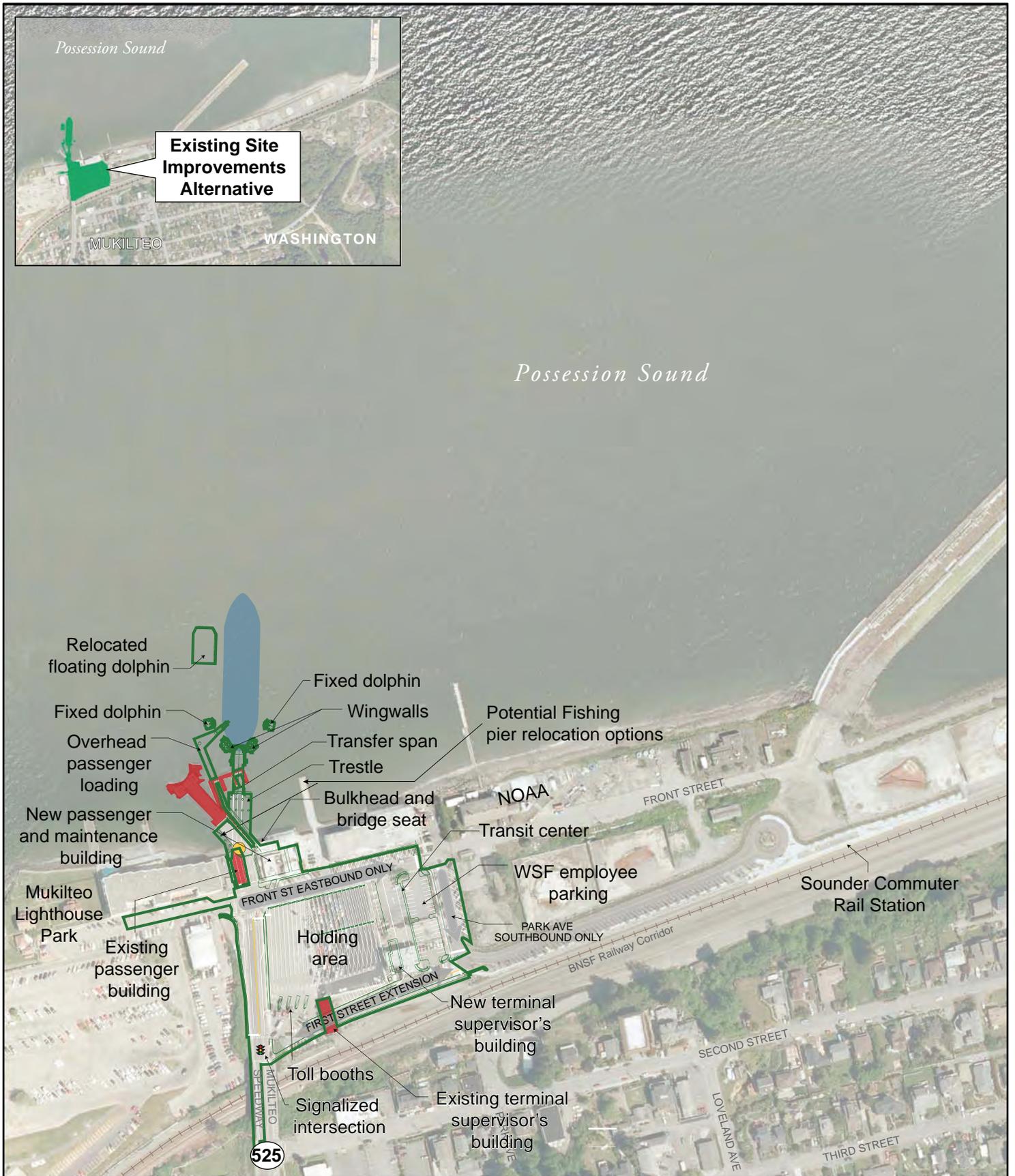
### **1.3.2 Existing Site Improvements Alternative**

The Existing Site Improvements Alternative would construct an improved multimodal facility by replacing the existing Mukilteo ferry terminal with an expanded terminal on and around the current site. Its key features are shown on Figure 4.

All of the existing ferry facility marine and upland features would be replaced. The ferry dock and trestle would be rebuilt facing due north to provide a straighter alignment with SR 525. The Port of Everett's existing fishing pier and seasonal day moorage would be relocated. Options for relocating the pier include placing it to the west or to the east of the new trestle.

The existing vehicle holding area would remain at the same general location and would still store the equivalent of one-and-one-half 144-vehicle vessels (approximately 216 vehicles). Toll booths and a supervisor's building would be constructed nearby. A new passenger and maintenance building would be constructed east of the ferry access driveway expanding into areas currently occupied by other uses. Overhead passenger loading ramps would connect to the second story of the new passenger building.

Front Street and Park Avenue would become one-way streets, and First Street would be extended west to a new signalized intersection with SR 525. A new transit center would be constructed east of the vehicle holding lanes, combined with a parking area for ferry employees.



**Figure 4. Existing Site Improvements Alternative**

### **1.3.3 Elliot Point 1 Alternative**

The Elliot Point 1 Alternative would develop the Mukilteo Multimodal Project on the eastern portion of the Mukilteo Tank Farm. Its key features are shown on Figure 5.

Because the shoreline slopes more gradually in this location, the ferry slip would need to be located about 250 feet offshore, which would require a longer pier and trestle. A new passenger building and a maintenance building would be located over water on the new concrete trestle. An overhead passenger loading ramp would connect to a second story of the new passenger building.

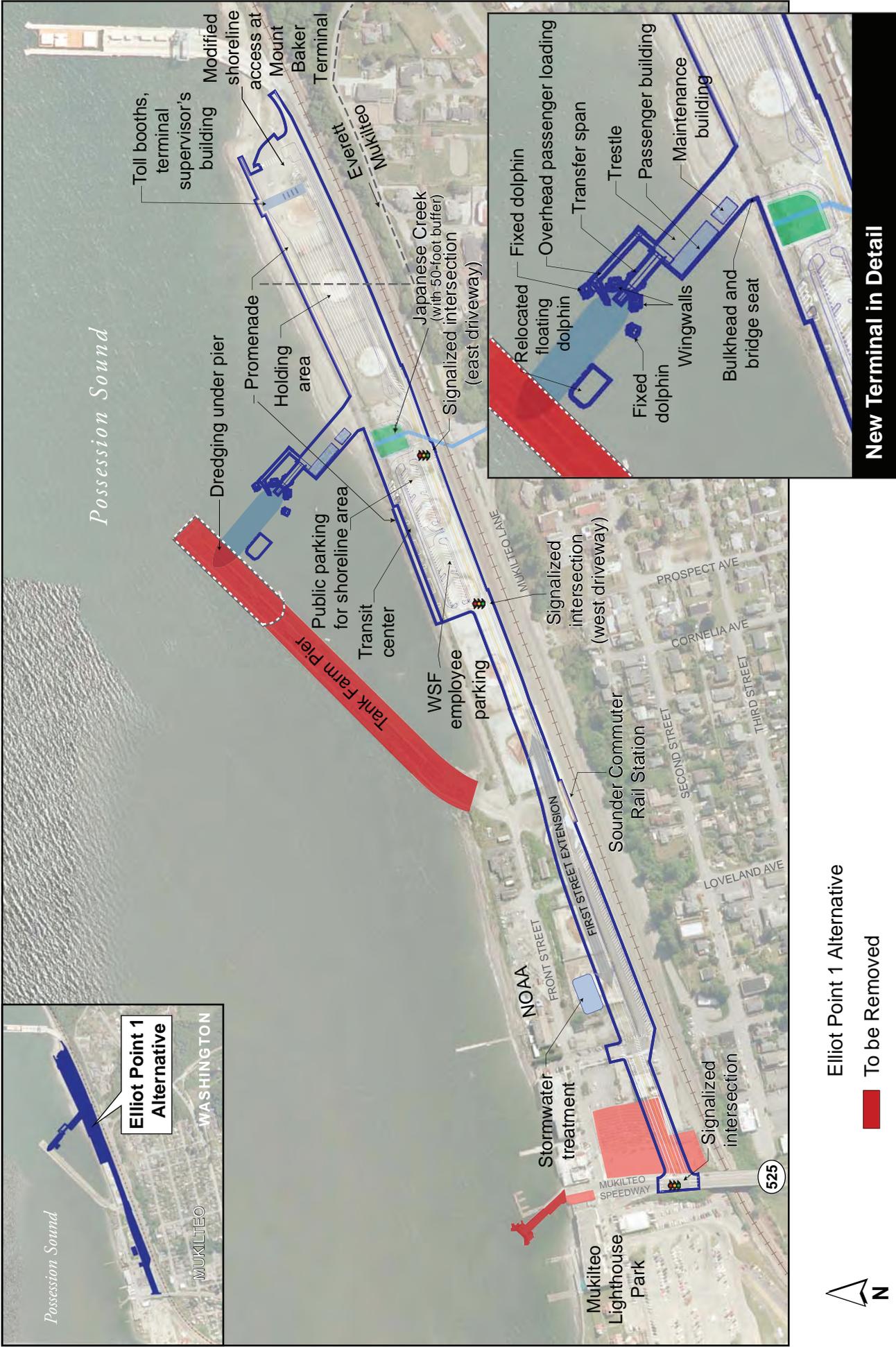
The Tank Farm Pier, including approximately 3,000 piles, would be removed up to its existing bulkhead and a channel 400 feet wide that provides a navigation depth of 26 feet would be dredged through part of the area currently occupied by the pier. Near the pier, current depths range from 14 to 17 feet, and other areas are deeper.

WSDOT would remove the existing ferry terminal, including buildings and marine structures, but the Port of Everett's fishing pier at the current terminal site would remain. The current vehicle holding area would be vacated.

The Elliot Point 1 Alternative would also provide parking for commuter rail, the Mount Baker Terminal shoreline access area, and ferry employees. The alternative includes toll booths, ferry vehicle holding areas, and shoreline promenades on each side of the new ferry dock. Japanese Creek, which currently runs in a pipe culvert below the Mukilteo Tank Farm, would be restored to an open stream north of the extended First Street, with a 50-foot buffer on either side. The stream would be crossed by a pedestrian bridge near the shoreline. New lighting would illuminate First Street and the terminal facilities, including the vehicle holding areas.

The vehicle holding areas would have capacity for approximately 216 vehicles. A terminal supervisor's building would be constructed above four new toll booths east of the holding area. This 35-foot-high structure would be oriented north-south.

First Street would be realigned and extended as a four-lane roadway from SR 525 to the Port of Everett's Mount Baker Terminal, also providing sidewalks and bike lanes. A new signalized intersection with SR 525 would be constructed. A rebuilt First Street/Park Avenue intersection would provide access to a reconfigured parking and access area for Mukilteo Station.



**New Terminal in Detail**

Figure 5. Elliot Point 1 Alternative

A new transit center with six bus bays would be west of the new terminal. Access and parking for Mukilteo Station would be configured to connect to the First Street extension.

New security fences and gates would secure the holding and terminal area during periods of heightened security, as required by the U.S. Coast Guard.

### **1.3.4 Elliot Point 2 Alternative**

The Elliot Point 2 Alternative would develop the project on the western portion of the Mukilteo Tank Farm. It would have a more compact footprint than the Elliot Point 1 Alternative due to the deeper water near the shore where the ferry would berth. Its key features are shown on Figure 6.

Elliot Point 2 would have the same types of marine facilities as Elliot Point 1, but because there is no beach and the water is deeper at this location, the ferry slip would be nearer to the shore than Elliot Point 1, with a shorter trestle. The Tank Farm Pier would be removed and a channel 500 feet wide that provides a navigation depth of 26 feet would be dredged through part of the area currently occupied by the pier.

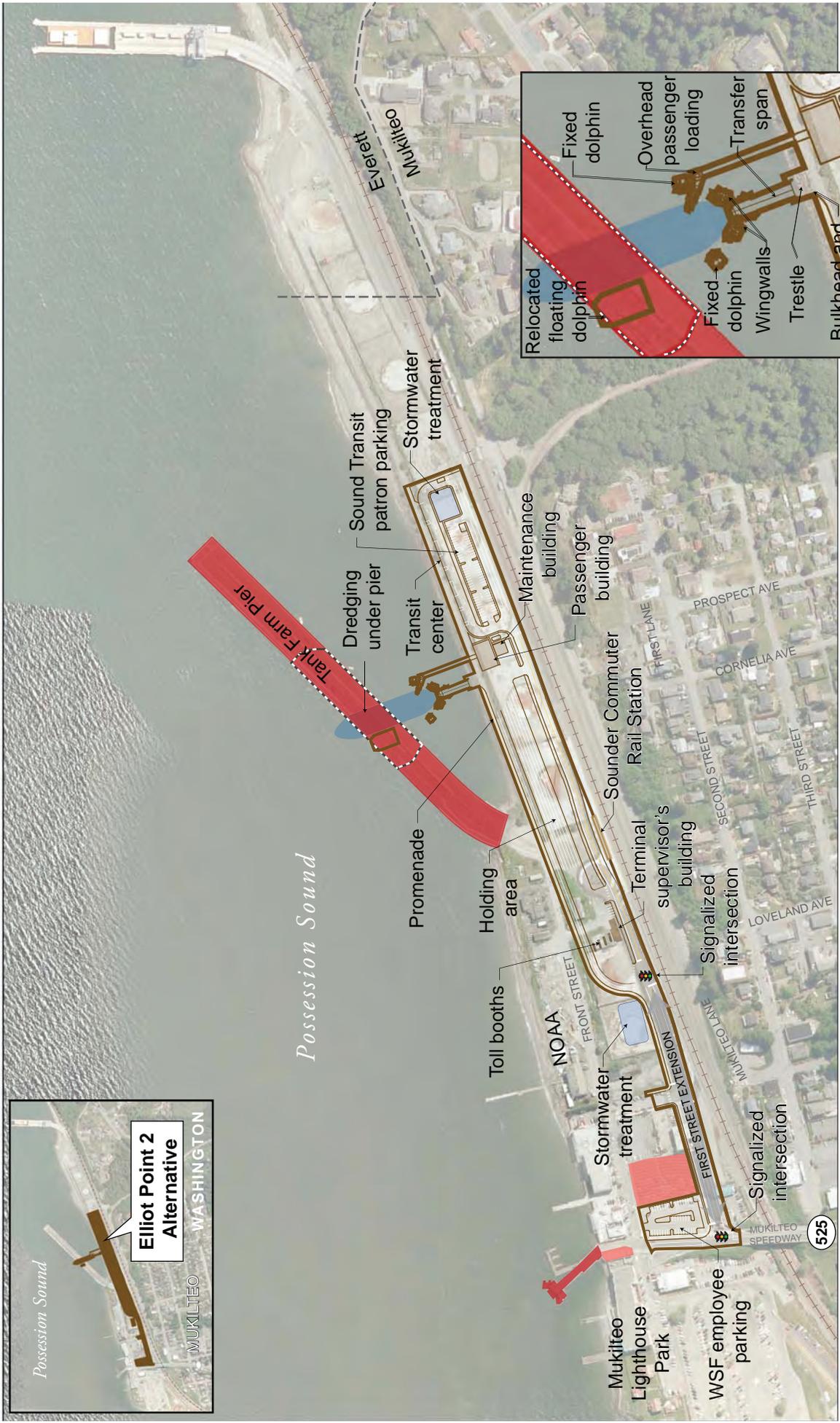
The existing ferry facility, including buildings and marine structures, would be removed, but the Port of Everett's fishing pier would remain. A ferry employee parking area would be located on the east side of SR 525, occupying part of the area currently used for vehicle holding, but the remainder of the existing holding area would be vacated.

A new passenger building and a maintenance building would be located immediately upland of the ferry dock. An overhead passenger loading ramp would connect to a second story of the new passenger building.

The vehicle holding area would have the holding capacity for approximately 216 vehicles. The terminal supervisor's building would be west of the vehicle holding area, near four new toll booths.

First Street would be realigned and extended as a four-lane roadway from SR 525 to a signalized entrance to the new ferry terminal. First Street would continue as a two-lane road to a new bus transit and paratransit center and a relocated parking area for Mukilteo Station.

A new transit center with six new bus bays and a transit passenger area would be on the eastern part of the site.



- Elliott Point 2 Alternative
- Ferry
- To be Removed
- Area Vacated by WSF
- Dredging Locations under Pier
- City Boundary

**New Terminal in Detail**

Figure 6. Elliott Point 2 Alternative

The First Street improvements would include a new signalized intersection with SR 525 and a reconstructed intersection with Park Avenue. The extended roadway would generally be along the southern portion of the Mukilteo Tank Farm. The First Street extension would occupy areas currently used by Sound Transit for the Mukilteo Station parking and pick-up/drop-off functions.

First Street would feature sidewalks and bicycle lanes. At the driveway for the ferry terminal, a walkway would be built along the edge of the terminal from First Street to a shoreline promenade located west of the ferry slip. Other sidewalks would link the Mukilteo Station and the transit center, which would also have relocated commuter rail parking and a shoreline promenade.

As with the Elliot Point 1 Alternative, this alternative would include new security fences and gates surrounding the holding area and terminal.

#### **1.4 Project Construction Activities Relevant to this Hazardous Materials Analysis**

Based on the descriptions of the four proposed project alternatives, the hazardous materials analysis performed for this Hazardous Materials Discipline Report (discipline report or report) considered whether or not WSF would perform the following activities for each of the project alternatives:

- Acquire property for project construction since WSF could assume liability for cleaning up contamination related to property it acquires.
- Renovate, remove, or excavate structures and equipment, including buildings, piers, and transformers, that could contain asbestos-containing material (ACM), lead-based paint (LBP), polychlorinated biphenyls (PCBs), and mercury because disturbance of such materials poses risks to public and worker safety.
- Remove above ground storage tanks (ASTs), underground storage tanks (USTs), and associated contaminated soil because such structures and soil could contain petroleum products and other hazardous materials that could be released to the environment.
- Decommission underground oil/water separators, bulk fuel distribution facilities, remediation wells, and all associated piping because such structures could contain residual petroleum products and other hazardous materials that could be spread during project construction and could serve as contaminant conduits.

- Remove creosote-treated timber and piles from structures being renovated or removed, including buildings, piers, and railway tracks, because creosote-treated timber and piles contaminate the environment.
- Disturb, dredge, or excavate sediment and soil that has been in contact with creosote-treated timber or piles because such sediment and soil could be contaminated with creosote and be spread as a result of project work.
- Grade or excavate contaminated soil because such activities would spread contamination.
- Dewater excavations or pits in the vicinity of contaminated groundwater because contaminated groundwater could be encountered or spread, and then be drawn into the excavations or pits, as a result of dewatering activities.
- Construct stormwater facilities in contaminated areas because any infiltration from those facilities could spread contamination that exists in those areas.



## **2. OVERVIEW OF HAZARDOUS MATERIALS ANALYSIS AND REGULATORY CONTEXT**

### **2.1 Analysis Overview**

In general, a hazardous material is a substance that may harm human health or the environment because of its physical or chemical characteristics. Hazardous materials may be classified in different categories based on the laws and regulations that define their characteristics and uses. These classifications include hazardous waste, dangerous waste, hazardous substances, and toxic substances.

The hazardous materials analysis in this discipline report evaluates the impacts related to hazardous materials that existing conditions could have on the project as well as impacts related to hazardous materials that the project could have on the natural and built environment (collectively, hazardous materials impacts). The analysis then identifies measures that could mitigate each of the identified impacts and includes estimated costs of the identified mitigation measures where applicable. In performing these evaluations and identifying these mitigation measures, the team of people that developed this report (analysts) used the methodology set forth in Attachment A of this report.

WSF is considering hazardous materials in planning for this project because WSF could, as part of the project, acquire property contaminated with hazardous materials and could, during project construction, encounter hazardous materials. Hazardous materials would also be used and could be accidentally spilled during project construction and operation. Acquiring contaminated property and encountering, using, and spilling hazardous materials could subject WSF to liability for cleaning up hazardous materials; harm project workers, the public, and the environment; delay project construction; increase project costs; and temporarily shut down project operation. Identification in this report of contaminated property that could be acquired and hazardous materials that could be encountered, used, or spilled allows WSF to engage in investigations and planning to avoid or reduce the potential impacts of such acquisitions, encounters, uses, and spills.

## **2.2 Regulatory Context Overview**

Numerous laws, regulations, guidance documents, and policies govern the handling, disposal, and remediation of hazardous materials. The most common of these laws and regulations are described in Attachment B.