Mukilteo Multimodal Ferry Terminal Project

Alternatives History through 2009

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EXECUTIVE SUMMARY

This document summarizes 15-years of design and analysis completed by the City of Mukilteo, Washington State Department of Transportation Ferries Division (WSF), the US Department of Transportation Federal Transit Administration (FTA) and other local, state and federal agencies in their efforts to improve the safety, reliability and capacity at the Mukilteo Ferry Terminal (the terminal) in Mukilteo, Washington.

Improvements to the terminal have been discussed in various efforts since the 1970's with major efforts beginning with the Mukilteo Multimodal Terminal and Access Study conducted by the City of Mukilteo in 1995. WSF began detailed master plan efforts with multiple concepts in the 2004 Mukilteo Multimodal Terminal Master Plan Design Report (WSF, 2004a). Further concepts were developed and refined as part of the National Environmental Policy Act Environmental Assessment (EA) started in 2004. Based on information included in the EA, the FTA determined that the project had the potential to cause significant impacts to natural and cultural resources and warranted preparation of an Environmental Impact Statement (EIS). The EIS process began in 2006, which resulted in further concept refinements.

During the EIS process, the concepts under consideration were determined to be non-constructible based on potential impacts to archaeological resources, the amount of over-water construction, geotechnical conditions and costs. The project was placed on hold in 2007 while additional studies were completed to address theses areas. Based on the study findings, WSF and its consultant team developed six additional concepts that addressed the identified constructability and cost issues.

In the development of these six new concepts, the project team used design criteria developed for cost estimating purposes and the study findings to identify modified alternatives for further consideration including concepts at the existing terminal and at the adjacent Tank Farm property. Locations and design of the Tank Farm property concepts were based on optimum soil conditions and minimization of disturbance of potential archeological materials.

The six concepts demonstrated to the Washington State Legislature that a project to relocate and improve the Mukilteo Terminal may be possible. In July of 2009, the National Environmental Policy Act (NEPA)/State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS) process was re-initiated for the project. This effort will consist of defining the range of alternatives, screening those alternatives, analyzing the alternatives for environmental effects, and identifying a locally preferred alternative in the final EIS. This effort will also include public comment opportunities.

1 INTRODUCTION

The Washington State Department of Transportation (WSDOT) Ferries Division (WSF) and other federal, state and local agencies have undertaken a variety of planning processes in an effort to improve the operation of the Mukilteo Ferry Terminal (existing terminal) located in the City of Mukilteo (City), Snohomish County, Washington (Exhibit 1). The existing terminal is located in the Mukilteo waterfront area, east of Mukilteo Lighthouse Park and west of the Tank Farm property (the former US Department of Defense, Defense Fuel Supply Point Mukilteo facility).

This document summarizes 15 years of design and analysis completed by the City of Mukilteo, WSF, the US Department of Transportation (USDOT) Federal Transit Administration (FTA) and other local, state and federal agencies in their efforts to improve the safety, reliability and capacity at the Mukilteo Ferry Terminal (the terminal) in Mukilteo, Washington. This history is important in understanding the current concepts being considered for the Mukilteo Multimodal Ferry Terminal Project (the project; multimodal terminal) by the FTA and WSF. It references earlier planning documents and decisions completed by a number of agencies and jurisdictions, and discusses the most recent planning efforts in detail. These include:

- 1995 State Environment Policy Act (SEPA) Environmental Impact Statement (EIS) (City of Mukilteo, 1995a & b)
- 2004 Mukilteo Multimodal Terminal Master Plan Design Report (WSF, 2004a)
- 2004 National Environmental Policy Act (NEPA) Draft Environmental Assessment (EA) (not published)
- 2006 scoping carried out by FTA and WSF in support of a NEPA EIS

Following the 2006 scoping process, the project proponents began assessing potential project impacts of two build alternatives (the compact alternative and the upland alternative) and documenting them in a preliminary draft EIS (DEIS) but suspended it when investigations identified high risks that jeopardized its constructability. The NEPA EIS process has been re-initiated and a new range of alternatives is likely to be developed beyond those identified in this document.

1.1 NEPA/SEPA Process

The project involves federal, state, and local actions. FTA is the NEPA federal lead agency and WSF is the SEPA lead agency. The EIS process includes the development of evaluation criteria, alternatives development and selection, preparation of the DEIS, soliciting agency, tribal, and public comment, and the preparation of a Final EIS (FEIS), and an FTA Record of Decision. Washington legislature has established April 1, 2015 as the goal for advertising the project for construction bids, and completing construction by July 1, 2019.

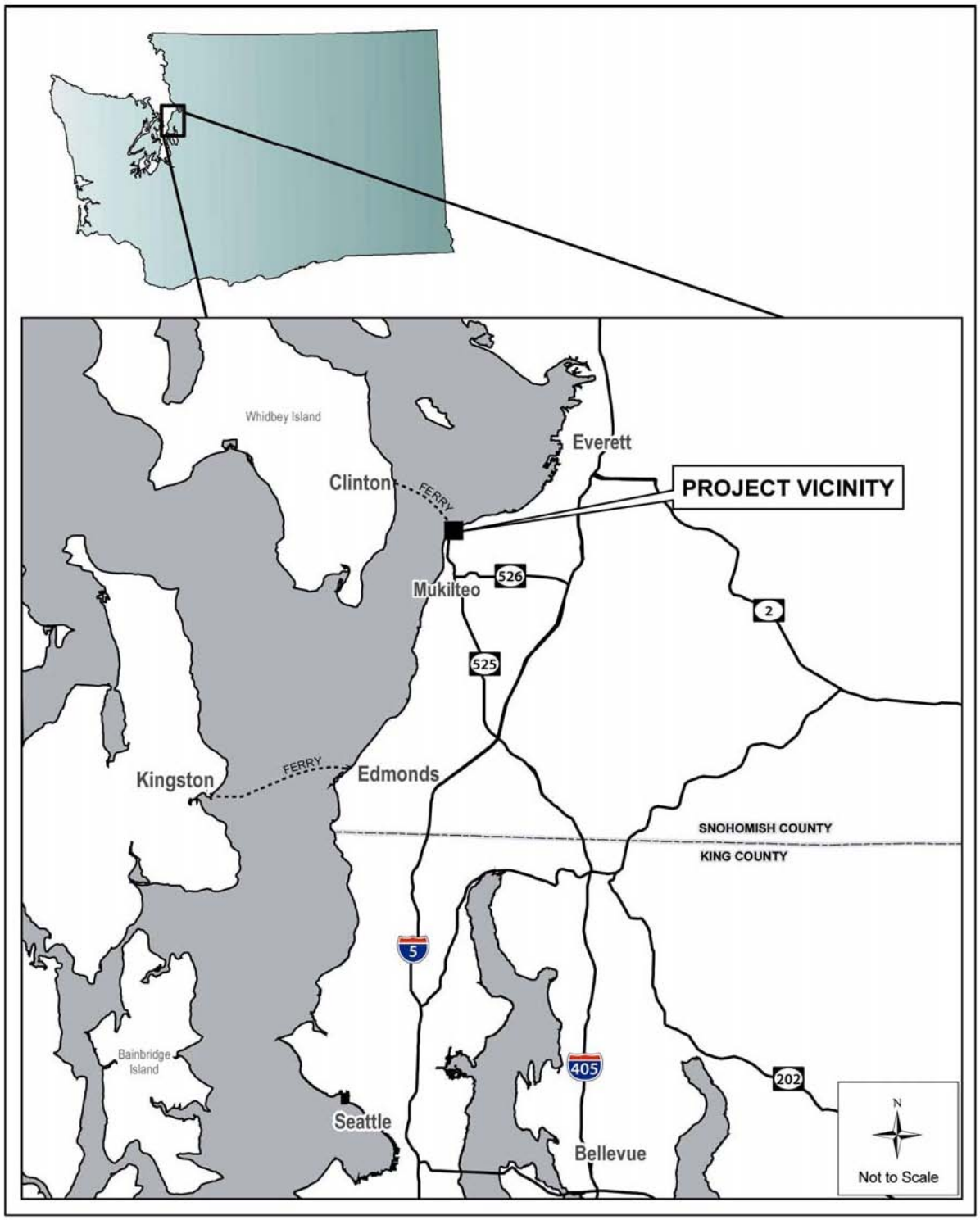
1.2 Project Definition

The information in this section is based on the 2006 draft WSF Long Range Plan that predates the final plan published on June 30, 2009. This was done to clarify the policies and plan that directed the concepts described in this document including those described in Section 6.

The Mukilteo-Clinton ferry route is a section of SR 525, the major transportation corridor between Whidbey Island (Island County) and the central Puget Sound mainland. The route is the second-busiest (in terms of vehicle traffic) in WSF's system and has the third-largest annual ridership. Ridership projections would exceed the terminal's capacity. The existing terminal is also over 50 years old, does not meet current standards, and needs to be modernized. The route now operates with two boats, and projections indicate the need for a third boat by 2018 during the summer and before 2030 year-round. For these reasons, FTA and WSF propose to improve or relocate the existing terminal (FTA/WSF, 2007). The project, as envisioned in 2006, would include:

- A ferry dock, with two ferry slips
- A terminal building with an overhead pedestrian bridge, giving passengers direct connections between the terminal, the ferry passenger deck, and the Sounder Transit commuter rail station (Mukilteo Commuter Rail Station)
- A new transit center with service connections to Everett and Community Transit networks and a pick-up/drop-off area
- Vehicle holding for two boat loads of vehicles, a four-booth toll plaza with dedicated bicycle staging, staging for carpools and other priority vehicles, and security screening areas
- An access road with an overflow lane for transit and carpool bypass
- A pedestrian waterfront promenade for public access to the shoreline
- Incidental commercial space for retail and other services
- A 275- to 480-stall parking structure

Exhibit 1
Vicinity Map



Source: FTA/WSF 2007

1.3 Alternatives Previously Considered

Evaluating and refining possible alternatives for the existing terminal has been an iterative process. Since the 1970s, the studies, feasibility reports, and plans of coordinating agencies for the relocation and/or expansion of the terminal have included those listed below.

- Advanced Planning Study SR 525 and SR 526 (Washington State Highway Commission, Department of Highways, 1972)—Addressed transportation needs, access alternatives, environmental considerations and other criteria.
- Shoreline Master Program (City of Mukilteo, 1974)—Identified locations for the terminal and utilities and the existing Tank Farm property in the context of the overall shoreline plan.
- SR 525/SR 526 to Mukilteo Ferry Terminal Draft Environmental Impact Statement/Section 4(f) Evaluation (WSDOT, 1980)—Discussed alternative alignments for SR 525 coming into Mukilteo in its current location and at Japanese Gulch.
- Mukilteo Ferry Terminal Study (Puget Sound Council of Governments, 1990)—Included surveys of ridership, destination, and demand/usage and traffic forecasts for 2010 and discussed Transportation Demand Management/Transportation System Management (TDM/TSM) alternatives and three possible terminal locations.
- Waterfront Access Study (City of Mukilteo, 1993)—Completed in cooperation with the Washington State Department of Natural Resources (DNR) and identified waterfront access areas and types.
- Mukilteo North-South Bypass Feasibility Report (for the City of Everett by CH2M Hill and Bernstein, 1993)—Looked at highway system concepts, environmental considerations, and corridor engineering, and developed a project prospectus for Japanese Gulch that specifically described traffic alternatives for the SR 526/North-South Bypass/Paine Field Boulevard intersection.
- Mukilteo Transportation Plan (Entranco, 1994)—Served as a transportation element of the City's comprehensive plan.

These studies emphasized the need for continued ferry service from Whidbey Island to SR 525 on the mainland and also supported the need for multimodal connectivity (WSDOT, 1986). In 1988, the Tank Farm property east of the existing terminal was declared surplus by the US Air Force, thus providing additional opportunities to improve overall transportation in Mukilteo that could include a relocated terminal.

In 2002, WSF began developing the Mukilteo Multimodal Terminal Master Plan Design Report (see Section 3 for further detail), which built on the earlier efforts. Environmental review began in 2004 for the master plan but was put on hold in 2007 because of funding and constructability issues associated with the alternatives that had been identified. WSF developed preliminary concepts to addresses the constructability and cost issues raised by the State legislature. These alternatives consider information found in the following plans and studies:

- Mukilteo Multimodal Terminal and Access Study Draft and Final Programmatic EIS (City of Mukilteo, 1995a and 1995b respectively) and Mukilteo Multimodal Terminal and Access Study (City of Mukilteo, 1995c)
- Sound Transit Everett-Seattle Commuter Rail Project EIS (Sound Transit, 1999)
- Mukilteo Multimodal Terminal Master Plan Design Report (WSF, 2004a)

- FTA/WSF NEPA EA scoping process (WSF, 2004b)
- Lighthouse Park Phase 1 and Phase 2 SEPA environmental checklists (City of Mukilteo, 2007 and 2009)
- Scoping by FTA/WSF in 2006 in preparation for the NEPA/SEPA EIS

2 CITY OF MUKILTEO MULTIMODAL TERMINAL AND ACCESS STUDY

In 1995, the City led a multi-agency planning effort to redevelop the Mukilteo waterfront in anticipation of the transfer of the Tank Farm property and pier to the Port of Everett. The resulting Mukilteo Multimodal Terminal and Access Study (City of Mukilteo, 1995c) and the SEPA EIS completed for the project (Mukilteo Multimodal Terminal and Access Study Draft Programmatic EIS [City of Mukilteo, 1995a]) considered 12 different alternatives for a new multimodal ferry terminal. Agencies contributing to this effort included FTA, Burlington Northern Santa Fe Railway (BNSF), the City of Everett, Community Transit, and WSDOT.

To evaluate the options for the project, alternatives were compared to the project purpose and need, as they were defined at the time. The project purpose identified in the EIS was:

> *. . . to improve and link a variety of transportation modes, create recreational and commercial development opportunities along the Mukilteo waterfront, and accommodate the future growth and demand for transportation in the Mukilteo area and the Puget Sound region.*

The needs for the project included efficient system linkage and capacity and safety improvements, along with desires for economic development and waterfront enhancement. Each of the 12 alternatives was analyzed to determine its advantages and disadvantages.

The study team developed criteria to guide the development of site layouts and the selection of alternatives. The 12 alternatives were combined into three according to which of three sites they occupied (Existing, Central Waterfront, and East Tank Farm). Each alternative involved different road access options (SR 525, Paine Field Boulevard Extension, or TDM/TSM), and these road options were also evaluated. A fourth terminal alternative, called the TSM alternative, included improvements to the existing site that would increase operational efficiencies but not increase overall capacity of the terminal.

Through the analysis of these alternatives, four were carried forward for evaluation in the City's Final Programmatic EIS (June 1995) (City of Mukilteo, 1995c):

- Existing Site Alternative
- Central Waterfront Alternative
- East Tank Farm Alternative
- TSM Terminal Alternative

The selection process for the four alternatives involved meetings of the City Council and of the Policy and Technical Committees. The Policy Committee, which included representatives of local and state agencies, business interests and state lawmakers, provided guidance and decided policy questions. The Technical Committee, which included representatives of local and state agencies and BNSF, provided information and expertise about technical issues.

Comments on the City's DEIS and community input at three open houses and at the SEPA public hearing were also considered during the selection process (City of Mukilteo, 1995b).

Key selection criteria used during this process included transportation operations, engineering factors, along with cost and environmental factors. A matrix summarizing significant topics of the process (Exhibit 2) provided a relative ranking of environmental impacts for each alternative selected for further study in the City's SEPA Draft Programmatic EIS (City of Mukilteo, 1995a). The ranking system was qualitative in nature and ranged from a strong positive impact to no impact (neutral) to a strong negative impact.

Exhibit 2
Environmental Matrix

		TERMINAL ALTERNATIVES				ACCESS OPTIONS		
Discipline Analysis	No Build	TSM	Existing Site	Central Waterfront	East Tank Farm	SR 525	TDM/TSM	PFBE
Air Quality	▬	++	⊖	⊖	⊖	−	⊖	++
Capital Construction Cost	$13	$39	$41-43	$45-47	$43-47	$25-27	$11	$24-28
City Street Access	▬	+	−	++	+	++	++	+
Commuter Access								
Auto	▬	−	++	+	+	++	++	+
Bus	▬	++	+	+	+	++	⊖	+
Cyclist	▬	++	+	+	+	++	⊖	++
HOV	−	++	+	+	+	++	⊖	++
Pedestrian	⊖	++	+	+	+	++	⊖	⊖
Rail	++	++	+	+	+	0	0	0
Cultural/Historic	0	0	−	0	0	0	0	−
Displacements	⊖	▬	▬	⊖	⊖	▬	−	⊖
Economics	0	++	−	++	++	⊖	⊖	++
Erosion	⊖	0	0	0	0	−	0	−
Fisheries	−	−	0	0	0	−	0	+
Haz. Substances	0	0	++	⊖	⊖	−	0	−
Landslide Potential	⊖	0	0	0	0	⊖	⊖	−
Marine Habitat	0	0	0	−	▬	0	0	0
Parks/Recreation	0	0	▬	++	++	++	0	−
Public Services	−	++	⊖	⊖	⊖	−	⊖	−
Traffic Volume	▬	++	++	+	+	++	⊖	+
Visual Quality	⊖	++	++	+	+	−	++	−
Water Quality	0	0	0	⊖	⊖	++	++	▬
Wetlands	0	0	0	−	−	⊖	0	−

LEGEND

+ = Greatest Positive Impact; ++ = Moderate Positive Impact; ⊖ = Neutral Impact
− = Moderate Negative Impact; ▬ = Greatest Negative Impact; 0 = No Impact
$ = Cost in $Millions

Source: City of Mukilteo 1995a

TDM strategies were incorporated as much as possible in all alternatives and included the following concepts:

- Continuation of priority loading lanes for high occupancy vehicles (HOV) and van pools
- Preferential pricing for overnight HOV parking in the area of the existing terminal

- Variable pricing on ferries favoring travel during off-peak hours and by HOV

The four alternatives are described below and shown in exhibits 3 through 5. Table 1 contains a comparison of these alternatives.

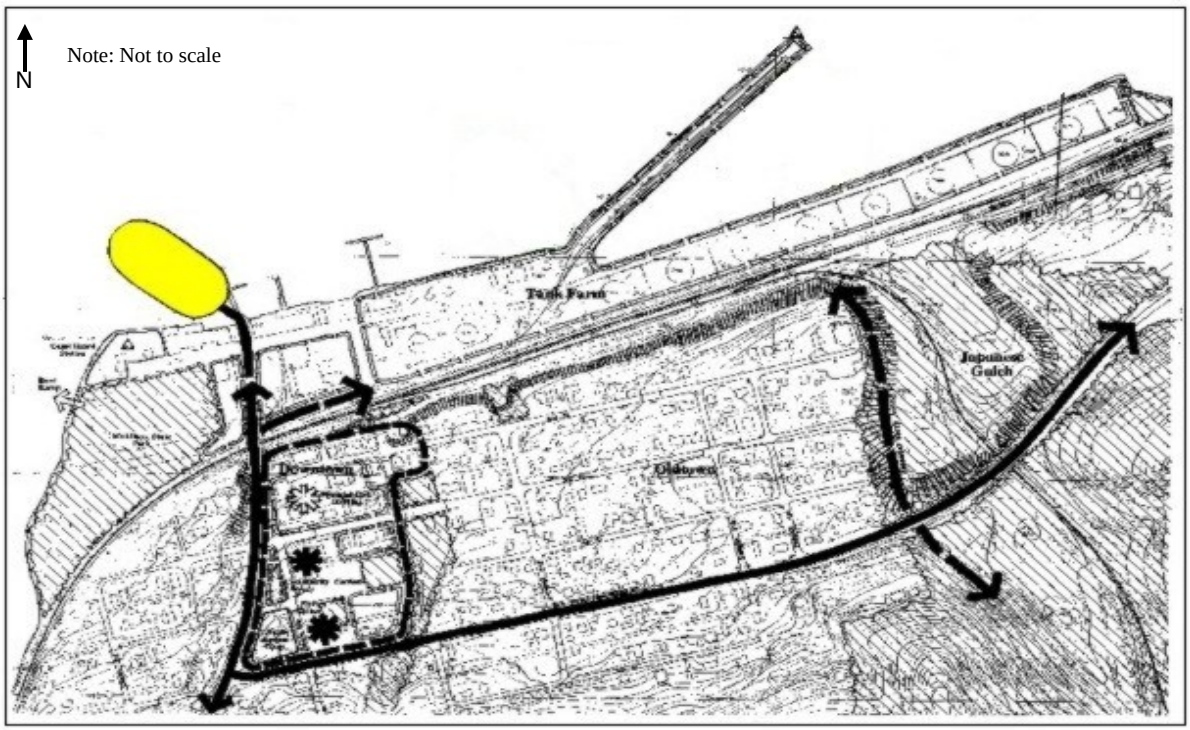
2.1 Existing Site Alternative

The Existing Site Alternative expanded the existing terminal and connected it to the site for a new multimodal terminal near the SR 525 bridge and over the BNSF rail lines (Exhibit 3). Two layouts were evaluated.

- Layout 1 required using the state park facility to the west of SR 525 as a ferry holding area and required use of much of the existing commercial downtown area of Mukilteo for multimodal terminal facilities.
- Layout 2 kept all development east of SR 525 and did not require the use of the state park facility. Instead, Layout 2 used much of the commercial downtown for multimodal facilities and required an elevated structure for space for bus platforms, bays, parking, and a park-and-ride lot for the terminal.

The existing site alternative was re-considered as part of the FTA/WSF NEPA environmental assessment (EA) and was called "Improve the Existing Site" (refer to Section 4.2.6).

Exhibit 3
Existing Site Alternative



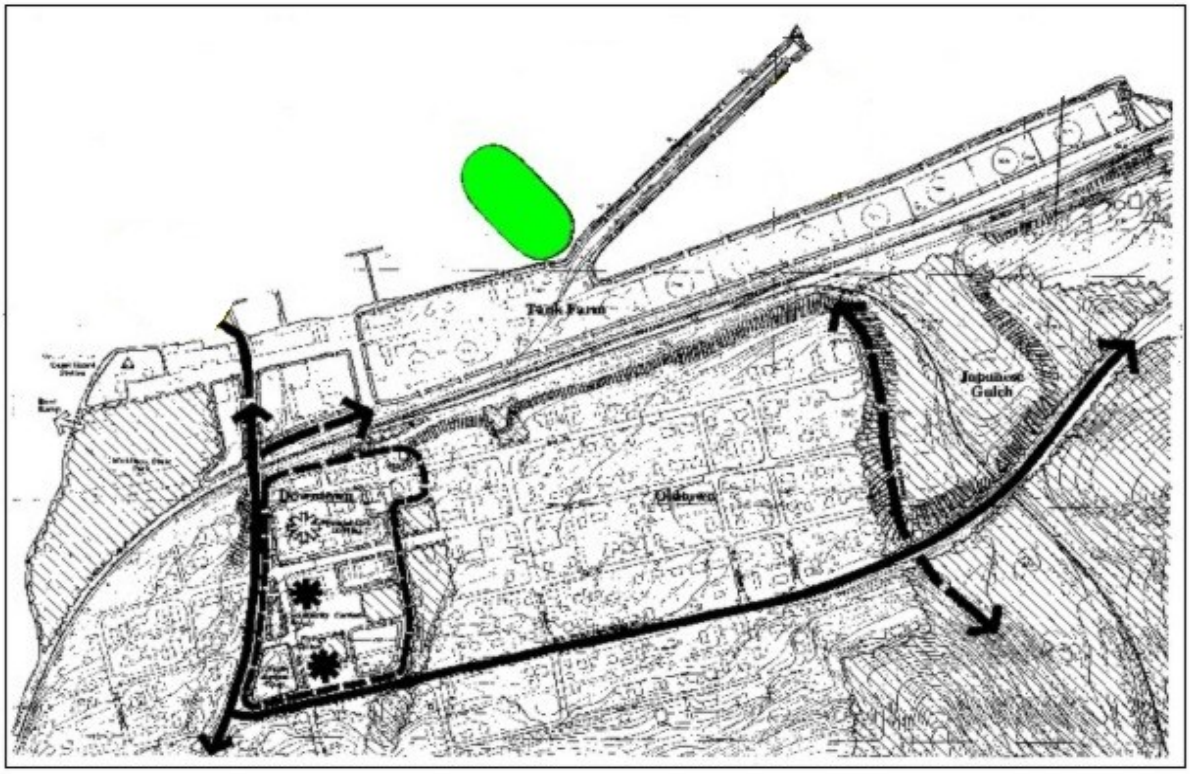
Source: City of Mukilteo 1995c

2.2 Central Waterfront Alternative

The Central Waterfront Alternative located the new terminal at the center of the Mukilteo waterfront, on the Tank Farm property just east of the existing terminal. This alternative would have required that WSF purchase or otherwise obtain the western half of the property (Exhibit 4).

This site was eventually selected as the City's preferred alternative (City of Mukilteo, 1995b).

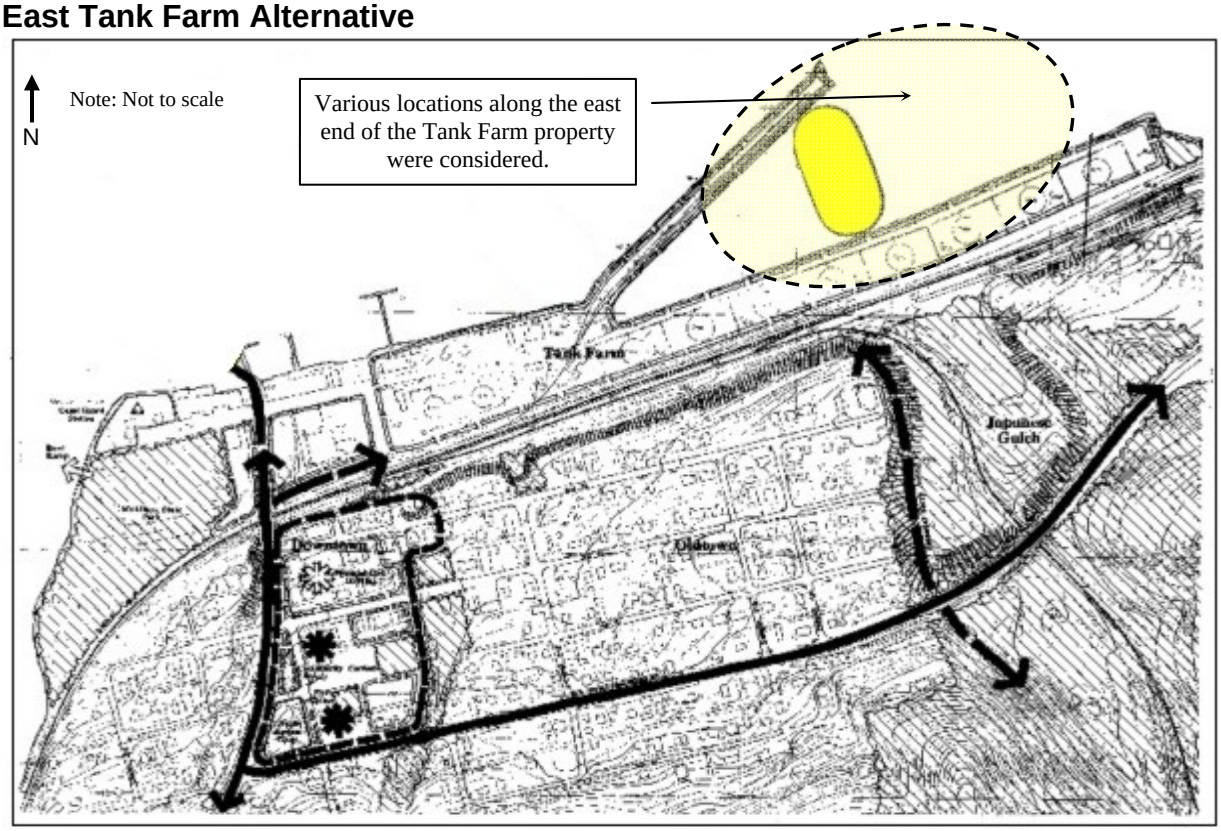
Exhibit 4
Central Waterfront Alternative



2.3 East Tank Farm Alternative

The East Tank Farm alternative moved the existing terminal to the east side of the Tank Farm property. Consideration of the exact location varied (Exhibit 5). Regardless of the final location, this option would have required WSF to purchase the entire Tank Farm.

Exhibit 5
East Tank Farm Alternative



Source: City of Mukilteo 1995c

2.4 Transportation System Management Terminal Alternative

The Transportation System Management (TSM) terminal alternative included activities that would maximize efficiency of the existing facility. The alternative evaluated whether TSM strategies at the existing ferry terminal would be sufficient to avoid expansion or relocation (City of Mukilteo, 1995a). While TSM alternatives typically are not considered build alternatives, this alternative included widening a portion of SR 525 to three lanes south of Fifth Street and providing pockets for turning movements. In addition, new signalization of the intersections at Goat Trail Road and 76th Street, with associated right-turn lanes, was proposed. Between Fifth Street and the waterfront, improvements included widening the road to four lanes for distribution of ferry and local waterfront traffic.

TSM strategies and principles were based on changes at the existing terminal that would improve operations without increasing overall capacity. Although this alternative included a few road improvements, it primarily improved the person-carrying capacity of the system while maintaining the existing vehicle capacity.

During the SEPA comment period, the City requested further study of the SR 525 access option to address neighborhood access issues. A more detailed analysis of SR 525 and key intersections considered access issues along the highway thoroughly (City of Mukilteo, 1995b).

Table 1 summarizes the advantages and disadvantages of the alternatives analyzed in the 1995 City of Mukilteo EIS.

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Table 1. City of Mukilteo SEPA Draft and Final Programmatic EIS Alternatives

Advantages	Disadvantages
Existing Site Alternative (Screened Out)	
• Did not require relocation of the existing ferry terminal • Minimal increase in over-water cover	• Would not meet overall purpose and need because o Consumed the entire downtown area o Location too small to handle growing service demand o Created traffic congestion in the downtown area o Inconvenient access for local traffic o Did not allow for circulation and safety improvements o Not easily accessible to other modes of transportation (ex. if the commuter rail developed by Sound Transit came to Mukilteo, a central location would be more optimal) • Was not consistent with City's Comprehensive Plan which stated that the Mukilteo multimodal terminal must be located close to the BNSF railroad for the possible Mukilteo Commuter Rail Station. • Would require significant acquisition of private property • Would require acquisition of park property • Would provide only minimal overflow holding lane along access road • Would still require utility upgrades and slip replacement along with at the end of the current facility's usable life • Would not be easily accessible to other modes of transportation (ex. if the commuter rail developed by Sound Transit came to Mukilteo) • Poor multimodal elements (ex. longer distance between ferry-rail-bus than both build alternatives)
Central Waterfront Alternative (Selected as Preferred Alternative)	
• Met overall purpose and need o Stimulated compatible existing and future waterfront development by allowing for more available developable waterfront land • Would be easily accessible to other modes of transportation (e.g., if the commuter rail developed by Sound Transit came to Mukilteo, this alternative would be a shorter distance between ferry-rail-bus) o Moved ferry traffic out of downtown and solved traffic congestion along SR 525 (proposed moving terminal traffic to a new Paine Field Boulevard and its extension near Japanese Gulch) o Allowed adequate circulation and safety o Provided a second through-route between the north and south end of Mukilteo • Greater flexibility in overall terminal layout • Maintained existing commercial area in downtown Mukilteo (minimal acquisition of developable property, private property, or park property) • Limited adverse community impacts from traffic, noise, visual quality, and loss of community cohesion • Provided mitigation opportunities that improved existing marine environment[1] • Provided opportunities that made environmental impacts for preferred access route mitigatable (i.e., restoration opportunities at Japanese Gulch)	• Would require new terminal to be located east of existing terminal (requiring property acquisition)
East Tank Farm Alternative (Screened Out)	
• Met overall purpose and need o Moved ferry traffic out of downtown and solved traffic congestion along SR 525 (proposed moving terminal traffic to a new Paine Field Boulevard and its extension near Japanese Gulch) o Stimulated compatible existing and future waterfront development by allowing for more available developable waterfront land o Allowed adequate circulation and safety o Provided for a second through-route between the north and south end of Mukilteo • Greater flexibility in overall terminal layout	• Would require new terminal to be located east of existing terminal and to west side of Tank Farm property (requiring significant property acquisition) • Did not meet overall purpose and need o Would relocate terminal to more remote location outside urban core, separated from existing business community and town center • Would require moving terminal east to Tank Farm property • More nearshore environmental impacts[2] (e.g., propwash scour a concern for Japanese Gulch Creek area) due to shallow water depth • More adverse community effects from traffic, noise, visual quality, and loss of community cohesion than Central Waterfront Alternative • Constructability issues given location[3] (e.g., would require dredging) • Could have required private property acquisition
TSM Terminal Alternative (Screened Out)	
• Did not require relocation of existing terminal • Met overall purpose and need o Stimulated compatible existing and future waterfront development by allowing for more available developable waterfront land o Provided long-term solutions to traffic and congestion problems on SR 525 by moving traffic to Japanese Gulch o Provided second through-route between north and south ends of Mukilteo • Limited adverse community effects from traffic, noise, visual quality, and loss of community cohesion • Provided opportunities that made environmental impacts for preferred access route mitigatable (restoration opportunities at Japanese Gulch) • Required minimal acquisition of developed private property	• Would not meet overall purpose and need because o Location too small to handle projected growth safely and efficiently o Created traffic congestion in downtown area and inconvenient access for local traffic o Did not allow adequate improvements for circulation and safety o Would not be easily accessible to other modes of transportation (e.g., if the commuter rail developed by Sound Transit came to Mukilteo) o Poor multimodal elements (e.g., longer distance between ferry-rail-bus than both build alternatives) • Similar to those listed for the Existing Site Alternative • Would require significant reconstruction of the downtown area • Would require acquisition of private property • Would require acquisition of park property • Would provide only minimal overflow holding lane along access road • Would still require utility upgrades and slip replacement at end of facility's usable life

[1]By building the new terminal within the structural footprint of the Tank Farm pier, it would be possible to remove a significant number of creosote-treated timber pilings and replace them with fewer steel or concrete pilings.

[2]Impacts to nearshore habitat often overlap critical habitat for species protected under the Endangered Species Act (salmon and trout) and can require more mitigation than impacts that occur in deeper water.

[3]Dredging would be required to move the terminal to this location. The bathymetry below the Tank Farm pier is not deep enough for ferry access without dredging and an adjacent nearshore habitat becomes more predominant if the terminal is moved further east.

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2.5 City of Mukilteo Preferred Alternative: Central Waterfront Alternative

As a result of the 1995 SEPA EIS analysis and community input, the City adopted the Central Waterfront Alternative as the preferred location of the multimodal terminal, with the Japanese Gulch route as the preferred access route (City of Mukilteo, 1995b). The City revised its comprehensive plan in 1996 to recognize the Central Waterfront Alternative, which is still reflected in the City's 2005 Comprehensive Plan, 2004 Transportation Plan (City of Mukilteo, 2004), and plans to update its shoreline master program. While the City determined that its preferred access route to the new multimodal terminal was through Japanese Gulch (City of Mukilteo, 1995b), no plans or funding are currently available to complete the planning for, or to develop, this new road.

3 MUKILTEO MULTIMODAL TERMINAL MASTER PLAN DESIGN REPORT

WSF began a master planning process for the multimodal terminal in 2002. A master plan is used by an agency and/or jurisdiction to describe, in narrative and with maps, an overall development concept. It is a document used to coordinate the preparation of more detailed plans or analysis. The WSF master planning process for the multimodal terminal began by identifying concepts and configurations for it that would strike a balance between efficient ferry operations, multimodal access and considerations, development potential on adjacent sites, and the City's desire to expand and enhance the downtown waterfront commercial district (WSF, 2004a).

WSF project goals and objectives included:

- Optimize efficiency of waterside operations
- Provide efficient and user-friendly land-side transportation access, including seamless connections to other transportation modes
- Ensure public safety/security
- Encourage non-single occupancy vehicle modes of transportation
- Explore potential for revenue generating uses
- Examine a broad range of joint venture possibilities for ownership, investment, and management of facilities
- Contribute to an economically viable mixed use waterfront redevelopment
- Promote environmental responsibility
- Minimize disruption of existing service

The efforts to develop concepts into alternatives described in this section were conducted prior to the additional geotechnical investigations and archeological studies done between 2007 and 2009. The effort to develop new concepts based on the additional geotechnical and archeological information is described in Section 5.

3.1 Operational Considerations

A few of the significant issues that became evident during the master planning process in connection with the inventory and analysis of the existing site, its context, and operating conditions, included:

- Inadequate accommodation of other transit modes
- Inadequate security and fare-control operations for walk-on and vehicle passengers
- Inability to accommodate future three-boat schedule
- Inadequate queuing capacity on SR 525 and resulting traffic flow problems on adjacent streets
- Inadequate holding capacity at existing facility, resulting in longer loading times

The deficiencies of the existing terminal became increasingly evident during the master planning effort, resulting in the development of several concepts based on the Central Waterfront Alternative.

3.2 Multimodal Considerations

3.2.1 City of Mukilteo

Because the City selected the Central Waterfront Alternative as its preferred alternative in the 1995 SEPA EIS, that location was carried forward into WSF's master planning process as the basis for all alternatives (WSF, 2004a). Each concept was designed to provide access to the ferry terminal from SR 525, but not preclude access from Japanese Gulch should that corridor be developed in the future.

3.2.2 Sound Transit

Sound Transit completed the Everett-Seattle Commuter Rail Project EIS under NEPA and SEPA (Sound Transit et al., 1999a and 1999b) to evaluate the potential effects of developing commuter rail service between Seattle and Everett. Screening criteria applied during this process included:

- Service and service integration (including the performance objectives for both)
- Performance (including mobility, cost/efficiency)
- Budget (cost/efficiency, financial feasibility, equity)
- Timing (cost/efficiency, equity, ability to implement service in a timely manner)
- Environmental considerations (social/economic/environmental)

Further details on the screening criteria and process for Sound Transit can be found in Volume 3 of the Everett-Seattle Final NEPA/SEPA EIS (Sound Transit et al., 1999b).

Sound Transit proposed a commuter rail station for Mukilteo in their 1999 NEPA/SEPA EIS that was consistent with the proposed Central Waterfront Alternative adopted by the City. Sound Transit began service on the line in 2003 and the Mukilteo Commuter Rail Station opened for service in May 2008. The station includes a platform on the north side of the tracks for passengers as well as interim parking. The addition of a south platform, pedestrian bridge, and additional parking spaces is planned. (http://www.soundtransit.org/projects-and-plans/Project-List/Mukilteo-Station).

The issuance of the Sound Transit NEPA/SEPA EIS in 1999 was also a pivotal factor in the development of project concepts for the Mukilteo Multimodal Terminal Master Plan Design Report (WSF, 2004a). The Sound Transit NEPA/SEPA EIS situated the commuter platform at the location of the Central Waterfront Alternative and explored different sites for the parking lot for the Sound Transit commuter rail station (Mukilteo Commuter Rail Station) (Sound Transit et al., 1999a and b). A 1999 Memorandum of Understanding (MOU) between WSDOT/WSF, the cities of Mukilteo and Everett, the Port of Everett, and Sound Transit set forth development of the Tank Farm property to include the Mukilteo Multimodal Ferry Terminal and the Mukilteo Commuter Rail Station.

Sound Transit updated its 1999 NEPA/SEPA EIS with a NEPA re-evaluation in August 2005 for the construction of the Mukilteo Commuter Rail Station. A re-evaluation was required because the EIS was over 3 years old and the design for parking facilities had changed from what was analyzed in the EIS. The first phase of the Mukilteo Commuter Rail Station was completed along with interim parking for 63 vehicles. Long term, the Mukilteo Commuter Rail Station would

require the development of 120 parking stalls. Sound Transit expects to provide these spaces in a parking structure, which was evaluated in the original FTA/WSF NEPA/SEPA EIS.

The concepts developed as part of the Mukilteo Multimodal Terminal Master Plan Design Report took into account the location of the Mukilteo Commuter Rail Station in an effort to coordinate with Sound Transit (WSF, 2004a). All nine master plan concepts tied into the Mukilteo Commuter Rail Station by incorporating an overhead walkway across the BNSF rail lines to connect ferry walk-on passengers directly to the rail station. And all nine concepts considered Sound Transit's need for 120 parking spaces, per the City of Mukilteo Shoreline Code (WSF, 2004a).

3.3 Tribal Governments

Coordination with the Tulalip, Lummi, Swinomish, and Suquamish tribes occurred as part of the master planning process (WSF, 2004a). Information on vessel routes at the existing terminal and proposed terminal locations was provided to obtain input on natural and cultural resource concerns. Tribal governments were also invited to participate in the development of the terminal alternatives during the 2006 FTA/WSF NEPA EA scoping process (Section 4.3).

3.4 Preliminary Site Concepts

The nine concepts, described later in this section, were developed by a design team in a series of interactive workshops with WSF Operations staff (WSF, 2004a). Each concept was evaluated against WSF goals and objectives along with operational, environmental, and developmental considerations that included:

- Goals and Objectives
  - Is consistent with stakeholder goals, objectives, and mission statements
  - Accommodates program components
  - Maintains multimodal emphasis of the project
- Operating Efficiencies
  - Provides and maintains adequate levels of service for multimodal transportation users of all modes
  - Facilitates systems operations for transportation providers such as WSF, Sound Transit, and Community/Everett transit
  - Integrates multimodal transportation efficiently
  - Is able to meet WSF revenue requirements
  - Is able to meet Homeland Security Act requirements
  - Is able to meet project site program requirements
  - Optimizes WSF staff efficiencies
  - Provides workable interface between WSF and concessionaires from user and service standpoint
  - Considers upland and over-water engineering and design
- Environmental Considerations
  - Amount of over-water cover
  - Potential for propeller scour

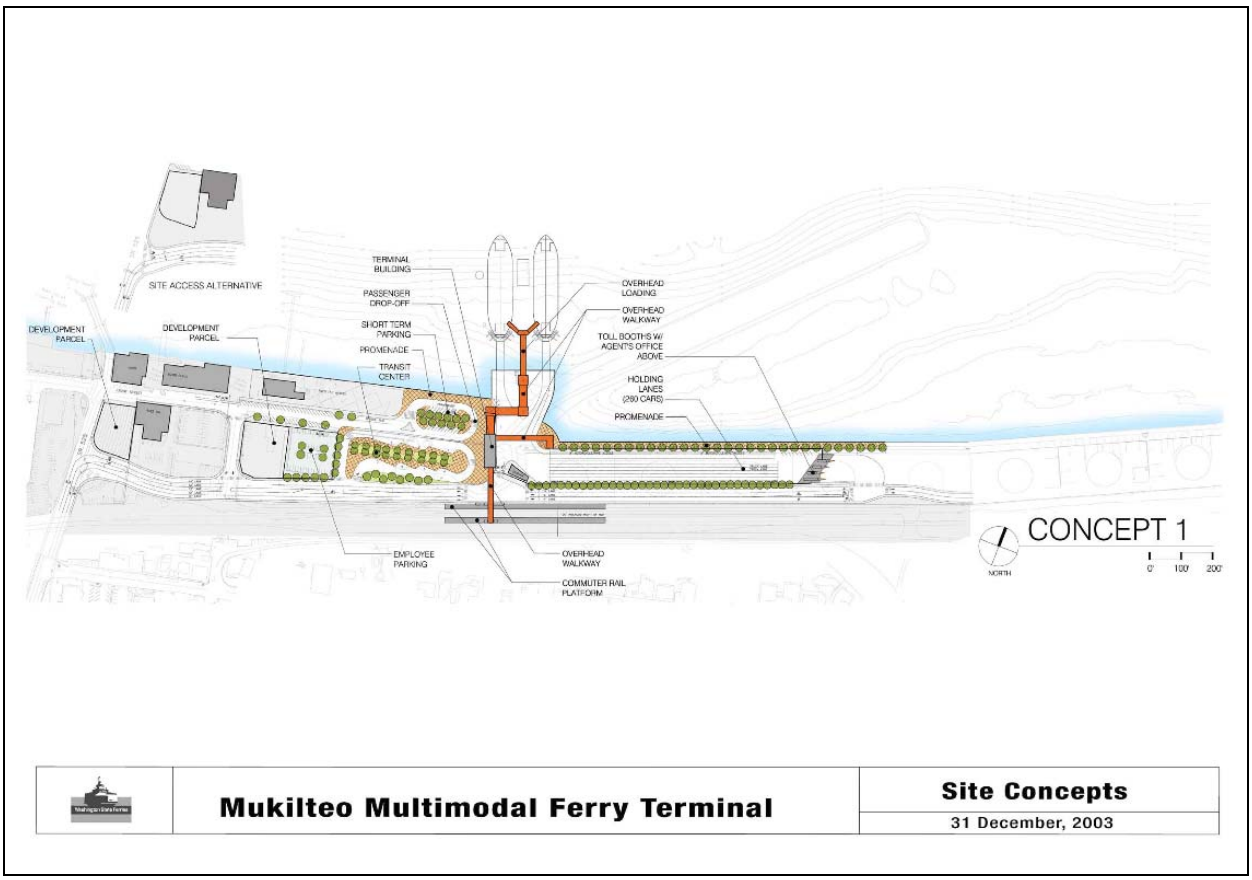
    - Placement of shoreline reinforcement below the Ordinary High Water (OHW) and Mean Higher High Water (MHHW) marks
    - Other potential environmental impacts
    - Possible mitigation opportunities
- Developmental Considerations
    - Private development opportunities and risks
    - Potential revenue generation for participating jurisdictions
    - Functional feasibility of phased development
    - Consistency with WSF business objectives
- Community Considerations
    - Is able to enhance waterfront area and neighborhood according to City plans and policies
    - Effects on existing views and public access
    - Potential negative effects and benefits to adjacent residential neighborhoods and businesses
    - Desired design character
    - Coordination with local transit operations
    - Traffic impacts on local access, intersections, and freeway queuing
    - Safety of pedestrian circulation
    - Reduction of transportation modal conflicts (access and egress from the multimodal terminal)
- Regional Considerations
    - Consistency of development with regional transportation plans
    - Coordination of transit-related design with regional transit operations
- Cultural/Historic Considerations
    - Sensitivity to local and Tribal concerns (undetermined at this time)
    - Development of educational opportunities
- Financial Considerations
    - Development, mitigation, maintenance, and operational costs
    - Short- and long-term returns to WSF, City, Port of Everett, and Sound Transit
    - Funding opportunities
    - Required permitting time and constraints

While these considerations were not formally ranked or weighted, the concepts could be compared and discussed in WSF's 2004 Master Plan Design Report.

3.4.1 Concept 1

Concept 1 stretched the holding lanes along the waterfront to the east of the multimodal terminal with the parking, transit center, and passenger drop-off areas located west of the terminal. Concept 1 was representative of the City's Central Waterfront Alternative (City of Mukilteo, 1995b) but with less over-water cover. The access road to the multimodal terminal included room for an overflow holding lane to reduce ferry traffic backup on SR 525 (Exhibit 6).

Exhibit 6
Concept 1

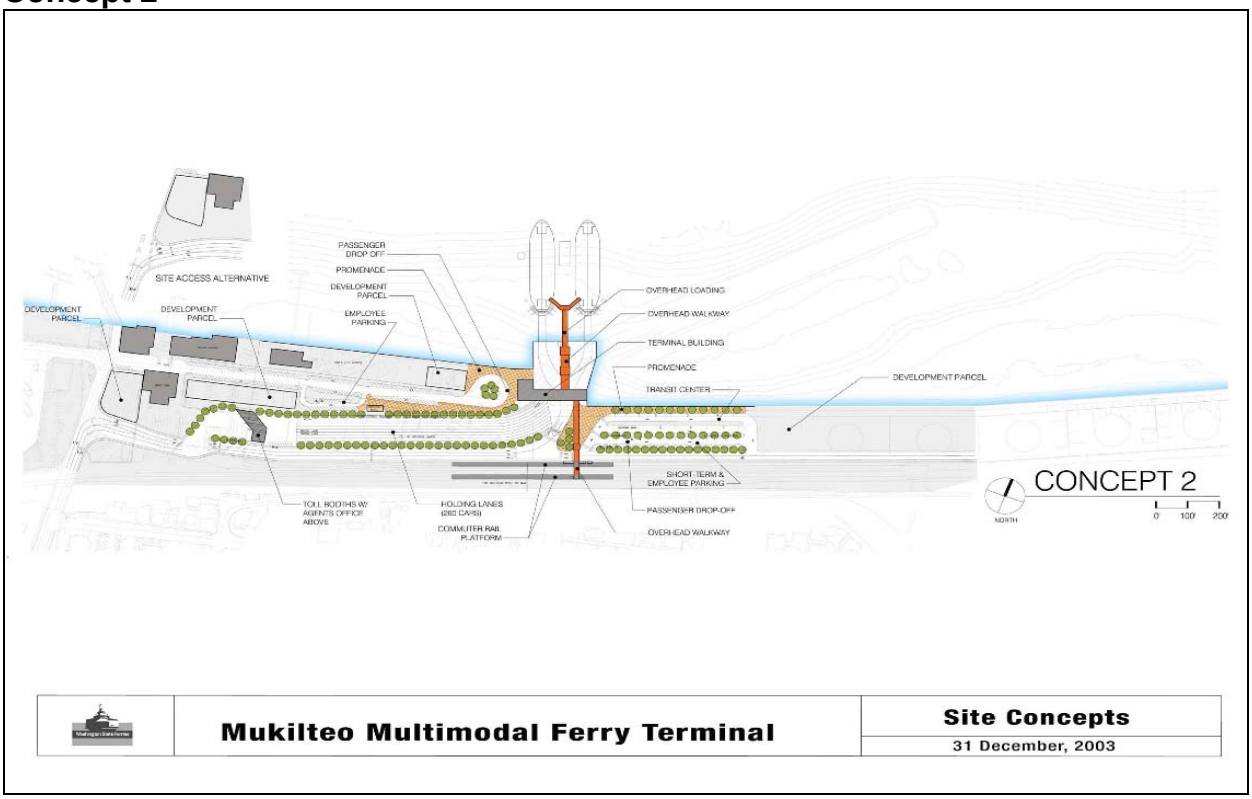


Source: WSF 2004a

3.4.2 Concept 2

In Concept 2, the terminal was located above the tollbooths, spanning the access lanes to the vehicle holding area. The holding lanes and passenger drop-off areas were to the west of the multimodal terminal, and the transit center and short-term parking areas were to the east of the terminal. Future parking was proposed above the commercial development and vehicle holding lanes in a parking garage. Vehicle overflow queuing occupied a lane of the access road (Exhibit 7).

Exhibit 7
Concept 2

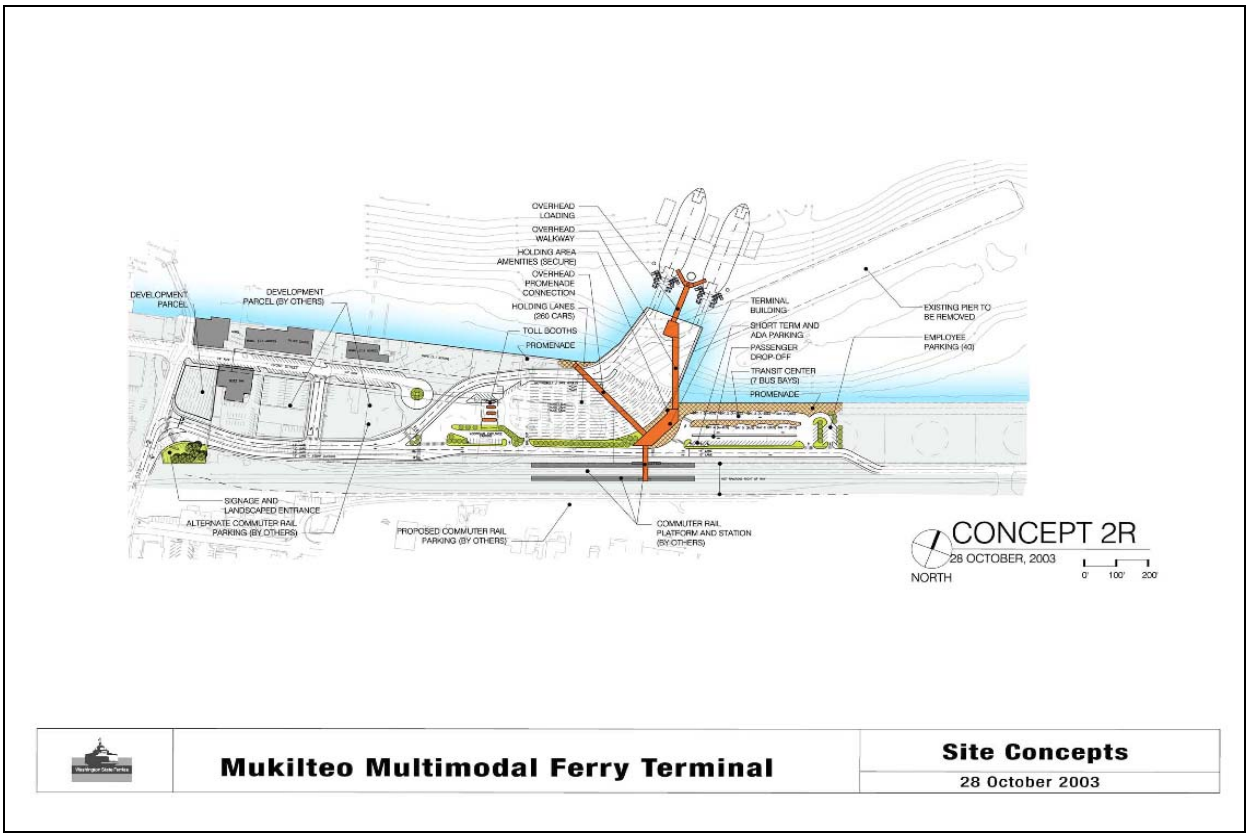


Source: WSF 2004a

3.4.3 Concept 2 Revised

Concept 2 Revised tried to resolve some of the conflicts associated with Concept 2. The holding lane area was reconfigured from long and narrow to short and broad, which created a more efficient configuration. The ferry egress lanes were moved to the north side of the holding area to reduce traffic conflicts with vehicles accessing the multimodal terminal (Exhibit 8).

Exhibit 8
Concept 2 Revised

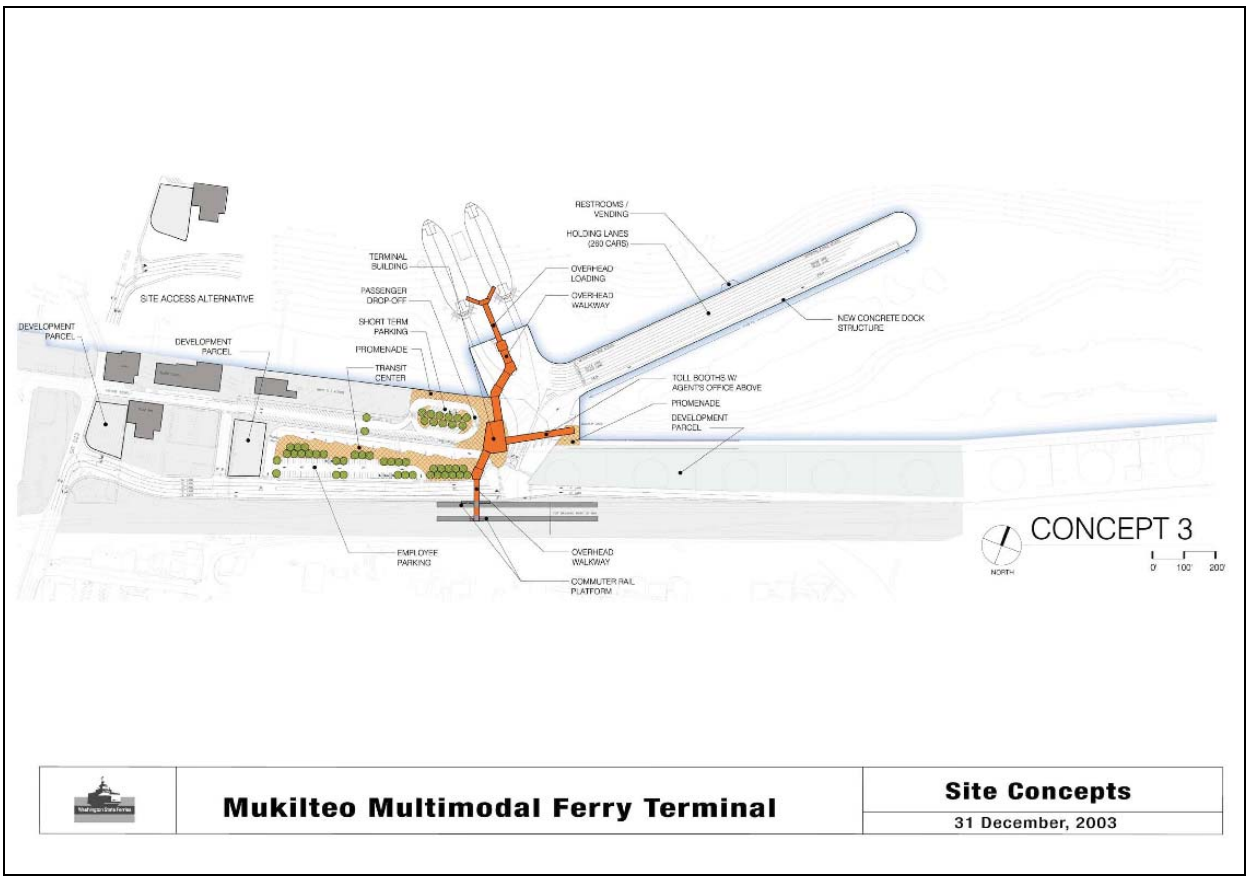


Source: WSF 2004a

3.4.4 Concept 3

Concept 3 tried to incorporate the presence of the existing Tank Farm pier into the multimodal terminal layout. In this concept, the holding lane area was constructed over water on a new concrete dock in the same alignment as the existing Tank Farm pier. The transit center, passenger drop-off, and employee and short-term parking areas were all located west of the multimodal terminal (Exhibit 9).

Exhibit 9
Concept 3

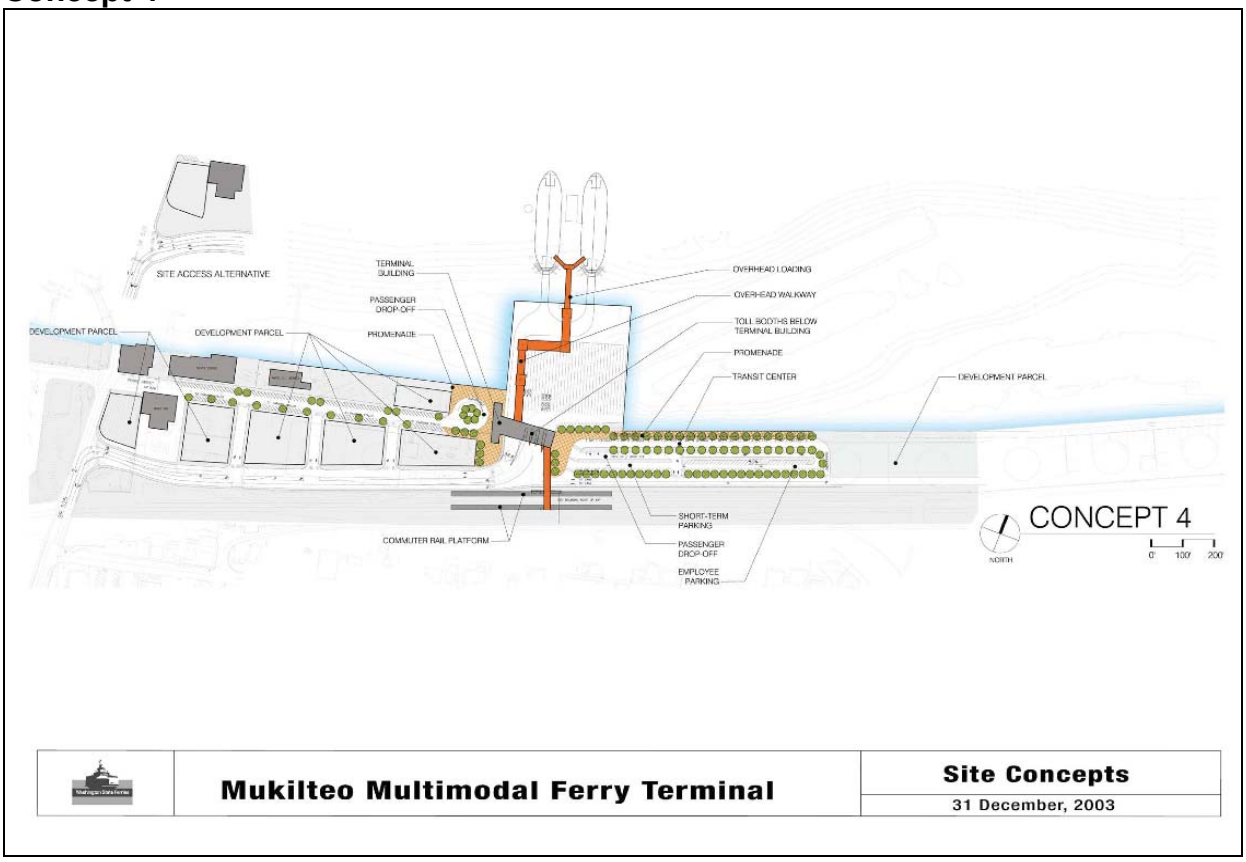


Source: WSF 2004a

3.4.5 Concept 4

The main feature of Concept 4 was that the holding area was over water and configured to be short and broad. The terminal was located above the tollbooths, spanning the access lanes to the vehicle holding area, similar to Concept 2. The employee and short-term parking areas and the transit center were located east of the multimodal terminal in order to separate them from ferry operations. The passenger drop-off area was located west of the multimodal terminal. Because short-term parking was located east of the terminal, a smaller passenger drop-off area was also available east of the terminal (Exhibit 10).

Exhibit 10
Concept 4



Source: WSF 2004a