

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

City of Seattle Solid Waste Intermodal Transfer Facility



Seattle Public Utilities



August 5, 2005

Note:

Some pages in this document have been purposefully skipped or blank pages inserted so that this document will copy correctly when duplexed.



City of Seattle

Gregory J. Nickels, Mayor

Seattle Public Utilities

Chuck Clarke, Director

August 5, 2005

Dear Interested Reader:

Enclosed is the final supplemental environmental impact statement (FSEIS) on the City of Seattle's proposed solid waste intermodal transfer facility. The FSEIS has been prepared in compliance with the State Environmental Policy Act, RCW 43.21C, and the Seattle SEPA ordinance, Chapter 25.05 of the Seattle Municipal Code (SMC).

Seattle Public Utilities (SPU), which is the lead agency under SEPA for the FSEIS, is responsible for the overall management of solid waste generated within the City of Seattle. As one of the outgrowths of the City's 1998 solid waste management plan, *On the Path to Sustainability*, SPU has prepared a draft Solid Waste Facilities Master Plan. The master plan identifies the solid waste intermodal transfer facility as currently needed to ensure that the city has the ability to transfer solid waste out of the city.

This FSEIS identifies impacts resulting from the construction and operation of the proposed solid waste intermodal transfer facility at four alternative sites. The four alternative sites are:

- A facility at Terminal 10 on Harbor Island
- A facility at Terminal 10 and the adjacent Pendleton site on Harbor Island
- A facility on property between South Corgiat Drive and Airport Way South south of South Albro Street
- A facility on property in the southwest quadrant of the intersection of South Edmunds Street and Airport Way South.

The FSEIS also evaluates the no action alternative. In addition, the FSEIS includes comments on the Draft SEIS provided by agencies, the public, and other interested parties, along with SPU's responses to those comments. The primary environmental issues addressed in the FSEIS are transportation, noise, and air quality.

Copies of the FSEIS document are available for your review at the following locations:

- The project website at www.seattle.gov/util/About_SPU
- Seattle Public Library: Central (Downtown), Ballard, Beacon Hill, Columbia, Delridge, Fremont, Wallingford, and West Seattle.
- Neighborhood Service Centers: Delridge, Fremont, Greater Duwamish, and West Seattle

Copies of the FSEIS are available on compact disk (CD) and can be obtained by contacting Barbara Orr at (206) 386-4567.

We expect the City to make a formal selection of an intermodal site in 2006.

Appeals of the adequacy of the FSEIS may be commenced by filing a notice of appeal with the office of the Hearing Examiner no later than 5:00 PM August 22, 2005. To appeal to the City's Hearing Examiner, the appeal must be in writing and delivered either in person to the Hearing Examiner's office on the 40th floor of Seattle Municipal Tower at 700 Fifth Ave. or by mail to the City of Seattle Hearing Examiner, P.O. Box 94729, Seattle, WA 98124-4729. Appeals must be accompanied by a \$50.00 filing fee in a check payable to the City of Seattle. (The Hearing Examiner may waive the appeal fee if payment would cause financial hardship). The appeal must specify exceptions or objections to the decision, and the relief sought. Appeals to the Hearing Examiner must conform in content and form to the Hearing Examiner's rules governing appeals. For information regarding appeals, visit the Hearing Examiner's website at www.seattle.gov/examiner or call them at (206) 684-0521.

Thank you for your interest and participation in this process.

Sincerely,



Nancy Ahern
Deputy Director, Resource Management Branch
Seattle Public Utilities

Fact Sheet

Nature and Location of Proposed Action

Seattle Public Utilities proposes to construct a new solid waste intermodal (truck to rail) transfer facility on one of four alternative sites, all of which are located within the city limits of Seattle, Washington, south of downtown Seattle. The four alternative sites are the following:

- **Alternative 2 (Harbor Island Terminal 10 site).** This site, located on the southwest side of Harbor Island, west of 16th Avenue SW, would support a city-only intermodal transfer facility.
- **Alternative 3 (Harbor Island Terminal 10/Pendleton site).** This site, located on the southwest side of Harbor Island, west of 16th Avenue SW, would support a combined city-county (King County) or a city-only intermodal transfer facility.
- **Alternative 4 (Corgiat Drive site).** This site, located between South Corgiat Drive and Airport Way South, southeast of South Albro Place and southwest of Interstate 5, would support a city-only intermodal transfer facility.
- **Alternative 5 (Edmunds Street site).** This site, located in the southwest quadrant of the South Edmunds Street/Airport Way South intersection and west of Interstate 5, would support a city-only intermodal transfer facility.

The principal features of the proposed intermodal transfer facility would be the following:

- A main transfer building, 50 to 60 feet in height above grade, where waste is delivered, compacted if necessary, and loaded into containers
- An exterior container storage area
- Rail siding tracks with adjacent cranes and other equipment for loading containers onto railway cars
- An employee/office building with adjoining parking
- Access driveways with entrance and exit scale facilities
- A small fueling station.

Construction of the new intermodal transfer facility would take approximately 16 to 22 months.

This environmental impact statement (EIS) also addresses the no-action alternative, designated as Alternative 1.

This EIS supplements the August 1998 EIS that evaluated the impacts of Seattle's 1998 solid waste management plan (*On the Path to Sustainability*) and the July 1990 EIS (*Seattle Waste Transport and Disposal Project Final Environmental Impact Statement*).

Proponent

Seattle Public Utilities

Lead Agency

Seattle Public Utilities

Date of Implementation

Fall 2005

Responsible Official

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Required Permits and Approvals

City of Seattle

- Shoreline substantial development permit (Alternatives 2 and 3 only)
- Building and grading permit
- Demolition permit.

Public Health – Seattle & King County

- Solid waste permit.

Puget Sound Clean Air Agency

- Air permit.

Washington State Department of Ecology

- Industrial Stormwater General Permit
- National Pollutant Discharge Elimination System construction permit.

Federal Aviation Administration

- Notice of Proposed Construction or Alteration (Form 7460-1).

EIS Authors

Herrera Environmental Consultants, Inc.

- Primary author
- Land and shoreline use
- Aesthetics and visual quality
- Plants and animals
- Earth
- Water
- Hazardous materials
- Public services and utilities.

Heffron Transportation, Inc.

- Transportation.

Environalysis, LLC

- Air quality and odor
- Noise.

Issue Date of the Draft EIS

February 17, 2005

Due Date for Comments on the Draft EIS

Comments on the draft supplemental EIS were due no later than the close of business on March 21, 2005.

Public Meeting

Public meetings to receive oral comments on the draft supplemental EIS were held at the following times and locations:

- March 1 at 6:30 p.m.: Hamilton Middle School, 1610 North 41st Street, Seattle, Washington
- March 2 at 6:30 p.m.: Concord Elementary, 723 South Concord Street, Seattle, Washington
- March 3 at 6:30 p.m.: West Seattle High School, 3000 California Avenue SW, Seattle, Washington.

Issue Date of the Final EIS

August 5, 2005

Date of Final Action

Summer/fall 2005

Availability of the Final EIS

The final supplemental EIS is available at the following branches of the Seattle Public Library:

- **Central** – 1000 Fourth Avenue
- **Ballard** – 5711 24th Avenue NW
- **Beacon Hill** – 2821 Beacon Avenue S.
- **Columbia** – 4721 Rainier Avenue S.

- **Delridge** – 5423 Delridge Way SW
- **Fremont** – 731 N. 35th Street
- **Wallingford** – 1501 North 45th Street
- **West Seattle** – 2306 42nd Avenue SW.

It is also available at the following neighborhood service centers:

- **Delridge** – 5405 Delridge Way SW
- **Fremont** – 908 North 34th Street
- **Greater Duwamish** – 2821 Beacon Avenue South
- **West Seattle** – 4205 SW Alaska Street.

The final supplemental EIS can be reviewed on the project website at http://www.seattle.gov/util/About_SPU.

Copies on CD (in Adobe Acrobat format) of the final supplemental EIS may be obtained without cost by contacting:

Barbara Orr

Seattle Public Utilities
Seattle Municipal Tower
P.O. Box 34018
Seattle, WA 98124-4018
(206) 386-4567

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Abbreviations

BNSF	Burlington Northern Santa Fe Railway
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
dB	decibels
dba	A-weighted decibels
EDR	Environmental Data Resources, Inc.
EIS	environmental impact statement
HAP	hazardous air pollutant
Leq	equivalent sound level
LOS	level of service
mg/kg	milligrams per kilogram
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
MTCA	Model Toxics Control Act
NPDES	National Pollutant Discharge Elimination System
NPU	nephelometric turbidity units
NRDS	North Recycling and Disposal Station
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PM ₁₀	particulate matter with a diameter of 10 micrometers or less
PM _{2.5}	particulate matter with a diameter of 2.5 micrometers or less
ppm	parts per million
PSE	Puget Sound Energy
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
SEPA	State Environmental Policy Act
SMC	Seattle Municipal Code
SRDS	South Recycling and Disposal Station

Abbreviations

SWFMP	solid waste facilities master plan
TCE	trichloroethylene
TEU	twenty-foot equivalent unit
TSCA	Toxic Substances Control Act
UP	Union Pacific Railroad
U.S. EPA	U.S. Environmental Protection Agency
UST	underground storage tank
WAC	Washington Administrative Code

Part 1: Summary

Objectives of the Proposal

Seattle Public Utilities has established the following objectives for the solid waste intermodal transfer facility project:

- Site selection and construction and operation of the solid waste intermodal transfer facility should minimize environmental impacts on Seattle residents and the region over the long term.
- Site selection and construction and operation of the solid waste intermodal transfer facility should be consistent with the City's comprehensive solid waste management plan (*On the Path to Sustainability* [Seattle 1998a, 2005]), including the comprehensive plan's goal of providing for the efficient transfer of both residential and commercial solid waste.
- The solid waste intermodal transfer facility should serve as a dedicated facility in Seattle to ensure the long-haul transport of solid waste at a reasonable cost.
- The solid waste intermodal transfer facility should provide an opportunity for the consolidation of collected recyclables and organics for distribution to processors.
- The solid waste intermodal transfer facility should improve the efficiency of intra-city transport of solid waste by directing the majority of collection trucks directly to an intermodal transfer facility, thereby minimizing intermediate waste handling costs and the associated traffic.
- The solid waste intermodal transfer facility should increase the payload of intermodal containers at the intermodal transfer facility, thereby reducing the number of containers, which will reduce shipping and handling costs (note that current payloads are limited by road weight limits because the intermodal containers are currently transported over public roads).
- The solid waste intermodal transfer facility should maintain competition for waste collection, transfer, long-haul transport, and disposal by providing equal opportunity for contractors that bid on solid waste services, thereby maintaining the quality of service at a competitive price.
- The solid waste intermodal transfer facility should maintain system flexibility and the ability to deal with emergencies by having access to multiple modes of transportation, both the Burlington Northern Santa Fe

Railway (BNSF) and the Union Pacific Railroad (UP), and multiple landfills.

- The solid waste intermodal transfer facility should minimize the dependence on the North Recycling and Disposal Station and the South Recycling and Disposal Station for compaction of waste into intermodal containers, thereby allowing other customer-based services at these stations.
- The solid waste intermodal transfer facility should improve the efficiency and safety of unloading collected materials by serving as a dedicated facility specifically designed for this purpose without the need to accommodate self-haul customers.

Description of the Proposed Project and Alternatives

In response to directives from the City of Seattle 1998 solid waste management plan, *On the Path to Sustainability* (Seattle 1998a), the City decided in 2001 to take a broad, long-term view of the facility needs in the entire solid waste system. As a result, Seattle Public Utilities has prepared a draft solid waste facilities master plan (SWFMP) that recommends constructing a new solid waste intermodal transfer facility and upgrading the existing North Recycling and Disposal Station and South Recycling and Disposal Station (referred to as NRDS and SRDS, respectively). The proposed project that is analyzed in this supplemental environmental impact statement (EIS) is the siting, construction, and operation of a new solid waste intermodal transfer facility. The initial scope for this supplemental EIS included consideration of improvements to NRDS and SRDS. Subsequently, Seattle Public Utilities determined that preparation of State Environmental Policy Act (SEPA) documentation for improvements to NRDS and SRDS would most appropriately be prepared at a later date. A full discussion of this determination is included in Part 2 of this draft supplemental EIS, in the section “Scoping Process.”

The differences among the alternatives for the proposed project that are evaluated in this supplemental EIS include the location of the proposed solid waste intermodal transfer facility and whether the proposed facility would be a city-only facility or a combined city-county facility. Four alternative sites are under consideration, all of which are located within the Seattle city limits, south of downtown (Figure 1-1).

The alternatives analyzed in this supplemental EIS are the following:

- **Alternative 1 (No Action).** Under Alternative 1, the City would not construct a new solid waste intermodal transfer facility and would continue to contract with the private sector to provide intermodal transfer services. This could result in the development of new intermodal transfer facilities by the private sector, but the timing of their development and the locations of new intermodal facilities, if any, are unknown.
- **Alternative 2 (Harbor Island Terminal 10).** Alternative 2 consists of a solid waste intermodal transfer facility at Terminal 10 in the southwest portion of Harbor Island, west of 16th Avenue SW.
- **Alternative 3 (Harbor Island Terminal 10/Pendleton).** Alternative 3 consists of a combined city-county or city-only solid waste intermodal transfer facility at Terminal 10 and the adjoining Pendleton parcel in the southwest portion of Harbor Island, west of 16th Avenue SW.



Figure 1-1. Alternative sites for the intermodal transfer facility in the City of Seattle Solid Waste Facilities Master Plan.

- **Alternative 4 (Corgiat Drive).** Alternative 4 consists of a solid waste intermodal transfer facility on property located between South Corgiat Drive and Airport Way South, northeast of the north end of King County International Airport (Boeing Field).
- **Alternative 5 (Edmunds Street).** Alternative 5 consists of a solid waste intermodal transfer facility on property located in the southwest quadrant of the South Edmunds Street/Airport Way South intersection, approximately 1 mile south of the Spokane Street/Interstate 5 interchange.

All facilities would include similar features:

- A main transfer building where waste and other materials would be delivered, compacted if necessary, and loaded into containers for transport
- An exterior container storage area
- Rail siding tracks with adjacent cranes and other equipment for loading containers onto railway cars or other modes of transportation
- An employee/office building with adjoining parking
- Access driveways with entrance and exit scale facilities
- A small fueling station.

The main transfer building would be approximately 50 to 60 feet above grade. Drainage from the building interior would be conveyed to the sanitary sewer system. Drainage from the remainder of the site would be treated and conveyed to the local stormwater system.

Impacts, Mitigation Measures, and Significant Unavoidable Adverse Impacts

This section summarizes the essential conclusions including significant impacts, major differences between alternatives, specific mitigation measures identified, and significant unavoidable adverse impacts for each element environmental analyzed in this supplemental EIS.

Transportation

A detailed transportation study was conducted to determine potential transportation impacts and any appropriate mitigation measures. Compared to the conditions under Alternative 1 (No Action), under Alternatives 2, 3, and 4 (Harbor Island sites and Corgiat Drive site), the traffic volumes and operations in the surrounding road network are predicted to remain at the same level of service or improve, and no traffic mitigation would be necessary. However, the traffic analysis shows that Alternative 5 (Edmunds Street site) would result in a degraded level of service at the South Edmunds Street/Airport Way South intersection, compared to that of the no-action alternative. This degraded level of service would be associated with vehicles turning onto and off of Airport Way South. Inadequate right-of-way exists to allow for the creation of left-turn pockets on Airport Way South, and the traffic volumes exiting the site would not be high enough to warrant a traffic signal. Therefore, mitigation for the inadequate level of service would involve providing an alternate access route on Seventh Avenue South or Sixth Avenue South connecting to South Industrial Way. The traffic analysis concluded that there would be no significant unavoidable adverse impacts on the transportation network, transit and nonmotorized vehicles, or parking under any of the alternatives.

The analysis of impacts on rail transportation concluded that under all of the action alternatives, the trains that would be needed would not be new to the existing UP and/or BNSF mainline, and there would be no increase in train volume on the rail system as a whole compared to the volume under the no-action alternative. At Harbor Island, lead tracks to the solid waste intermodal transfer facility would require two at-grade crossings of public streets. Railway operating needs at either of the Harbor island sites would need to be coordinated with the Port of Seattle. At the Edmunds Street site, a track-sharing agreement would need to be negotiated with Northwest Container Services, whose operations would occur on the same tracks that would be used for intermodal loading and train building. The railroads would need to be assured that train-building activities would not disrupt the operations at Argo Intermodal Yard or Georgetown Interlocking. Whichever alternative is selected, further design work and rail operations analysis would be conducted at the site as part of the negotiations with UP and BNSF. Any potential operation impacts associated with the intermodal transfer facility would need to be mitigated to the satisfaction of the railroads.

During scoping, several comments raised the issue of impacts on solid waste traffic as a result of future road construction projects, in particular the possible replacement of the Alaskan Way Viaduct. Seattle Public Utilities is aware of these projects and how they can affect the solid waste system. However, major detours associated with projects such as the Alaskan Way Viaduct would likely affect truck traffic arriving from North Seattle regardless of whether the new intermodal transfer facility is constructed. Both collection trucks and transfer trucks now use the Alaskan Way Viaduct to access the two existing intermodal transfer facilities operated by Allied Waste Industries and Waste Management, Inc. Therefore, the potential impact of the Alaskan Way Viaduct replacement project on truck movements would be independent of the proposed action and is not addressed in this supplemental EIS.

Noise

Alternatives 2 and 3 (Harbor Island sites) would result in increased noise levels in a small park immediately south of the Pendleton site. Alternatives 4 (Corgiat Drive site) and 5 (Edmunds Street site) would result in minimal noise impacts on residential areas or recreational facilities. The following mitigation measures would apply to all the action alternatives:

- All machinery will be well lubricated and mufflers will be maintained in good working condition.
- If stationary generators or compressors are used, they can be muffled with portable sound barrier walls.

By complying with environmental regulations and building permit requirements, significant unavoidable adverse impacts are unlikely to result from any of the action alternatives.

Air Quality and Odor

Under all the action alternatives, the sites would be designed to minimize vehicle queues; therefore, the emissions from idling vehicles would be low. Under peak conditions, the vehicle queues would not be expected to extend beyond the site boundaries. Neither the quality of air surrounding the queued vehicles nor the staff at the weigh station would be adversely affected under any of the action alternatives.

None of the action alternatives is likely to result in complaints of odors for the following reasons:

- All the alternative intermodal sites are distant from residential neighborhoods and other sensitive odor receptors.

- The handling of exposed waste will take place in the enclosed main transfer building, and waste will be stored outside the main transfer building in sealed, leak-proof containers.

Under all the action alternatives, mitigation measures during construction and operation would conform with the Puget Sound Clean Air Agency specific regulations pertaining to fugitive dust (Regulation 1, Sections 9.11, 9.15, and 9.20), which require the use of best available control technology to control fugitive dust emissions.

With mitigation measures in place, significant unavoidable adverse impacts on air quality or odor are not predicted for any of the action alternatives.

Land and Shoreline Use

Alternative 2 (Harbor Island Terminal 10 site) and Alternative 3 (Harbor Island Terminal 10/Pendleton site) would provide an opportunity for an additional mode of transportation (water transport) for municipal solid waste transfer operations. In the case of Alternative 3, the project could have the added benefit of providing solid waste handling for both Seattle and King County, which may provide economies of scale and use less industrial land than the amount that would be necessary for two separate operations. However, Alternatives 2 and 3 would require the development of public facilities on an industrial shoreline, which is in limited supply and in high demand by private businesses in the Duwamish Manufacturing/Industrial Center. If either Alternative 2 or Alternative 3 is selected, the project must be designed as a water-dependent or water-related use to be allowed under Seattle's Shoreline Master Program. In order to be considered water dependent or water related, the project would have to include a pier or dock for shipping.

A dock has historically been a component of the facilities at these sites. A new dock will be constructed to replace the former dock that was removed as part of the cleanup of the area. Construction of the new dock will occur whether or not the solid waste intermodal transfer facility is constructed on one or both of these sites; therefore, construction of the new dock is an action that is independent of the proposed intermodal transfer facility. Because of the availability of the dock and its potential use for waste transfer, the proposed intermodal transfer facility would be considered a water-related use.

Alternative 4 (Corgiat Drive site) is located in an area that has a greater mix of adjacent zoning districts than the other alternatives, which are located in areas with adjacent zoning that is similar to that of the site itself (General Industrial). Therefore, to the extent that the project would have adverse land use impacts associated with dissimilar uses, this alternative would have greater effects on the adjoining properties than the other alternatives would.

Three of the alternatives would result in the displacement of private businesses. Alternative 3 (Harbor Island Terminal 10/Pendleton site) would displace one industrial business. Alternative 4 (Corgiat Drive site) would displace nine commercial or industrial businesses. Alternative 5 (Edmunds Street site) would displace seven commercial or industrial businesses. The businesses displaced by these three alternatives could relocate to other locations within the Duwamish Manufacturing/Industrial Center. Alternative 2 (Harbor Island Terminal 10 site) would not displace any existing businesses.

Compliance with existing regulations would mitigate all the land use impacts resulting from all the action alternatives.

With mitigation measures in place, no significant unavoidable adverse impacts are anticipated to result from any of the action alternatives.

Aesthetics and Visual Quality

In general, construction of the proposed solid waste intermodal transfer facility at any of the four alternative sites is not expected to result in a significant change in the aesthetics and visual character of the area surrounding the site. Under Alternative 2 (Harbor Island Terminal 10 site), the activities associated with the intermodal transfer facility and the increased lighting would be compatible with the scale and type of activities already occurring on Harbor Island and would not stand out by comparison. Under Alternative 3 (Harbor Island Terminal 10/Pendleton site), the visually memorable grain silos on the Pendleton site would be removed. Under Alternative 4 (Corgiat Drive site), the north end of the site might be visible from southbound Interstate 5 southbound, especially during periods of slow traffic. Light from security luminaires affixed to tall poles might cause glare for southbound drivers on Interstate 5. Under Alternative 5 (Edmunds Street site), the sense of pedestrian-scale small business in the area would be reduced by the removal of the buildings that front South Edmunds Street and Airport Way South.

Mitigation measures for impacts during construction include the maintenance of an organized and clean work site, control of queuing to prevent vehicles from lining up along the roads, and prompt completion of construction to reduce the duration of the impacts. The design of the proposed project elements will follow the requirements of the City of Seattle's Design Review Program. In addition, the City may consider design elements to mitigate the potential visual impacts of the project, including the installation of shielded lighting to limit light spillover; the installation of landscape vegetation or solid fences to provide ornamental screening; architectural treatments (e.g., windows or window-like apertures); and surface treatments of the building walls and doors (e.g., texture or color).

With mitigation measures in place, no significant unavoidable adverse impacts are anticipated to result from any of the action alternatives.

Plants and Animals

All of the alternative intermodal sites are developed for industrial uses and include minimal biological habitat. The Harbor Island sites (Alternatives 2 and 3) are adjacent to the Duwamish West Waterway, which provides the transition between the Duwamish River and Elliott Bay, both of which support important biological resources. No in-water work would occur at either Harbor Island site and implementation of best management practices for water quality during construction and operation would minimize the impacts on in-water habitat.

The Corgiat Drive site (Alternative 4) is located within approximately 1,600 feet of the runway at King County International Airport, where the presence of birds could pose a safety hazard. Mitigation measures and design features that would be implemented to minimize the attractiveness of the solid waste intermodal transfer facility to birds and rodents at whichever site is selected include the following:

- Putrescible solid waste will be handled only within the main, enclosed transfer building.
- Bird exclusion material (e.g., brush spikes) will be installed on portions of onsite structures that could serve as bird perches.
- Vehicle entrances and exits in the main transfer building will be designed to inhibit bird movement into the building interior.
- The tipping floor of the main transfer building will be washed down as required to minimize the attraction of wildlife.
- All putrescible solid waste stored outside of the main transfer building will be contained in sealed containers.

With mitigation measures in place, no significant unavoidable adverse impacts are anticipated to result from any of the action alternatives.

Earth

All the alternative sites for the solid waste intermodal transfer facility are located on flat or gently sloping land in the lower Duwamish River valley, and changes in topography as a result of construction would be minimal at any of the sites. Most of the lower valley is underlain by alluvial soils and/or manmade fill, and the City of Seattle has mapped all four sites within the potential liquefaction zone that covers much of the lower Duwamish River valley. A geotechnical study to determine the appropriate foundation design would precede construction

on any of the sites, and the intermodal transfer facility would be constructed to meet the seismic standards required under the City's building code.

With implementation of recommendations provided by a licensed geotechnical engineer, no significant unavoidable adverse earth impacts would result under any of the action alternatives.

Water

At any of the alternative intermodal sites, construction and operation could result in the discharge of contaminated runoff from the site to receiving waters. However, water quality impacts would be mitigated by the implementation of best management practices during the construction phase and the installation of water quality treatment systems required by City of Seattle stormwater regulations and the Industrial Stormwater General Permit issued by the Washington Department of Ecology. Alternative 5 (Edmunds Street site) and Alternative 4 (Corgiat Drive site) would be the least likely to result in impacts on water resources compared to the existing conditions because both sites currently support active industrial uses, and the installation of upgraded stormwater systems would probably result in either a net reduction (Alternative 5) or no net change (Alternative 4) in pollutant loads to surface waters over the long term. Alternative 2 (Harbor Island Terminal 10 site) and Alternative 3 (Harbor Island Terminal 10/Pendleton) would pose a greater risk of an increase in water quality impacts compared to the existing conditions because the Duwamish West Waterway adjoins each site and there is little industrial activity currently occurring on the sites. Standard stormwater treatment systems are not 100 percent effective in removing contaminants, and additional treatment of onsite or offsite stormwater could be provided to offset potential long-term increases in pollutant loading to receiving waters.

With the implementation of available construction-phase best management practices and long-term stormwater treatment, none of the alternatives would result in significant unavoidable adverse impacts.

Hazardous Materials

The Harbor Island sites (Alternatives 2 and 3) could be affected by contaminated ground water from the Seafab Metal Surface Impoundment where copper, cadmium, nickel, and zinc concentrations have exceeded the Model Toxics Control Act (MTCA) cleanup criteria. In addition, ground water contaminated with gasoline-range petroleum hydrocarbons from the BP West Coast Products site could potentially affect the subject property. A release of petroleum hydrocarbons occurred at the Corgiat Drive site (Alternative 4), but the concentrations were less than the MTCA cleanup criteria. A release of petroleum hydrocarbons also occurred at the Edmunds Street site (Alternative 5), but the spill was cleaned up and the Department of Ecology determined that no further action was needed.

Based on the hazardous materials information available at this time, the potential impacts due to hazardous waste at the four alternative sites would not be significantly different. Mitigation measures to avoid contaminated soil, dispose of or treat contaminated soil and ground water, and manage hazardous materials during construction would be the same under all the action alternatives. Once a preferred alternative has been selected, an environmental site assessment would be completed to delineate areas of residual soil and ground water contamination. Prior to construction, a formalized plan would be required for the removal, treatment, or other management of contaminated soil and ground water.

With mitigation measures in place, no significant unavoidable adverse impacts are anticipated to result from any of the action alternatives.

Public Services and Utilities

None of the action alternatives is expected to result in significant impacts on public services or utilities. The no-action alternative, however, would result in significant unavoidable adverse impacts on solid waste services in Seattle over the long term because the identified problems in the present system would not be addressed.

Major Conclusions, Areas of Controversy, and Issues to Be Resolved

The major conclusion of this draft supplemental EIS is that although there are differences in impacts among the four action alternatives, if the mitigation measures described in this document are implemented, no significant unavoidable adverse impacts would result from any of the action alternatives. Although impacts associated with the construction and operation of the proposed solid waste intermodal transfer facility would not occur under Alternative 1 (No Action), the no-action alternative would result in a significant adverse impact on solid waste services for Seattle residents and businesses because the system deficiencies and inefficiencies identified through the facility planning process would not be remedied.

Most of the comments on the alternatives for the intermodal transfer facility that were received during the process of determining the EIS scope focused on traffic issues. Some of these comments seemed to be based on the presumption that the traffic impacts due to the intermodal transfer facility would be substantial, and several comments requested that the traffic analysis take into account various future events, some of whose timing and nature are uncertain (e.g., the Alaskan Way Viaduct repair or replacement). The traffic analysis conducted for this EIS was performed in accordance with standard traffic engineering practice, in conformance with City requirements, and takes into account reasonably certain future conditions of the road network. Nonetheless, although the traffic analysis concluded that significant unavoidable adverse transportation impacts would be unlikely, traffic may be an area of controversy for reviewers of the published final supplemental EIS.

Areas of controversy associated with upgrades to the north and south recycling and disposal stations are outside of the scope of this EIS. As appropriate and required by the Washington state SEPA Rules and the City of Seattle SEPA ordinance, aspects of those issues will be addressed in SEPA documentation that will be prepared in the future for those facility upgrades.

This EIS identified few issues that require resolution. Although the level of analysis of rail transportation issues is adequate for SEPA compliance, and the conclusion of the traffic analysis regarding the unlikelihood of significant adverse impacts on rail operations is well-founded, additional coordination with BNSF and UP (and the Port of Seattle for Alternatives 2 and 3 [the Harbor Island sites]) will be necessary during the final design under any of the action alternatives to ensure that impacts on rail operations are fully mitigated.

If either of the Harbor Island sites (Alternative 2 or Alternative 3) is selected, the specific nature and level of long-term stormwater treatment that would be necessary to protect water quality in the Duwamish West Waterway and adjacent water bodies will be determined during the final design through the City of Seattle's and the Washington Department of Ecology's permit processes.

Part 2: Proposed Project and Alternatives

Background

Seattle's Past Solid Waste Planning

In 1989, the City of Seattle prepared a solid waste management plan, *On the Road to Recovery* (Seattle 1989). That plan substantially changed the focus of Seattle's solid waste management from disposal to recycling. In 1990, the City prepared a plan and an environmental impact statement (EIS) (Seattle 1990) for the Seattle Waste Transport and Disposal Project. As a result of that planning and environmental review process, the City entered into a long-term contract to transport and dispose of its waste at an arid-region landfill (Columbia Ridge Landfill in Oregon) that was constructed to minimize environmental contamination.

In 1998, the City of Seattle completed another solid waste management plan, *On the Path to Sustainability* (Seattle 1998a), and in August 1998 issued an EIS (Seattle 1998b) that evaluated the impacts of the 1998 solid waste management plan. The 1998 solid waste management plan describes the City's future agenda for solid waste management, and among the elements of that agenda is the efficient collection and transfer of Seattle's waste. To that end, the 1998 plan states that "the City will improve the efficiency and convenience of waste collection and transfer operations." To improve efficiency and convenience, the 1998 plan calls for various future programs, including "[investment] in capital improvements at the City Recycling and Disposal Stations" and "[continuance of] long haul landfill disposal." The EIS evaluated several alternatives, including a proposed action that involved limited changes to the existing transfer stations and continuance of disposal at an arid-region landfill. The potential changes proposed at the existing transfer stations included acquiring adjacent property, rebuilding or refurbishing existing buildings, and introducing new systems for handling recyclable and waste materials.

The City's adoption of the 1998 solid waste management plan was a non-project-specific (or programmatic) action. The EIS prepared for the plan (Seattle 1998b) stated (in Section 1.3.2) that it was "part of a phased environmental review under the City of Seattle's SEPA ordinance (Seattle Municipal Code, Section 25.05.060E [SMC 25.05.060E]). Should the program directions recommended in the Final Draft Plan lead to the development of new facilities, siting and construction of those facilities could also be subject to project-specific environmental review. Modifications to existing facilities could also be subject to project-specific environmental review depending on the nature of the modifications. The need for additional project-specific environmental review will be determined on a case-by-case basis."

In response to these directives from the 1998 plan, the City of Seattle decided to take a broad, long-term view of the facility needs in the entire solid waste system. In December 2001, the Seattle City Council passed Resolution 30431 directing Seattle Public Utilities to develop a solid waste facilities master plan (SWFMP) that would address the long-term facility needs for managing Seattle's waste. The draft SWFMP recommends constructing a new solid waste

intermodal transfer facility and rebuilding the existing North Recycling and Disposal Station and South Recycling and Disposal Station (referred to as NRDS and SRDS, respectively) with additional property at both sites. Seattle Public Utilities has determined that a project-level EIS should be prepared for the proposed solid waste intermodal transfer facility, under the City ordinance that implements the State Environmental Policy Act (SEPA), to supplement the 1998 EIS prepared for the solid waste management plan (Seattle 1998b). Separate environmental documentation will be required for rebuilding the two existing transfer stations, NRDS and SRDS, in their current locations.

The transition from a programmatic review of the entire solid waste system to a project review of specific facility improvements constitutes a phased review under the SEPA rules (Washington Administrative Code, Chapter 197-11, Section 060[5][b] [WAC 197-11-060{5}{b}]). The phased review allows agencies and the public to focus on issues that are ready for decision and excludes from consideration issues that have already been decided or are not yet ready for decision. Decisions that were already made in the previous EIS will not be reevaluated under this supplemental EIS. An example of an issue that is not yet ready for decision is the final design of the facilities considered in this document. It is anticipated that this supplemental EIS will provide adequate SEPA compliance for all permit acquisition. However, when the final facility design is completed and building permits are sought, the City will evaluate the supplemental EIS to determine if this document provides adequate SEPA documentation for the City's building permit decisions. If the City determines that this supplemental EIS does not provide adequate SEPA documentation for that stage of the process, Seattle Public Utilities will prepare additional SEPA documentation.

Need for the Proposed Project

In November 2003, Seattle Public Utilities completed a draft SWFMP. The draft SWFMP (Seattle 2003a) identifies limitations of Seattle's existing solid waste facilities and considers options for addressing those limitations and improving the solid waste facilities in accordance with the 1998 solid waste management plan. The following paragraphs summarize the facility limitations associated with current intermodal operations that are identified in the 2003 draft SWFMP.

Currently, Seattle's municipal solid waste is received and containerized at the North Recycling and Disposal Station (NRDS) and the South Recycling and Disposal Station (SRDS) as well as two privately owned stations: Eastmont Transfer Station operated by Waste Management, Inc., and Rabanco's Recycling, Transfer, and Intermodal Facility operated by Allied Waste Industries. This situation is less than ideal because the Rabanco facility is the only station that was originally designed to load intermodal containers, and all four stations lack the capacity for significant expansion. In addition, the intermodal containers must be trucked to a separate loading facility to be loaded on trains for transport to Seattle's contracted disposal site. The most efficient facility would combine a waste receiving facility with a container loading facility,

would have sufficient space on nearby railroad tracks to build a train of sufficient length to accommodate the accumulated waste, and would have access to both Union Pacific Railroad and Burlington Northern Santa Fe Railway lines and other modes of transportation. A separate facility for solid waste containerization and railway car loading would ensure the long-term availability of a suitable facility with adequate long-term capacity for waste transfer through a variety of transportation modes in a competitive manner.

Seattle is a regional hub for freight shipments; waste from five or more counties is shipped through Seattle. Most of the counties in western Washington have closed all of their landfills and now ship their waste to regional landfills located in arid regions of Washington and Oregon. Of significant regional importance is the planned closure of King County's Cedar Hills Landfill, currently scheduled for 2012. Once this landfill has been closed, approximately 1 million tons of additional waste per year will need to be shipped out of the county; this waste might be shipped through Seattle by rail. In order to accommodate this increased quantity of waste, King County must find or develop additional capacity for loading waste-filled intermodal containers waste onto transport vehicles for shipment to a disposal facility outside the county. In recognition of this situation, the draft SWFMP considers the impact of increased regional waste requirements. Some of the options in the draft SWFMP allow for future expansion of capacity to accommodate waste from vendors other than the City of Seattle or to accommodate the development of adjacent facilities for potential joint operations.

An efficient solid waste intermodal transfer facility meeting the needs described above would include the following functions:

- The facility would receive municipal solid waste from refuse collection trucks (not from self-haul customers).
- The facility would also have the capacity to receive some recyclables and organics (yard and food materials) from collection trucks.
- The facility would weigh and track solid waste and other material handled by the facility.
- The facility would compact solid waste into intermodal transport containers.
- The facility would provide an opportunity to consolidate recyclables and organics for distribution to processors.
- The facility would load and unload containers for shipment on a long-haul transport vehicle and store containers for shipment.
- The facility would coordinate long-haul transportation of solid waste to a disposal facility.

Objectives of the Proposal

Based on the needs and necessary functions described in the preceding paragraphs, Seattle Public Utilities has established the following objectives for the solid waste intermodal transfer facility project:

- Site selection and construction and operation of the solid waste intermodal transfer facility should minimize environmental impacts on Seattle residents and the region over the long term.
- Site selection and construction and operation of the solid waste intermodal transfer facility should be consistent with the City's comprehensive solid waste management plan (*On the Path to Sustainability* [Seattle 1998a, 2005]), including the comprehensive plan's goals of providing for the efficient transfer of both residential and commercial solid waste.
- The solid waste intermodal transfer facility should serve as a dedicated facility in Seattle to ensure the long-haul transport of solid waste at a reasonable cost.
- The solid waste intermodal transfer facility should provide an opportunity for the consolidation of collected recyclables and organics for distribution to processors.
- The solid waste intermodal transfer facility should improve the efficiency of intra-city transport of solid waste by directing the majority of collection trucks directly to an intermodal transfer facility, thereby minimizing intermediate waste handling costs and the associated traffic.
- The solid waste intermodal transfer facility should increase the payload of intermodal containers at the intermodal transfer facility, thereby reducing the number of containers, which will reduce shipping and handling costs (note that current payloads are limited by road weight limits because the intermodal containers are currently transported over public roads).
- The solid waste intermodal transfer facility should maintain competition for waste collection, transfer, long-haul transport, and disposal by providing equal opportunity for contractors that bid on solid waste services, thereby maintaining the quality of service at a competitive price.
- The solid waste intermodal transfer facility should maintain system flexibility and the ability to deal with emergencies by having access to multiple modes of transportation, both the Burlington Northern Santa Fe Railway and the Union Pacific Railroad, and multiple landfills.

- The solid waste intermodal transfer facility should minimize the dependence on NRDS and SRDS for compaction of waste into intermodal containers, thereby allowing other customer based services at these stations.

- The solid waste intermodal transfer facility should improve the efficiency and safety of unloading collected materials by serving as a dedicated facility specifically designed for this purpose without the need to accommodate self-haul customers.

Description of the Proposed Project

As a central component of the draft SWFMP, Seattle Public Utilities developed options for addressing the identified limitations of Seattle’s existing intermodal transfer system. The options range from “no build” to constructing a new solid waste intermodal transfer facility. All these options were evaluated against the objectives described above. In a multi-step evaluation process, Seattle Public Utilities selected one option (Option 11 in the SWFMP) for implementation, eliminating the other options because they were substantially inconsistent with the objectives. Option 11 includes building a new intermodal transfer facility and rebuilding NRDS and SRDS.

The proposed project that is analyzed in this supplemental EIS involves building a new solid waste intermodal transfer facility. The differences among the alternatives for the proposed project that are evaluated in this supplemental EIS include the location of the proposed intermodal transfer facility and whether the proposed facility would be a city-only facility or a combined city-county facility. Four alternative sites are under consideration, all of which are located within the Seattle city limits, south of downtown. For the proposed rebuilding of NRDS and SRDS, SEPA documentation will be prepared when Seattle Public Utilities is closer to applying for permits for those projects. The determination regarding the timing of the SEPA documentation for NRDS and SRDS is described in detail in the section “Scoping Process.”

The locations of the alternative sites for the solid waste intermodal transfer facility are shown in Figure 1-1. After implementation of the proposed project, transfer and disposal of Seattle’s solid waste would follow the process shown in Figure 2-1. The following sections provide details related to the alternative intermodal sites and details of the specific improvements and new construction that would occur under the proposed project.

Alternative Intermodal Sites

The alternative sites for the solid waste intermodal transfer facility that are under consideration by the City of Seattle, include four sites (Figure 1-1).

The four alternative sites are the following:

- **Harbor Island Terminal 10 site**
- **Harbor Island Terminal 10/Pendleton site**
- **Corgiat Drive site**
- **Edmunds Street site.**

These sites are described further in the section “Description of Alternatives for the Proposed Project.”

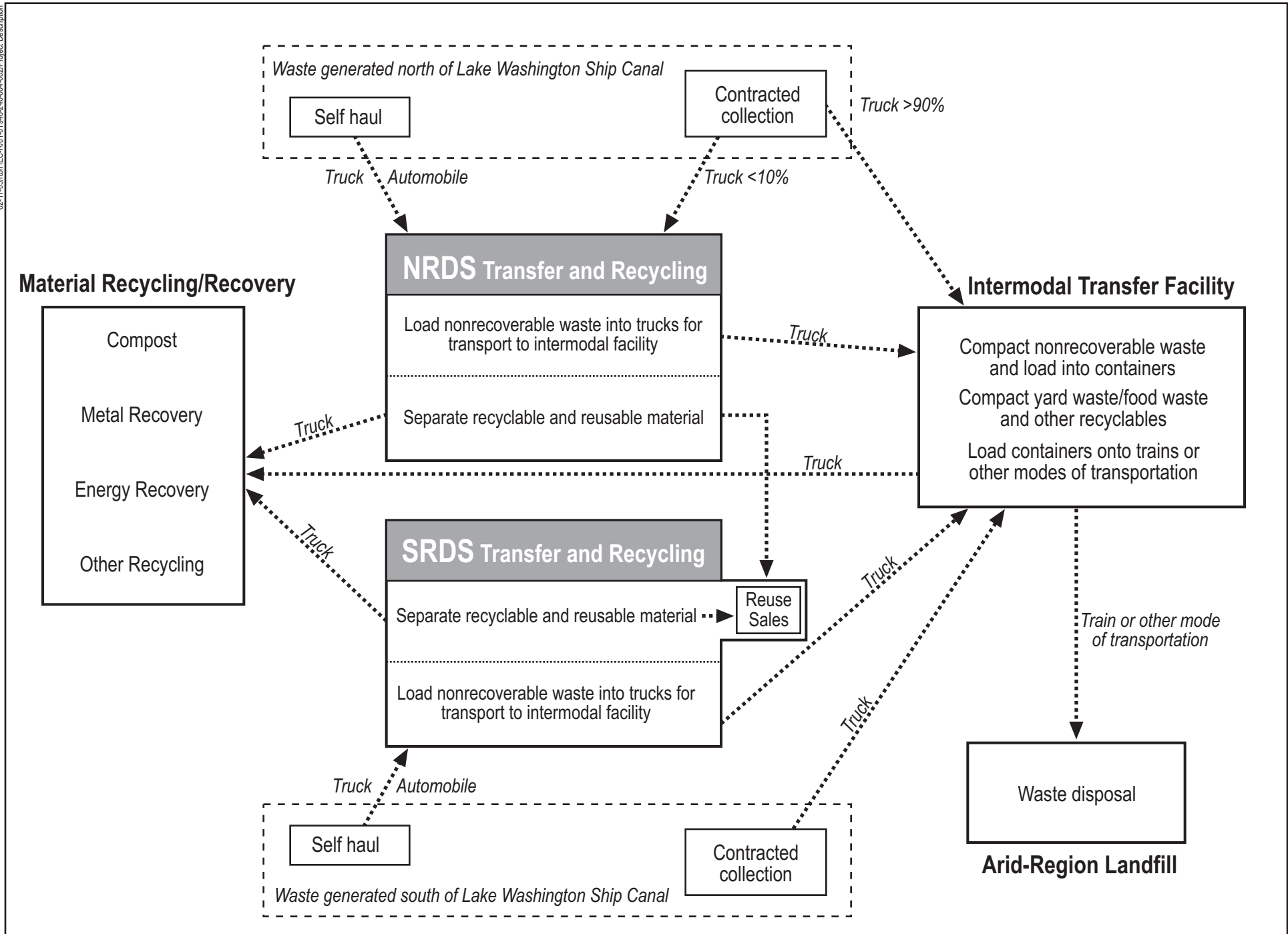


Figure 2-1. City of Seattle waste flow after implementation of the proposed project.

All facilities would include similar features:

- A main transfer building where waste is delivered, compacted if necessary, and loaded into containers, which are then sealed to make them leak-proof
- An exterior container storage area
- Rail siding tracks with adjacent cranes and other equipment for loading containers onto railway cars
- An employee/office building with adjoining parking
- Access driveways with entrance and exit scale facilities
- A small fueling station.

The main transfer building would be approximately 50 to 60 feet above grade. Drainage from the building interior would be conveyed to the sanitary sewer system. Drainage from the remainder of the site would be treated and conveyed to the local stormwater system.

Construction Period

A detailed construction schedule would be developed during the final design. In general, construction would proceed as described in the following paragraphs.

Construction would take place in three stages: demolition, site preparation, and building construction. Demolition would not be necessary at the Harbor Island Terminal 10 site, and it would be minimal at the Edmunds Street site. The entire construction period would extend for 16 to 22 months, depending primarily on the extent of demolition required, which, if necessary, would require approximately 4 to 6 months. During demolition, all onsite structures would be removed, and the demolition debris would be recycled onsite, hauled to a recycling facility, or hauled to a suitable demolition disposal facility. Site preparation would require up to about 4 months. During site preparation, the site would be excavated and fill would be placed as necessary. Excavated material that is suitable for use as fill would be retained on the site and the remainder would be hauled to a suitable disposal site. During site preparation, utility lines would also be installed. The building construction stage is expected to require up to 12 months. During that period, siding track would be laid, driveway and exterior work areas would be paved, and building foundations and superstructure would be constructed. Final inspection and testing of all equipment and procedures would take place before operations begin at the upgraded facility.

During the construction period, the applicable regulatory requirements would be met. Best management practices for erosion and sedimentation control would be implemented in

accordance with the City of Seattle's Stormwater, Grading, and Drainage Control Code (Seattle Municipal Code, Chapters 22.800–22.808 [SMC 22.800–22.808]) and Construction Stormwater Control Technical Requirements Manual (Director's Rule 16-2000). Construction activities would comply with Seattle's noise ordinance (in Seattle Municipal Code, Title 25 [SMC 25]), which specifies allowable noise levels during various hours of construction, as well as Seattle's Street Use Ordinance (SMC 15), which controls the routes to be traveled by vehicles carrying construction materials or demolition debris and regulates traffic control. Fugitive dust generated by construction activities would be controlled in accordance with Puget Sound Clean Air Agency's Regulation I, which requires the use of best management practices, such as using water, gravel, or chemical dust suppressants and wheel washing, to control fugitive dust. Any contaminated materials encountered during demolition or used during other stages of construction would be handled and disposed of in accordance with City of Seattle and Washington state regulations regarding hazardous materials.

Implementation Schedule

The currently anticipated schedule for implementation of the proposed intermodal project is the following:

- Permitting and final design: 2005–2007
- Construction period: 2007–2009
- Beginning of operation: 2009 or 2010.

Property Search for Alternative Intermodal Sites

In conjunction with the preparation of the draft SWFMP, Seattle Public Utilities undertook a property search in 2002 for suitable sites for a solid waste intermodal transfer facility. The search and its results are summarized below and described in more detail in Appendix F of the draft SWFMP (Seattle 2003a).

The property search initially identified 126 potential individual sites: 31 sites in the Interbay/North Seattle region and 95 sites (as well as 8 aggregate sites) in the area south of downtown. All of these sites met four fundamental criteria:

- Area of at least 5 acres
- Railway access within 200 feet of the property
- Zoned for industrial use
- Accessible by a main arterial road.

Two rounds of evaluation using more stringent criteria and more detailed site-specific information were then conducted to eliminate the least favorable sites. As a result of these two subsequent rounds of evaluation, the two top-ranked sites were the Pendleton and Terminal 10 sites on Harbor Island. The next three highest ranked sites were excluded due to a lack of availability or a change in intended use.

In 2003, Seattle Public Utilities conducted a followup evaluation to determine the status of various properties identified through the 2002 property search and to identify additional potential sites that had become available. That followup evaluation confirmed the status of the highest ranked properties identified in 2002 and also identified additional sites whose status had changed during the intervening year. While most of the newly identified sites were subsequently found to be unsuitable, one (the Edmunds Street site, which was listed in the 2003 study as site 110) was determined to be potentially suitable for a solid waste intermodal transfer facility.

Since the 2003 study, Seattle Public Utilities has determined another site (the Corgiat Drive site) to be potentially suitable for an intermodal transfer facility. The Corgiat Drive site is an aggregation of a parcel considered in the 2002 study (listed in that study as site 75) and several adjoining parcels.

Description of Alternatives for the Proposed Project

Five alternatives are considered in this supplemental EIS: the no-action alternative (Alternative 1) and four alternatives for the proposed project (Alternatives 2 through 5). Seattle Public Utilities has not yet selected its preferred alternative. Seattle Public Utilities expects to select a preferred alternative after consideration of comments on this draft supplemental EIS, in which case the preferred alternative will be described in the final supplemental EIS.

Alternative 1 (No Action)

Under Alternative 1, the City would not construct a new solid waste intermodal transfer facility and would continue to contract with the private sector to provide intermodal transfer services. This could result in the development of new intermodal transfer facilities by the private sector, but the timing of their development and the locations of new intermodal facilities, if any, are unknown.

Alternative 2 (Harbor Island Terminal 10)

The Harbor Island Terminal 10 site is located on the west side of Harbor Island, adjacent to the Duwamish West Waterway (Figure 2-2). The features of the solid waste intermodal transfer facility and the construction activities under Alternative 2 are described in the previous section “Description of the Proposed Project,” under the heading “Alternative Intermodal Sites.” Access to the site would be from the west frontage road adjacent to 16th Avenue SW, which runs along the east side of the site. During the construction period, excavation would be minor and limited to that necessary for utilities and perhaps piling. A conceptual layout of the city-only intermodal transfer facility that would be constructed on this site under Alternative 2 is shown in Figure 2-3.

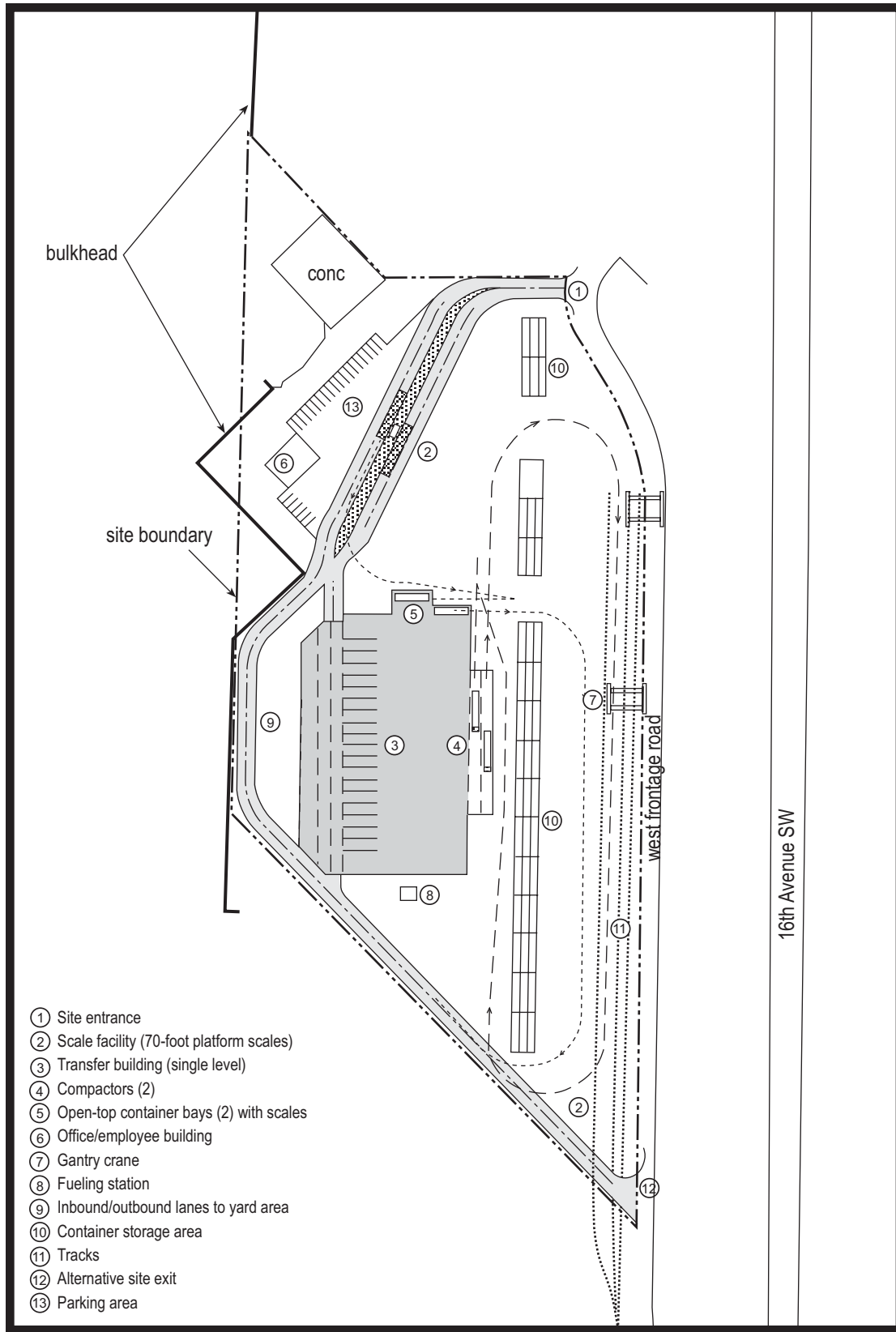
Alternative 3 (Harbor Island Terminal 10/Pendleton)

The Harbor Island Terminal 10 and Pendleton sites are located on the west side of Harbor Island (Figure 2-4). As for Alternative 2, access to the site under Alternative 3 would be from the west frontage road adjacent to 16th Avenue SW, which runs along the east side of the site. During the construction period, excavation would be minor and limited to that necessary for utilities and perhaps piling. A conceptual layout of the combined city-county intermodal transfer facility that could be constructed on this site under Alternative 3 is shown in Figure 2-5.



Not to scale

Figure 2-2. Harbor Island Terminal 10 intermodal site.



- ① Site entrance
- ② Scale facility (70-foot platform scales)
- ③ Transfer building (single level)
- ④ Compactors (2)
- ⑤ Open-top container bays (2) with scales
- ⑥ Office/employee building
- ⑦ Gantry crane
- ⑧ Fueling station
- ⑨ Inbound/outbound lanes to yard area
- ⑩ Container storage area
- ⑪ Tracks
- ⑫ Alternative site exit
- ⑬ Parking area

0 100 200 300 Feet
Approximate scale

Figure 2-3. Conceptual layout for the Harbor Island Terminal 10 intermodal site (Alternative 2).



Not to scale

Figure 2-4. Harbor Island Terminal 10 and Pendleton intermodal sites.

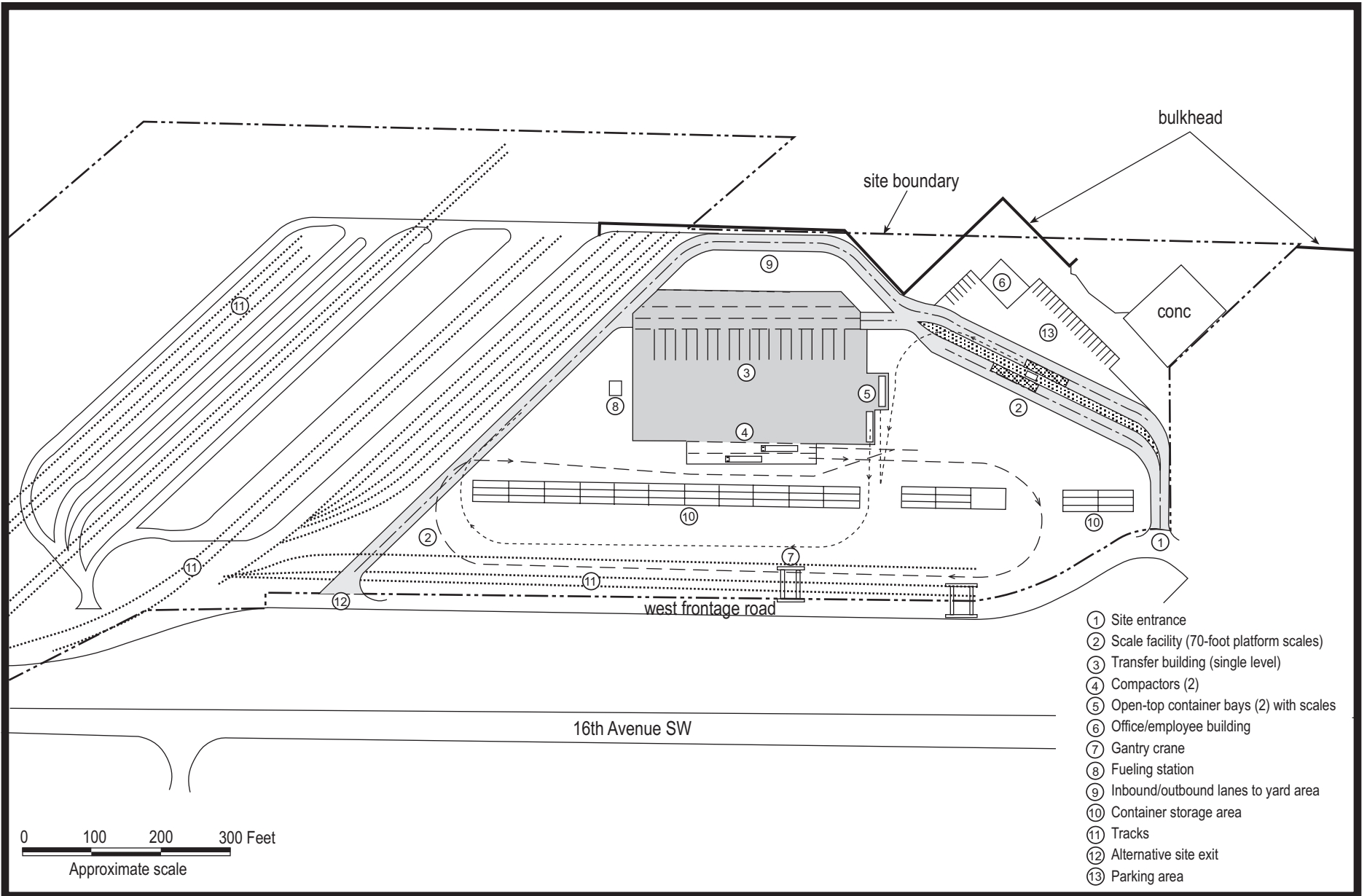


Figure 2-5. Conceptual layout for the Harbor Island Terminal 10/Pendleton intermodal site (Alternative 3).



Not to scale

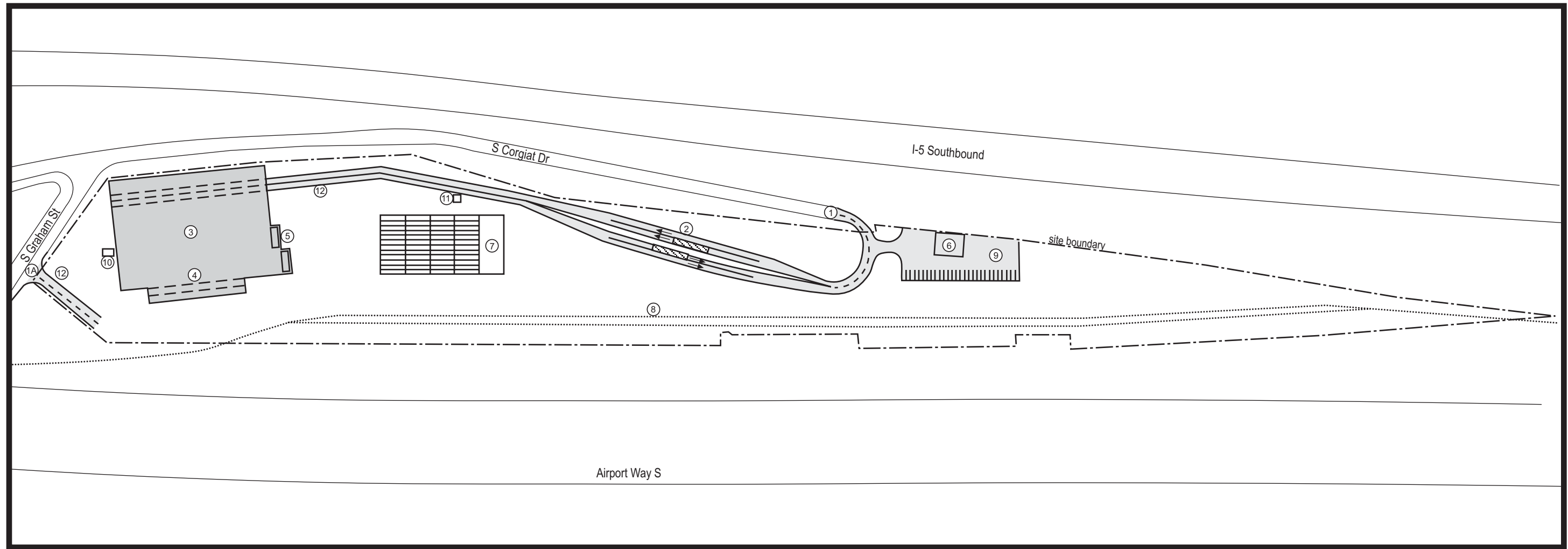
Figure 2-6. Corgiat Drive intermodal site.

Alternative 4 (Corgiat Drive)

The Corgiat Drive site is located northeast of King County International Airport (Boeing Field) and west of Interstate 5 (Figure 2-6). Access to the site would be from South Corgiat Drive, which runs along the east side of the site. A conceptual layout of the city-only intermodal transfer facility that would be constructed on this site under Alternative 4 is shown in Figure 2-7.

Alternative 5 (Edmunds Street)

The Edmunds Street site is located in the southwest quadrant of the intersection of South Edmunds Street and Airport Way South (Figure 2-8). Access to the site would be from South Edmunds Street, which runs along the north side of the site. A conceptual layout of the city-only intermodal transfer facility that would be constructed on this site under Alternative 5 is shown in Figure 2-9.



- ① Site entrance
- ①A Alternative service entrance
- ② Scale facility (70-foot platform scales)
- ③ Transfer building (two levels)
- ④ Compactors (2)
- ⑤ Open-top container bays (2)
- ⑥ Office/employee building
- ⑦ Container storage area
- ⑨ Parking area
- ⑩ Fueling station
- ⑪ 15-foot axle scale
- ⑫ Retaining wall and ramp up/down

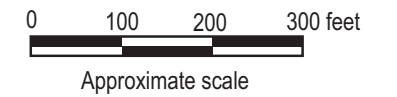
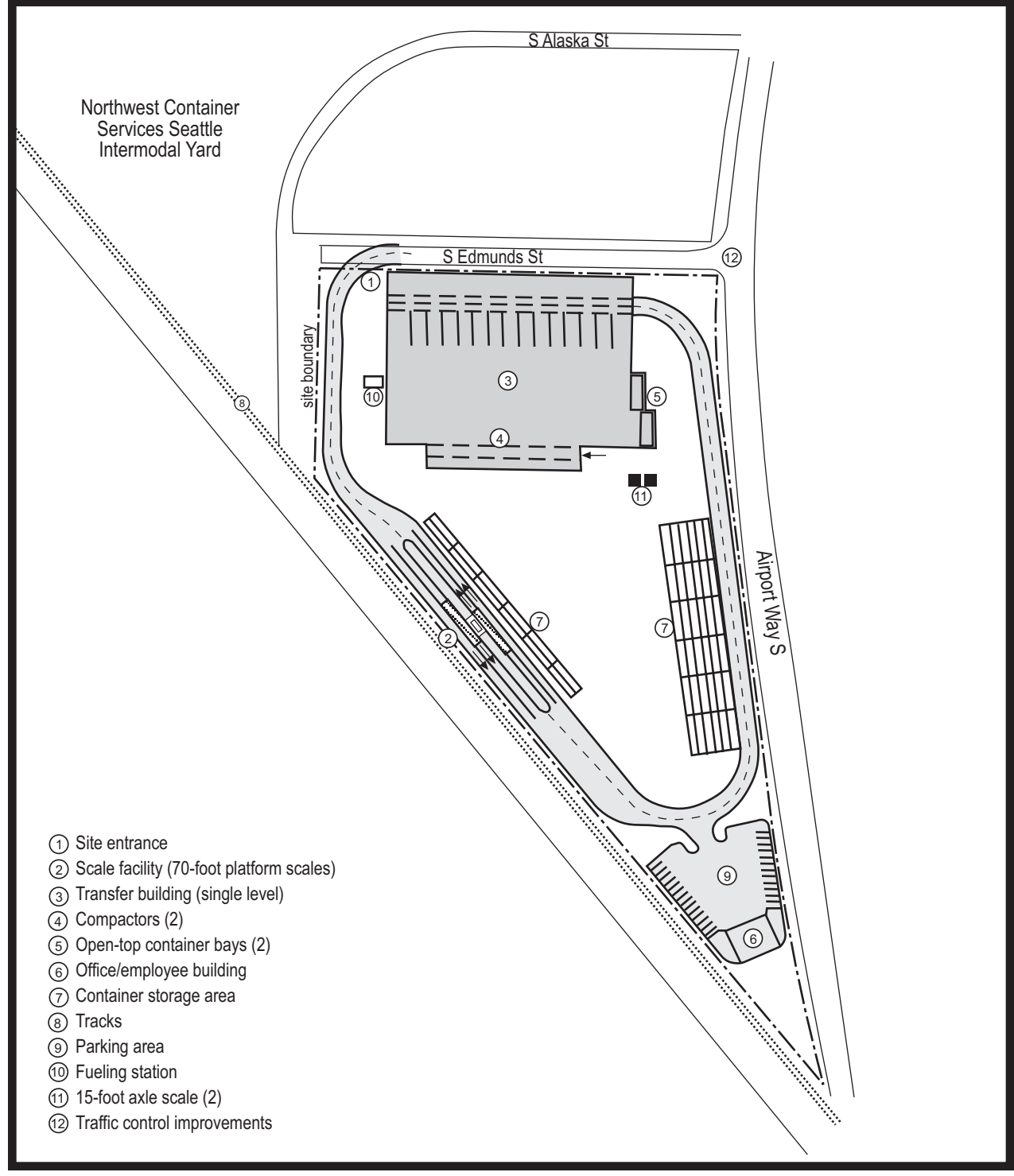


Figure 2-7. Conceptual layout for the Corgiat Drive intermodal site (Alternative 4).



Figure 2-8. Edmunds Street intermodal site.



- ① Site entrance
- ② Scale facility (70-foot platform scales)
- ③ Transfer building (single level)
- ④ Compactors (2)
- ⑤ Open-top container bays (2)
- ⑥ Office/employee building
- ⑦ Container storage area
- ⑧ Tracks
- ⑨ Parking area
- ⑩ Fueling station
- ⑪ 15-foot axle scale (2)
- ⑫ Traffic control improvements

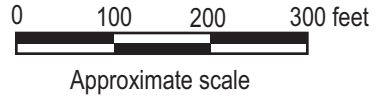


Figure 2-9. Conceptual layout for the Edmunds Street intermodal site (Alternative 5).

Scoping Process

On August 2, 2004, Seattle Public Utilities issued a Determination of Significance (Appendix A) stating its intent to prepare a supplemental EIS for the *City of Seattle Solid Waste Facilities Master Plan* and soliciting comments from interested parties on the issues and alternatives to be addressed in the supplemental EIS. The scoping period extended through October 25, 2004. Seattle Public Utilities hosted three public meetings to discuss the supplemental EIS and solicit comments: one in Wallingford on August 10, 2004, one in South Park on August 12, 2004, and one in West Seattle on October 11, 2004. A summary of the comments received at the public meetings is provided in Appendix B. The scope of this supplemental EIS reflects Seattle Public Utilities' consideration of the comments received in response to the Determination of Significance.

The scope of the supplemental EIS described in the original Determination of Significance included the upgrading of both NRDS and SRDS as a component of each of the four action alternatives. Based on initial work conducted in preparing this supplemental EIS and on a consideration of the anticipated schedule for the improvement and construction of NRDS and SRDS, Seattle Public Utilities concluded that the supplemental EIS should consider only alternatives for the proposed solid waste intermodal transfer facility and that preparation of SEPA documentation for NRDS and SRDS should be postponed to a later date. Improvements to NRDS and SRDS are not scheduled to occur for several years.

This decision is based on the following:

- The fundamental programmatic decisions regarding the upgrading of NRDS and SRDS were made in the City's 1998 comprehensive solid waste planning process that included the preparation of a SEPA EIS. Those programmatic decisions were to improve the existing NRDS and SRDS facilities to address identified facility deficiencies and inefficiencies. Logically, the next stage of SEPA documentation for the NRDS and SRDS improvements would be project-specific and would be prepared close to the time when land use and/or building permits are sought. The programmatic SEPA documentation completed in 1998 satisfied the requirements of WAC 197-11-055(2) regarding the performance of a SEPA review at the earliest possible point in the planning and decision-making process for NRDS and SRDS.
- It would be appropriate to delay the preparation of SEPA documentation for NRDS and SRDS until Seattle Public Utilities is closer to being ready to apply for land use and/or building permits for improvements to those facilities. The designs for NRDS and SRDS, which currently are only conceptual, will then be more fully developed, and a more detailed and specific SEPA evaluation can then occur. This would result in SEPA

documentation that is more current (in relation to the permit decision being made) in its description of the affected environment and impacts. From this perspective, delaying the preparation of SEPA documentation for the NRDS and SRDS improvements would address the intent expressed in WAC 197-11-055(2)(a) that SEPA review should occur when the environmental effects can be meaningfully evaluated.

- Waiting to conduct the SEPA review would also be consistent with WAC 197-11-060(5). This section of the SEPA Rules addresses phased review and the intent that the phased review process be used to assist agencies and the public to focus on issues that are ready for a decision and exclude issues that have already been decided or are not ready for consideration.
- The NRDS and SRDS improvements and the proposed solid waste intermodal transfer facility are not related closely enough to be one single course of action as defined in the SEPA Rules (WAC 197-11) for the following reasons:
 - Improvements to NRDS and SRDS are necessary even if the intermodal transfer facility is not constructed.
 - Conversely, the intermodal transfer facility would be constructed and operated even if no improvements were made to NRDS and SRDS.
 - The NRDS and SRDS facilities are geographically separate from each other and from the potential sites under consideration for the intermodal transfer facility.
 - Permitting and construction of the three projects (NRDS, SRDS, and the intermodal transfer facility) would occur on a staggered schedule so that no two projects would occur in parallel, although processes may overlap in timing to some extent, so that, for example, permitting of one may occur when construction of another is taking place.
 - The nature of the decisions to be made regarding the intermodal transfer facility on the one hand, and NRDS and SRDS on the other hand, are quite different in character. The decision about the intermodal transfer facility is a programmatic site-selection decision. The supplemental EIS will consider project-specific issues related to the intermodal facility to the extent possible given the conceptual level of the current design. By contrast, the equivalent programmatic issues related to NRDS and SRDS

(location and general nature of improvements) were addressed in the 1998 comprehensive plan process.

Comments received during the scoping period that relate to NRDS and/or SRDS will be retained by Seattle Public Utilities and considered prior to the preparation of SEPA documentation for those facilities.

This EIS analysis focuses primarily on the following four elements, because the alternatives are most likely to result in significant impacts on these elements:

- Transportation
- Air quality and odor
- Noise
- Aesthetics and visual quality.

However, the EIS analysis also addresses other environmental elements for which significant impacts are less likely:

- Earth
- Water
- Plants and animals
- Hazardous materials
- Land and shoreline use
- Public services and utilities.

These additional environmental elements are addressed to the extent necessary for completeness and adequate disclosure of impacts.

Required Permits

The permits that would be required for the facilities addressed in this supplemental EIS are listed below.

- City of Seattle demolition permits
- City of Seattle building permits
- City of Seattle shoreline substantial development permit (for Alternatives 2 and 3 only)
- Puget Sound Clean Air Agency permit
- Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) construction permit
- Washington State Department of Ecology Industrial Stormwater General Permit
- Public Health – Seattle & King County solid waste permit
- Federal Aviation Administration – Notice of Proposed Construction or Alteration (Form 7460-1).

**Part 3: Affected Environment, Impacts,
Mitigation Measures, and Significant Unavoidable
Adverse Impacts**

Transportation

This section documents the transportation impacts associated with the operation of a new solid waste intermodal transfer facility at four alternative sites. For the transportation analysis, the operation of the intermodal transfer facility that is analyzed takes into account the planned rebuilding of the North Recycling and Disposal Station (NRDS) in Wallingford and the South Recycling and Disposal Station (SRDS) in south Seattle that are described in the SWFMP. However, although the traffic analysis modeled maximum probable truck diversion from NRDS and SRDS, this traffic flow is not dependent on the rebuilding of NRDS and SRDS. Also, waste collection trucks could still be directed to the existing NRDS and SRDS whether or not a dedicated city intermodal transfer facility is constructed.

The transportation analysis for the solid waste intermodal transfer facility determined the net change in passenger-vehicle and truck traffic at each alternative site and how the change in traffic would affect traffic operations and onsite queuing. It also evaluated train operations and how trains could affect street operations in the vicinity of each alternative site. The information in this section is summarized from the results of the transportation analysis, which are included in the transportation technical report (Appendix C).

Alternative 2 (Harbor Island Terminal 10)

Affected Environment

Detailed descriptions of the transportation network, traffic volumes and operations, site access and circulation, traffic safety, transit and nonmotorized facilities, parking, and rail facilities under the existing conditions and year 2028 no-action conditions are provided in the transportation technical report (Appendix C). The following subsections summarize each of these topics.

Transportation Network

The Harbor Island Terminal 10 site is located on the west side of Harbor Island, along what is known as the west frontage road. Access to this road is provided from 16th Avenue SW at SW Lander Street. Vehicles can exit on this same route or exit to the south where the west frontage road reconnects with 16th Avenue SW, just north of SW Spokane Street. The entrance and exit route to the north is separated from Harbor Island's railroad tracks and storage yards by the grade-separated bridge on 16th Avenue SW. The exit route to the south, however, crosses the railroad tracks (service tracks) that would feed the intermodal site as well as the primary lead track serving all of Harbor Island. Key attributes of the roadways in the vicinity of the Harbor Island Terminal 10 site are described in the transportation technical report (Appendix C).

No new roadway projects are planned on Harbor Island. However, the Port of Seattle plans to grade-separate East Marginal Way South from the two railroad crossings east of Harbor Island.

This grade separation is described in the following section, “Traffic Volumes and Operations.” The City of Seattle plans to replace the lift/turn cylinders on the Spokane Street Swing Bridge, which are located west of Harbor Island. The cylinders are being manufactured offsite, and their installation is planned for 2005.

There are two major transportation projects proposed in the site vicinity that will affect traffic when they are under construction: the Spokane Street Viaduct widening project and the Alaskan Way Viaduct replacement. The Spokane Street Viaduct will be widened by the addition of a structure on the north side of the existing viaduct. The Spokane Street Viaduct widening project will also change the on- and off-ramps for westbound traffic. The existing off-ramp to Fourth Avenue will be closed, and new ramps will be created for on and off traffic at First Avenue South. For the Alaskan Way Viaduct replacement, the Washington State Department of Transportation (WSDOT) and the City of Seattle are currently evaluating various construction options, which could include full closure of the facility. The planning and design for the Alaskan Way Viaduct will determine the traffic management improvements and detours needed to accommodate traffic during construction.

Traffic Volumes and Operations

The three key intersections near the Harbor Island Terminal 10 site are SW Spokane Street/Klickitat Avenue SW, South Spokane Street/East Marginal Way South, and SW Lander Street/16th Avenue SW. A new traffic count was performed at the SW Spokane Street/Klickitat Avenue SW intersection on Thursday, September 23, 2004. This count was performed between 2:00 and 5:00 p.m. to account for the peak conditions associated with truck traffic traveling to Terminal 18 as well as the afternoon traffic departing from Todd Shipyards. The peak 1-hour volumes occurred from 3:30 to 4:30 p.m.

Traffic-operating conditions are characterized by level of service (LOS). Six letter designations (A through F) are used to define level of service. LOS A is the best level of service, representing good traffic flow with little or no delay for motorists. LOS F is the worst level of service, representing poor traffic flow with long delays for motorists. Levels of service were analyzed using the methodology in the *Highway Capacity Manual* (TRB 2000).

Currently, the intersection of South Spokane Street and East Marginal Way South is a boulevard-type intersection with the north and south roadways of South Spokane Street split by a median in which the columns that support the Spokane Street Viaduct are located. Just south of the intersection on East Marginal Way South are two railroad crossings that link the rail yards in West Seattle and on Harbor Island to the mainline tracks and support yards. One of the railroad crossings is operated by the Burlington Northern Santa Fe Railway (BNSF), and the other is operated by the Union Pacific Railroad (UP). The Port of Seattle is proposing to reconstruct East Marginal Way to separate the grade of the roadway from that of the two railroad crossings. As part of this reconstruction project, the intersection of East Marginal Way South and South Spokane Street would be reconstructed. The existing boulevard-type intersection that is now controlled by two signals would be changed to a single intersection controlled by one signal.

Future traffic volumes on and in the vicinity of Harbor Island are expected to change dramatically in the future as a result of expanded container operations at the Port of Seattle. Future conditions in the year 2030 were evaluated as part of the Port of Seattle's *Container Terminal Access Study (CTAS) Year 2003 Update* (Heffron 2003) and for the Port of Seattle's East Marginal Way grade-separation project (Heffron 2004). The key assumptions in the forecasts included the following:

- Growth in container traffic through the Port of Seattle terminals to 3 million TEUs (twenty-foot equivalent units)
- King County's potential solid waste intermodal transfer facility on Harbor Island
- Growth in through traffic on Spokane Street and East Marginal Way (non-Port-related traffic) of 0.5 percent per year.

A detailed description of year 2028 no-action traffic volumes associated with the growth in the Port of Seattle container truck volume is presented in the transportation technical report (Appendix C).

King County is also evaluating the potential for locating a solid waste intermodal transfer facility on Harbor Island. Therefore, in addition to the Port of Seattle truck traffic that could occur in 2028 under no-action conditions, there could be traffic associated with the King County facility. Although the King County project is in the early stages of planning, preliminary estimates of truck volumes that would be generated by the county facility are 300 trips each weekday and 32 truck trips during the commuter peak hour. An estimated 20 employees would work at this facility, resulting in another 40 vehicle trips each day. However, the employees are expected to stay past 5:00 p.m., which is later than Harbor Island's commuter peak hour (3:30 to 4:30 p.m.) due to Todd Shipyards.

An analysis of level of service at the three intersection in the study area for the transportation analysis (SW Spokane Street/Klickitat Avenue SW, South Spokane Street/East Marginal Way South, and SW Lander Street/16th Avenue SW) indicated that they would all operate at LOS C in the year 2028 under no-action conditions.

Site Access and Circulation

The Harbor Island Terminal 10 site was vacant at the time of the transportation study and was generating no traffic at that time. When the study was conducted, the Port of Seattle was in the process of leasing out the site; therefore, current truck and rail traffic may be greater than that observed during the study.

Traffic Safety

Accident data were obtained from the City of Seattle to determine if there are any traffic safety conditions that could adversely affect or be adversely affected by the proposed action. Three

years of the most recent available data (January 1, 2001, through August 23, 2004) were obtained for the following intersections: SW Spokane Street/Klickitat Avenue SW, SW Spokane Street/11th Avenue SW, SW Spokane Street/SW Manning Street, SW Lander Street/16th Avenue SW, and the merging areas for traffic on SW Spokane Street and the Spokane Street Viaduct ramps. None of the intersections met the City's threshold for a high-accident intersection.

There is good emergency vehicle access to the Harbor Island Terminal 10 site. Harbor Island was designed with extensive coordination with the Seattle Fire Department. All the properties on Harbor Island have at least two means of access, providing redundant access in the event that one route is blocked by a train.

Transit and Nonmotorized Facilities

King County Metro provides bus transit service to the study area. The Harbor Island Terminal 10 site is directly served by Route 35, which provides service between downtown Seattle and Harbor Island. In the vicinity of the site, the bus route is along Spokane Street, Klickitat Avenue SW, 16th Avenue SW, and SW Manning Street. The terminus of the route on Harbor Island is at 16th Avenue SW/SW Florida Street.

When the Port of Seattle reconstructed the Harbor Island roadway network, sidewalks were added to one or both sides of all roadways on Harbor Island. A sidewalk currently exists along the entire length of the west frontage road adjacent to the site. This sidewalk connects at the north to 16th Avenue SW and to the south through the Port's public access area north of SW Spokane Street. All sidewalks also connect to the West Seattle bicycle trail, which is located along SW Spokane Street. The West Seattle bicycle trail crosses the SW Spokane Street's north frontage road and the access road to Terminal 18 at unsignalized intersections.

Parking

The Harbor Island Terminal 10 site was vacant at the time of the transportation study and was generating no parked vehicles at that time. No on-street parking is permitted near the site on 16th Avenue South or the west frontage road. However, there are many areas within the City-owned and Port-owned rights-of-ways that have been developed as public parking areas. These areas were developed to accommodate Todd Shipyard's parking needs as its parking areas were displaced by the Terminal 18 improvement project.

Rail Facilities

Harbor Island is served by two railroads: UP and BNSF. When Harbor Island was reconstructed as part of the Terminal 18 improvement project, all of the rail lines and rail yards on Harbor Island were also reconstructed. Both railroads' primary access tracks to the island are located along the south and west sides of Klickitat Avenue SW and pass under the Spokane Street Swing Bridge. North of Spokane Street, 16th Avenue SW passes over the rail lines and the island's main rail yard, which is located east of 16th Avenue SW. The lead tracks to Harbor Island cross the west frontage road at grade near its southern intersection with the 16th Avenue SW corridor.

The King County Solid Waste Division is evaluating the feasibility of constructing a solid waste intermodal transfer facility on Harbor Island adjacent to Seattle Public Utilities' proposed Harbor Island Terminal 10 site. The King County facility is expected to generate about 3,000 tons of waste per day or approximately 100 containers. This tonnage would generate an estimated four trains per week. Each train would be about 4,000 feet long (excluding the engines).

The Port of Seattle is undertaking a comprehensive study of rail operations on Harbor Island to evaluate issues associated with growth in container traffic at the Port to its long-term target of 3 million TEUs. In addition to rail traffic generated by the Port, the study will include other existing rail traffic on Harbor Island (e.g., rail barge) as well as potential future rail traffic associated with King County's and Seattle Public Utilities' solid waste intermodal facilities. The results of this study will not be available until summer 2005.

Impacts

This section describes the transportation conditions that would exist after implementation of the proposed action on the Harbor Island Terminal 10 site. Detailed descriptions of the impacts are included in the transportation technical report (Appendix C), and these impacts are summarized in the following subsections.

Transportation Network

The Harbor Island Terminal 10 site is one of four sites that are being evaluated for a new solid waste intermodal transfer facility. This facility would include the following features:

- A main transfer building where waste is delivered; compacted, if necessary; and loaded into containers
- An exterior container storage area
- Rail siding tracks with adjacent cranes and other equipment for loading containers onto rail cars
- An employee/office building with adjoining parking
- Access driveways with entrance and exit scale facilities
- A small fueling station.

Under Alternative 2, the City of Seattle would have a stand-alone solid waste intermodal transfer facility that would handle Seattle's waste, and King County would have a separate solid waste intermodal transfer facility on land to the south of the Harbor Island Terminal 10 site.

Under Alternative 2, the proposed action would not alter the street network on Harbor Island. All the streets on Harbor Island were recently reconstructed as part of the Terminal 18 improvement project. All the streets have pedestrian facilities on one or both sides of the street, and the pavement is in excellent condition.

Under Alternative 2, the rail network would be modified to create a rail loading facility on the site. Most of the modifications would involve making new connections to the lead tracks that previously served the Pendleton Flour Mills site and the area north of Pendleton Flour Mills (now known as the Pendleton site). No changes would be made to the storage yards on Harbor Island or the primary lead tracks that connect Harbor Island to the mainland.

Traffic Volumes and Operations

Future traffic volumes in the year 2028 under no-action conditions were discussed previously under the heading “Affected Environment.” All analyses of future traffic volumes and operations were performed for the year 2028. The future traffic volumes on Harbor Island include growth in traffic due to Terminal 18 as well as growth in traffic generated by other businesses on Harbor Island. In addition, the 2028 traffic volumes include truck traffic generated by the potential King County solid waste intermodal transfer facility on Harbor Island.

Traffic generated by the Seattle Public Utilities solid waste intermodal transfer facility was derived from detailed models of waste streams and projected growth in waste. These forecasts are described in detail in the transportation technical report (Appendix C). Traffic volumes generated by the intermodal transfer facility have been estimated for a peak design day (an average day in the month of August) (Table 3-1). The facility-generated volumes are indicated for the entire day, for the peak hour of the facility, and for typical AM and PM peak hours of commuter traffic. The analysis of AM peak-hour traffic assumed that the facility would open at 7:00 a.m. However, many commercial collection trucks pick up during off-hours for businesses in locations such as downtown Seattle. To accommodate these trucks, it is likely that the intermodal transfer facility will open earlier than 7 a.m. Therefore, the AM peak-hour volumes used for all traffic analyses are conservatively high and reflect worst-case conditions.

Table 3-1. Trip generation summary for the intermodal transfer facility on a peak design day.

Weekday Trip Types	Daily Trips	Typical Commuter AM Peak Hour (7:00 to 8:00 a.m.)	Facility PM Peak Hour (3:00 to 4:00 p.m.)	Typical Commuter PM Peak Hour (5:00 to 6:00 p.m.)
Self haul	0	0	0	0
Contractor - commercial	312	67	6	2
Contractor - residential	240	0	66	14
Transfer trucks	52	0	5	5
Employees	48	17	4	13
Total	652	84	81	34

On Harbor Island, the peak-hour traffic volumes occur from 3:30 to 4:30 p.m., when vehicles from Todd Shipyard are leaving the island and trucks from Terminal 18 are also departing through the North Gate. To determine how the Seattle Public Utilities intermodal transfer facility would affect traffic operations on Harbor Island, the facility's PM peak-hour traffic (the traffic generated between 3:00 and 4:00 p.m.) was added to the peak-hour traffic on Harbor Island. The vast majority of the trips generated by the intermodal transfer facility proposed by Seattle Public Utilities would be vehicles arriving on and departing from Harbor Island from the east. Vehicles from SR 99 and the Spokane Street Viaduct would access the site via direct ramps to Harbor Island. A small percentage (15 percent) of vehicles would be from West Seattle and would arrive and depart via the Spokane Street Swing Bridge.

Major detours associated with projects such as the Alaskan Way Viaduct would likely affect truck traffic arriving from North Seattle regardless of whether the new solid waste intermodal transfer facility is constructed. Both collection trucks and transfer trucks now use the Alaskan Way Viaduct to access the two existing intermodal transfer facilities operated by Allied Waste Industries and Waste Management. Therefore, the potential impact of the Alaskan Way Viaduct replacement project on truck movements would be independent of the proposed action.

Level of service was determined for the conditions in the year 2028 after implementation of the proposed action. This analysis added traffic at the intersections and increased the percentage of trucks to account for the effect of the facility's trucks. The results of this analysis indicate that the increased truck traffic would not change the traffic operations in the vicinity of the Harbor Island Terminal 10 site (Table 3-2). Key intersections near the Harbor Island Terminal 10 site would continue to operate at LOS C or better in the year 2028 after implementation of the proposed action.

Table 3-2. Level of service at intersections near the Harbor Island Terminal 10 site under Alternative 2.

Intersection	Existing (2004) Conditions		Year 2028 No-Action Conditions		Year 2028 with Proposed Action	
	LOS	Delay ^a	LOS	Delay ^a	LOS	Delay ^a
16 th Avenue SW/SW Lander Street ^b	B	14.0	C	18.4	C	22.4
SW Spokane Street/Klickitat Avenue SW	B	12.9	C	25.7	C	27.6
S. Spokane Street/East Marginal Way S. ^c	C	27.6	C	24.8	C	24.9

Source: Methodology from the *Highway Capacity Manual* (TRB 2000).

LOS = level of service.

^a Average seconds of delay per vehicle.

^b Unsignalized intersection for which the delay reflects turns from SW Lander Street onto 16th Avenue SW. The other two intersections are signalized.

^c Future conditions assume that the intersection would be modified as part of the East Marginal Way grade-separation project, which is currently funded.

The roadways on Harbor Island were designed with the assumption that a relatively high-intensity use would be located on the former Lockheed Shipyard site, which is the location

proposed for both the King County and the Seattle Public Utilities intermodal transfer facilities. The amount of traffic that would be generated by these uses would be less than the volume that was assumed for this area in the analysis for the Terminal 18 improvement project. Therefore, the levels of service at the intersections would be adequate in the future after these facilities are constructed.

Site Access and Circulation

The Harbor Island Terminal 10 site would be accessed from the west frontage road. This roadway carries a very low volume of traffic, and turns to and from the intermodal transfer facility would operate at LOS A.

The traffic volume generated by the intermodal transfer facility would be low enough that no onsite queuing is expected. Even under peak conditions, the queue is not expected to extend beyond the site. Therefore, no adverse impacts related to site access or queuing are anticipated as a result of the Seattle Public Utilities intermodal transfer facility on the Harbor Island Terminal 10 site.

Traffic Safety

Under Alternative 2, the proposed action is not expected to adversely affect traffic safety in the vicinity of the Harbor Island Terminal 10. All the streets on Harbor Island were designed to accommodate high volumes of large trucks. The recent accident history indicates a very low number of accidents on Harbor Island since the roads were reconstructed.

Many trucks currently use the Spokane Street Viaduct, including collection trucks that access the existing intermodal transfer facilities. A new intermodal transfer facility at the Harbor Island Terminal 10 site would increase truck traffic on portions of the viaduct, which could increase the potential for accidents. The City of Seattle has prepared a final design to improve many of the viaduct's substandard elements such as no shoulders or narrow shoulders, inadequate merge and diverge lengths on the ramps, and narrow lane widths. The project would improve safety on the Spokane Street Viaduct.

Transit and Nonmotorized Facilities

Alternative 2 would result in additional truck volumes on SW Spokane Street's north frontage road at the unsignalized crossing of the West Seattle bicycle trail. However, this crossing was designed to accommodate a higher volume of truck traffic than the volume that would occur after implementation of this alternative. Therefore, the proposed action would not adversely affect any transit or nonmotorized facilities in the vicinity. Since sidewalks currently exist along the entire site frontage, no improvements would be required.

Parking

Under Alternative 2, employment at the intermodal transfer facility is expected to peak at about 24 persons on the site at any one time. Parking for these employees would be provided on the site, and no offsite parking impacts are expected.

Rail Facilities

The proposed intermodal transfer facility is expected to receive about 2,030 tons of waste on an average weekday (Monday through Friday) and approximately 2,230 tons on a peak design day in the year 2028. This would fill between 68 and 75 intermodal rail containers each day assuming that each container is packed with an average of 30 tons of waste. It was assumed that each intermodal train could hold approximately 126 containers (21 double-stack rail cars, with three wells per car). This would translate to a train length of approximately 4,000 feet (excluding the engines) assuming about 190 feet per car. Based on these assumptions, Seattle's solid waste would require approximately three trains each week, which are projected to run Monday, Wednesday, and Friday. Although these trains would be new to Harbor Island, they would not be new to the rail system. If the City does not build an intermodal transfer facility, Seattle's solid waste would continue to be loaded at other intermodal facilities that would generate the same demand for train capacity on the UP and/or BNSF mainlines.

The comprehensive rail operations study that the Port of Seattle is conducting on Harbor Island will evaluate the ability of the existing system to accommodate the rail operation (switching and train building) needs of the various uses, as well as the track storage needs. If the current system cannot accommodate the demands, improvements or operating restrictions may be suggested. The results of this study will not be available until summer 2005.

In addition to the Port's study, the City of Seattle and King County would also need to negotiate with both railroads regarding operations at the intermodal transfer facility. Therefore, any potential operation impacts associated with the facility would need to be mitigated to the satisfaction of the railroads.

The lead tracks to the Harbor Island Terminal 10 site would cross two public streets at grade: the west frontage road on Harbor Island and East Marginal Way South. The lead tracks do not cross SW Spokane Street on Harbor Island since the tracks go under SW Spokane Street at Klickitat Avenue SW. Train blockages of the west frontage road would primarily affect truck traffic that may want to exit the new intermodal transfer facility via the direct route to the south. If this route is blocked by a train, these trucks could exit the area by going north on the west frontage road and then turning south on the 16th Avenue SW corridor, which passes over the tracks.

The at-grade crossing of East Marginal Way South is likely to be mitigated by the Port of Seattle's East Marginal Way grade-separation project. This roadway project would grade-separate East Marginal Way from both the UP and BNSF lead railroad tracks. It would also provide alternate entrance and exit routes for local businesses adjacent to the tracks if one route is blocked by a train. No further mitigation would be needed to accommodate the additional three trains per week generated by Seattle Public Utilities' intermodal transfer facility.

Mitigation Measures

Under Alternative 2, mitigation for transportation impacts Alternative 2 would include coordinating rail operating needs with the both railroads (BNSF and UP), as well as with the Port of Seattle.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse transportation impacts have been identified for Alternative 2 (Harbor Island Terminal 10).

Alternative 3 (Harbor Island Terminal 10/Pendleton)

Affected Environment

The affected environment related to transportation for the Harbor Island Terminal 10/Pendleton site is identical to that of Alternative 2 (Harbor Island Terminal 10).

Impacts

Alternative 3 combines the potential county intermodal transfer facility (on the Pendleton site) that is under consideration by the King County Solid Waste Division and the City of Seattle intermodal transfer facility (on the Harbor Island Terminal 10 site) into a joint operation. Under Alternative 3, some components of the city and county intermodal facilities (e.g., the transfer building) could be shared. The transportation impacts resulting from Alternative 3 (Harbor Island Terminal 10/Pendleton) would be essentially identical to those of Alternative 2 (Harbor Island Terminal 10). The same volume of waste would be generated by King County and the City of Seattle whether the facilities are shared or separate. Therefore, the volume of truck and rail traffic would be the same as that resulting from Alternative 2 (a city-owned facility on the Harbor Island Terminal 10 site).

Under Alternative 3, the combined waste generated by the county and the city would fill one to two trains per day.

Mitigation Measures

The mitigation measures discussed for the Harbor Island Terminal 10 site (Alternative 2) also apply to the Harbor Island Terminal 10/Pendleton site (Alternative 3).

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse transportation impacts have been identified for Alternative 3 (Harbor Island Terminal 10/Pendleton).

Alternative 4 (Corgiat Drive)

Affected Environment

Detailed descriptions of the transportation network, traffic volumes and operations, site access and circulation, traffic safety, transit and nonmotorized facilities, parking, and rail facilities under the existing conditions and year 2028 no-action conditions are provided in the transportation technical report (Appendix C). The following subsections summarize each of these topics.

Transportation Network

The Corgiat Drive site is located between South Corgiat Drive, which is located immediately west of and parallel to Interstate 5, and the BNSF/UP railroad tracks along the east side of Airport Way South. The site extends south from South Graham Street to the dead end of South Corgiat Drive. Key attributes of the roadways located in the vicinity of the Corgiat Drive site are described in the transportation technical report (Appendix C). No new roadway projects are planned near the Corgiat Drive site.

Traffic Volumes and Operations

There are three signalized intersections near the Corgiat Drive site: South Albro Place/South Corgiat Drive/Interstate 5 off-ramp, South Albro Place/Swift Avenue South, and South Albro Place/Stanley Avenue South. New traffic counts were performed at all three intersections on September 23, 2004. On April 7, 2005, a traffic count was performed at the South Bailey Street/13th Avenue South/Stanley Avenue South intersection. The PM peak hour of the intermodal transfer facility would be 3:00 to 4:00 p.m. Traffic volumes for the year 2028 were estimated by applying a uniform growth rate of 1.5 percent per year to all movements.

The level of service at these three intersections was analyzed using the methodology in the *Highway Capacity Manual* (TRB 2000) (Table 3-3). Data related to the intersection geometry and signal operations were obtained from the Seattle Department of Transportation (SDOT) as well as the Washington State Department of Transportation (WSDOT), the agency responsible for operating the signals at the Interstate 5 ramps).

Site Access and Circulation

The Corgiat Drive site is currently occupied by many businesses that generate traffic. The combined trip generation for these existing uses was estimated using an existing traffic count on South Corgiat Drive, as well as trip generation rates for various types of uses and the size of the uses now occupying the site. It is estimated that these uses generate a total of 780 trips per day, with about 75 trips during the PM peak hour. Of the total trips, Puget Sound Energy accounts for about 360 trips per day and 30 trips during the PM peak hour.

Table 3-3. Level of service at intersections near the Corgiat Drive site under existing and future no-action conditions.

Signalized Intersection	Existing (2004) Conditions		Year 2028 No-Action Conditions	
	LOS	Delay ^a	LOS	Delay ^a
S. Albro Place/Swift Avenue S.	C	25.7	E	79.8
S. Albro Place/S. Corgiat Drive/I-5 off-ramp	B	17.2	C	21.2
S. Albro Place/Stanley Avenue S.	A	6.6	A	9.0
S. Bailey Street/13 th Avenue S./Stanley Avenue S.	B	10.9	C	20.3

Source: Methodology from the *Highway Capacity Manual* (TRB 2000).

LOS = level of service.

^a Average seconds of delay per vehicle.

Traffic Safety

Accident data were obtained from the City of Seattle to determine if there are any traffic safety conditions that could adversely affect or be adversely affected by the proposed action at the Corgiat Drive site. Three years of the most recent available data (January 1, 2001, through August 23, 2004) were obtained for the following intersections: South Albro Place/Stanley Avenue South, South Albro Place/South Corgiat Drive, South Albro Place/Swift Avenue South, South Graham Street/South Corgiat Drive, and South Bailey Street/13th Avenue South/Stanley Avenue South. None of the intersections met the City's threshold for a high-accident intersection.

The Corgiat Drive site has emergency vehicle access via South Corgiat Drive, which is a relatively low-volume roadway that is not crossed by railroad tracks.

Transit and Nonmotorized Facilities

King County Metro provides bus transit service in the vicinity of the study area. However, there are no transit stops located within an 800-foot walking distance of the Corgiat Drive site. The closest southbound stop is located at South Eddy Street, and the closest northbound stop is located at Stanley Avenue South.

There are sidewalks along both sides of South Albro Place. On South Corgiat Drive, the sidewalks are intermittent. There are no bicycle facilities in the vicinity of the Corgiat Drive site.

Parking

There is no on-street parking on South Corgiat Drive in the vicinity of the Corgiat Drive site. All the vehicles that are currently generated by the existing uses of the site park in onsite parking areas.

Rail Facilities

The Corgiat Drive site is located adjacent to what is known as the Van Asselt Yard. There are three railroad mainlines located on the west side of this yard: two owned by BNSF and one owned by UP. As part of the joint facility arrangement between the railroads and Sound Transit, the three mainlines will be shared by the Rhodes Interlocking and the Black River Interlocking (both of which are south of the Van Asselt Yard). This will provide additional capacity for both railroads and Sound Transit trains to operate in this corridor.

Another recent change near the Van Asselt Yard is the closure of the at-grade crossing at Military Road. This was the only remaining at-grade crossing in the area. No other public streets cross the tracks in the vicinity of the Van Asselt Yard.

Impacts

This section describes the transportation conditions that would exist after implementation of the proposed action on the Corgiat Drive site. Detailed descriptions of the impacts are included in the transportation technical report (Appendix C), and the impacts are summarized in the following subsections.

Transportation Network

Under Alternative 4, the intermodal transfer facility would primarily serve Seattle and would be similar to that proposed under Alternative 2 (Harbor Island Terminal 10). The proposed Seattle Public Utilities intermodal transfer facility would occupy a site located between South Corgiat Drive and the railroad tracks. The site layout would require the use of two public street (18th Avenue South and Ursula Place South) and may require the use of portions of South Corgiat Drive for scale facilities and queue lanes. This could be accomplished through either a street-use permit and/or street vacation for one or more of the streets. The need for these streets and the required permit or vacation action would be determined later in the design process.

Traffic Volumes and Operations

Under Alternative 4, trip generation related to the intermodal transfer facility on a peak design day would be the same as that discussed for Alternative 2 (Harbor Island Terminal 10) (Table 3-1). Peak-hour traffic volumes in the vicinity of the Corgiat Drive site occur between 3:00 and 4:00 p.m.; therefore, trip generation during the PM peak hour of the intermodal transfer facility, which would also occur during this hour, was added to the peak-hour traffic volumes in the site vicinity. During this hour, the facility would generate approximately 81 trips—77 truck trips (one way) and 4 employee trips.

The existing uses on the site would be removed to accommodate the new intermodal transfer facility. It is estimated that these uses generate approximately 780 trips per day, with about 75 trips during the PM peak hour. One possible option would be the retention of some of the businesses in the area. If all the businesses except Puget Sound Energy are relocated, the removed uses would reduce the existing traffic volumes by about 420 daily trips and 45 trips

during the PM peak-hour. These trips were removed from the study area intersections based on the existing travel patterns to and from South Corgiat Drive.

Additional solid waste that has already been loaded into containers may be accepted at this site similar to Alternative 3. If partner waste is accepted, the Puget Sound Energy facility would be relocated along with all traffic from that facility.

Most of the traffic generated by the new intermodal transfer facility would originate from the north and would enter and exit the site via Interstate 5. The off ramp from southbound Interstate 5 intersects with South Albro Place opposite South Corgiat Drive. The return route to Interstate 5 would use the on ramps to both the northbound and southbound lanes, which are located off South Michigan Street and South Bailey Street. Trucks would use South Albro Place and Stanley Avenue South to access South Bailey Street.

The level of service in the year 2028 was analyzed using the net change in traffic associated with the intermodal transfer facility. The results of this analysis indicate that the proposed action would not change the level of service at the three intersections nearest the Corgiat Drive site (Table 3-4). The all-way-stop intersection at South Bailey Street/13th Avenue South/Stanley Avenue South currently operates at LOS B. If the proposed project is not implemented, operations at this intersection would decline to LOS C by the year 2028 because of growth in background traffic. Additional traffic generated by the intermodal transfer facility would degrade operations at this intersection to LOS D. This is an acceptable level of service in Seattle, and changes neither to the lane geometry nor traffic control would be needed.

Table 3-4. Level of service at intersections near the Corgiat Drive site under Alternative 4.

Intersection	Existing (2004) Conditions		Year 2028 No-Action Conditions		Year 2028 with Proposed Action	
	LOS	Delay ^a	LOS	Delay ^a	LOS	Delay ^a
S. Albro Place/Swift Avenue S.	C	25.7	E	79.8	E	78.5 ^b
S. Albro Place/S. Corgiat Drive/I-5 off-ramp	B	17.2	C	21.2	C	24.0
S. Albro Place/Stanley Avenue S.	A	6.6	A	9.0	A	9.1
S. Bailey Street/13 th Avenue S./Stanley Avenue S.	B	10.9	C	20.3	D	26.1

Source: Methodology from the *Highway Capacity Manual* (TRB 2000).

LOS = level of service.

^a Average seconds of delay per vehicle.

^b Delay improves because traffic volumes would be reduced after implementation of the proposed action since the solid waste intermodal transfer facility would generate fewer trips that would affect critical movements compared to the no-action conditions. See the transportation technical report (Appendix C) for further information about this analysis.

Site Access and Circulation

Under Alternative 4, the intermodal transfer facility would be accessed from South Corgiat Drive. The facility would be the only business located at the south end of Corgiat Drive;

therefore, the facility-related traffic would not conflict with any other traffic on the main access drive.

Under Alternative 4, the traffic volume associated with the intermodal transfer facility would be low; therefore, no onsite queuing is expected. Even under peak conditions, the queue is not expected to extend beyond the site. Therefore, no adverse impacts on site access, circulation, or onsite queuing are expected to result from the proposed action on the Corgiat Drive site.

Traffic Safety

Increased traffic volumes can increase the potential for accidents. Under Alternative 4, the net change in traffic generated by the intermodal transfer facility would be small since the existing traffic would be removed from the site. However, the proposed action may change the mix of vehicles, resulting in a higher percentage of trucks. Given the location of the Corgiat Drive site in the industrial area of Seattle, all of the major access routes to the site were designed to accommodate high volumes of trucks. In addition, the available accident records indicate a very low rate of accidents in the site vicinity. Therefore, it is unlikely that the proposed action would adversely affect safety in the vicinity of the Corgiat Drive site.

Transit and Nonmotorized Facilities

Under Alternative 4, the proposed action would not affect transit service or facilities in the vicinity of the Corgiat Drive site.

Sidewalks currently exist along the west side of South Corgiat Drive, from South Albro Place to 18th Avenue South. On the east side of South Corgiat Drive, the sidewalk extends from South Graham Street to approximately 500 feet north of Ursula Place South. These sidewalks are adequate for the limited needs for pedestrian access in the area, and Seattle Public Utilities is not proposing to construct new sidewalks in the area.

Parking

Under Alternative 4, employment at the intermodal transfer facility is expected to peak at about 24 persons on the site at any one time. Parking for these employees would be provided on the site, and no offsite parking impacts are expected.

Rail Facilities

Under Alternative 4, the intermodal transfer facility at the Corgiat site would generate the same train volume as that of Alternative 2 (Harbor Island Terminal 10), which was estimated to be approximately three trains per week. The Corgiat Drive site would not be shared with King County or other sources, except to the extent that excess capacity exists. As discussed for the Harbor Island Terminal 10 site, the required trains would not be new to the rail system. If the City does not build an intermodal transfer facility, Seattle's solid waste would continue to be

loaded at other intermodal transfer facilities that would generate the same demand for train capacity on the UP and/or BNSF mainlines.

Loading and train building on the Corgiat Drive site would occur on tracks adjacent to the existing Van Asselt Yard. These activities would not cross or block any public streets in the site vicinity.

If the Corgiat Drive site is chosen for the intermodal transfer facility, further design work and analysis of rail operations would be performed as part of negotiations with both UP and BNSF. Therefore, any potential operation impacts associated with the facility would need to be mitigated to the satisfaction of the railroads.

Mitigation Measures

Under Alternative 4, mitigation for transportation impacts would include coordinating the rail operating needs with BNSF and UP.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse transportation impacts were identified for Alternative 4 (Corgiat Drive).

Alternative 5 (Edmunds Street)

Affected Environment

Detailed descriptions of the transportation network, traffic volumes and operations, site access and circulation, traffic safety, transit and nonmotorized facilities, parking, and rail facilities under the existing conditions and year 2028 no-action conditions are provided in the transportation technical report (Appendix C). The following subsections summarize each of these topics.

Transportation Network

The Edmunds Street site is located on the east side of the UP Argo Intermodal Yard and west of Airport Way South, just south of South Edmunds Street. This section of Airport Way South consists of four lanes and widens to five lanes (two lanes in each direction plus a center left-turn lane) north of the site. The nearest traffic signals are located at South Lucile Street south of the site and at South Spokane Street north of the site. Key attributes of roadways located in the vicinity of the Edmunds Street site are described in the transportation technical report (Appendix C).

As part of its Bridge Painting Program, the City of Seattle plans to paint the bridge spanning the Argo Intermodal Yard at Airport Way South. As part of this program, steel bridges are painted

to protect them from deterioration and loss of strength. No other roadway improvements are planned near the Edmunds Street site.

Traffic Volumes and Operations

The Edmunds Street site would be accessed from Airport Way South at South Edmunds Street. The traffic volumes along Airport Way South indicate two distinct peak periods coinciding with the morning and afternoon commute patterns. The traffic volume is highest during the PM peak hour (4:00 to 5:00 p.m.).

A new traffic count was performed at the Airport Way South/South Edmunds Street intersection on October 5, 2004, and a new count was performed at the nearby Airport Way South/South Industrial Way intersection on September 23, 2004.

The traffic volumes on Airport Way South have been growing at a faster rate than the volumes on other arterials in the industrial area. This is likely due to commuters who have discovered Airport Way South as a way to bypass the congestion on Interstate 5. In the past 10 years, the traffic volumes on Airport Way South just north of Lucile Street have grown at a rate of 2 percent per year. This growth rate was used to project future traffic volumes for the year 2028.

The level of service at the two unsignalized intersections near the Edmunds Street site was analyzed using the methodology in the *Highway Capacity Manual* (TRB 2000). The results of this analysis indicate that left turns from the side streets currently operate at acceptable levels of service (Table 3-5). However, in the future, increased traffic volumes on Airport Way South would make these turns difficult. Under year 2028 no-action conditions, left turns onto Airport Way South would operate at LOS F. The calculations of level of service assumed a posted speed limit on Airport Way South of 35 mph. However, observations along the street show that the actual speeds are likely much higher. Turns onto Airport Way South are even more difficult when speeds are higher than the posted speed limit.

Table 3-5. Level of service near the Edmunds Street site under existing and future no-action conditions.

Intersection	Existing (2004) Conditions		Year 2028 No-Action Conditions	
	LOS	Delay ^a	LOS	Delay ^a
Airport Way South/South Edmunds Street				
Left turn from Edmunds Street	C	22.0	F	103.9
Left turn from Airport Way	A	1.1	A	3.5
Airport Way South/South Industrial Way				
Left turn from Industrial Way	D	28.1	F	75.1
Left turn from Airport Way	B	11.6	C	20.4

Source: Methodology from the *Highway Capacity Manual* (TRB 2000).

LOS = Level of service.

^a Average seconds of delay per vehicle.

Site Access and Circulation

The existing Edmunds Street site is occupied by warehouses and a freight terminal. These businesses generate passenger vehicle and truck traffic throughout the day, all of which access the site via the Airport Way South/South Edmunds Street intersection. A count of the traffic generated by the existing site was performed on October 5, 2004. This count indicated that during the peak hour along Airport Way South (4:00 to 5:00 p.m.), the existing site generates 20 vehicle trips (8 inbound and 12 outbound). Of these 20 trips, 2 (10 percent) are trucks.

Traffic Safety

Accident data were obtained from the City of Seattle to determine if there are any traffic safety conditions that could adversely affect or be adversely affected by the proposed action at the Edmunds Street site. Three years of the most recent available data (January 1, 2001, through August 23, 2004) were obtained at the following intersections: Fourth Avenue South/South Industrial Way, Sixth Avenue South/South Industrial Way, Seventh Avenue South/South Industrial Way, Airport Way South/South Industrial Way, Airport Way South/South Edmunds Street, and Airport Way South/South Lucile Street. None of the intersections met the City's threshold for a high-accident intersection.

The Edmunds Street site has emergency vehicle access via South Edmunds Street, which is a relatively low-volume roadway that is not crossed by railroad tracks.

Transit and Nonmotorized Facilities

Transit information for the Edmunds Street site was reviewed to determine if there is existing bus service in the vicinity that might be affected by a new intermodal transfer facility. Some employees of the facility may use the available service. King County Metro provides bus transit service to this area, with stops located along Airport Way South. The closest northbound stop is at the intersection of South Edmunds Street and Airport Way South. The closest southbound stop is at the intersection of South Alaska Street and Airport Way South; there is a bus pullout at this transit stop.

There are sidewalks along both sides of Airport Way South and a sidewalk on the north side of South Edmunds Street. There are no bicycle facilities in the area.

Parking

There is no on-street parking along Airport Way South near the Edmunds Street site. There is on-street parking on both sides of South Edmunds Street. Parking needs generated by the existing uses near the site are met by a combination of onsite and on-street parking spaces.

Rail Facilities

The Edmunds Street site is located on the north side of the UP Argo Intermodal Yard. UP currently provides service to Northwest Container Services, the firm that operates the existing

intermodal transfer facility that would be operated jointly with Seattle Public Utilities if this site is selected. The BNSF mainline is located along the north side of the Argo Intermodal Yard, between the Georgetown Interlocking and the mainline right-of-way located between First Avenue South and Fourth Avenue South.

All public streets in the vicinity are grade-separated from the railway tracks that serve the Edmunds Street site.

Impacts

This section describes the transportation conditions that would exist after implementation of the proposed action on the Edmunds Street site. Detailed descriptions of the impacts are included in the transportation technical report (Appendix C), and the impacts are summarized in the following subsections.

Transportation Network

Under Alternative 5, the intermodal transfer facility would serve Seattle only and would be similar to that proposed under Alternative 2 (Harbor Island Terminal 10). No changes to the transportation network are proposed to accommodate the facility on the Edmunds Street site.

Traffic Volumes and Operations

Under Alternative 5, trip generation related to the intermodal transfer facility on a peak design day would be the same as that for Alternative 2 (Harbor Island Terminal 10). As previously described, the peak hour along Airport Way South occurs from 4:00 to 5:00 p.m.; however, traffic volumes for the prior hour (3:00 to 4:00 p.m.) are only slightly lower. For this reason, traffic operational impacts that combine the PM peak hour of the street with the PM peak hour of the facility were evaluated. It was assumed that the facility would generate approximately 81 trips during the PM peak hour of the facility—77 truck trips and 4 employee trips.

Most of the trips generated by Edmunds Street site would arrive and depart to the north. Because there are no direct ramps from Interstate 5 to Airport Way South, many of the facility-related trips would likely access the site via South Spokane Street, Sixth Avenue South, and South Industrial Way. Some traffic would also arrive and depart from the south.

The existing Edmunds Street site is occupied by warehouses and a freight terminal. As previously discussed, a traffic count determined that these businesses generate 20 vehicle trips (8 inbound and 12 outbound) during the PM peak hour along Airport Way South. Of the 20 trips, 2 (10 percent) are trucks. These trips were removed from the study area intersections for the analysis of future conditions.

The level of service in the year 2028 was analyzed using the net change in traffic associated with the intermodal transfer facility. The results of this analysis indicate that the proposed action would degrade the levels of service for vehicles turning to and from Airport Way South

(Table 3-6). Turning left onto Airport Way South from South Edmunds Street would be very difficult in the afternoon. As previously mentioned, this level of service assumes the posted speed limit of 35 mph on Airport Way South; however, many vehicles have been observed exceeding this limit. Turns are more difficult when the speeds are higher. There is limited right-of-way on Airport Way South, and no room to create a left-turn pocket. Another option may be to require vehicles to turn right onto Airport Way South. This option was also evaluated, but given the volume of trucks that would need to exit the site, the right-turn movement would also operate at LOS F. Finally, the volume of traffic exiting the site would not be high enough to warrant a traffic signal. Therefore, if the Edmunds Street site is selected, an alternate exit route should be provided. This route could include proceeding north to Seventh or Sixth Avenue South and connecting to South Industrial Way. If this route is selected, the proposed project would add more trips to the left-turn movement from South Industrial Way onto Airport Way South. Since this movement is projected to operate at LOS F in 2028 under no-action conditions, mitigation may be required after implementation of the proposed action if the Edmunds Street site and this alternate exit route are selected.

Table 3-6. Level of service at intersections near the Edmunds Street site under Alternative 5.

Intersection	Existing (2004) Conditions		Year 2028 No-Action Conditions		Year 2028 with Proposed Action	
	LOS	Delay ^a	LOS	Delay ^a	LOS	Delay ^a
Airport Way South/South Edmunds Street						
Left turn from Edmunds Street	C	22.0	F	103.9	F	>200.0
Left turn from Airport Way	A	1.1	A	3.5	A	4.6
Airport Way South/Industrial Way South						
Left turn from Industrial Way	D	28.1	F	75.1	F	84.0
Left turn from Airport Way	B	11.6	C	20.4	D	34.9

Source: Methodology from the *Highway Capacity Manual* (TRB 2000).

LOS = Level of service.

^a Average seconds of delay per vehicle.

Site Access and Circulation

Under Alternative 5, trucks exiting the Edmunds Street site would have a very difficult time turning left or right onto Airport Way South due to the speed and volume of traffic on this arterial. If the Edmunds Street site is selected, an alternate exit route that bypasses Airport Way South should be provided. This route could connect to Sixth or Seventh Avenue South, north of the site. Connections to South Industrial Way would operate at acceptable levels of service because this street has low traffic volumes and boulevard connections between the directions of traffic.

Under Alternative 5, the traffic volume associated with the intermodal transfer facility would be low enough that no onsite queuing is expected. Even under peak conditions, the queue is not expected to extend beyond the site.

Traffic Safety

Without an alternate exit route from the Edmunds Street site, poor traffic operations along Airport Way South could increase the number and severity of accidents. Turns from South Edmunds Street would compete with higher speed traffic on Airport Way South. Because there is no center turn lane, left turns exiting the site would require a gap in both directions of traffic. Also, left turns into the site could block the traffic that follows in the northbound direction. This traffic safety condition could be partially mitigated by providing an alternate exit route from the Edmunds Street site.

Transit and Nonmotorized Facilities

Under Alternative 5, the proposed action would not adversely affect transit or nonmotorized facilities in the area. There are existing sidewalks along Airport Way South and along the north side of South Edmunds Street. Seattle Public Utilities is not proposing to construct additional sidewalks in the area.

Parking

Under Alternative 5, employment at the intermodal transfer facility is expected to peak at about 24 persons on site at any one time. Parking for these employees would be provided on the site, and no offsite parking impacts are expected.

Rail Facilities

Under Alternative 5, the intermodal transfer facility on the Edmunds Street site would generate the same train volume as that of Alternative 2 (Harbor Island Terminal 10), which was estimated to be three trains per week. As discussed for the Harbor Island Terminal 10 site, the required trains would not be new to the rail system. If the City does not build an intermodal transfer facility, Seattle's solid waste would continue to be loaded at other intermodal facilities that would generate the same demand for train capacity on the UP and/or BNSF mainlines.

Loading and train building on this site would occur on the same tracks that now support the operations of Northwest Container Services. A track-sharing agreement would need to be negotiated with Northwest Container that may separate activities by time of day. For example, train loading/unloading of the Northwest Container trains may occur during daytime hours, while train loading/unloading of the Seattle Public Utilities intermodal trains may occur at night.

In addition, if the Edmunds Street site is chosen for the intermodal transfer facility, further design work and analysis of rail operations would be performed as part of negotiations with both UP and BNSF. Seattle Public Utilities would need to be assured that both railroads can access this site, and the railroads would need to be assured that train-building activities would not disrupt operations at the Argo Intermodal Yard or at the nearby Georgetown Interlocking. Therefore, any potential operation impacts associated with the facility would need to be mitigated to the satisfaction of the railroads.

Mitigation Measures

Under Alternative 5, mitigation for transportation impacts would include coordinating rail operating needs with BNSF and UP and providing an alternate exit route from the Edmunds Street site that does not directly intersect with Airport Way South. In addition, Alternative 5 may require mitigation for the left-turn movement from South Industrial Way onto Airport Way South.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse transportation impacts were identified for Alternative 5 (Edmunds Street) if a secondary access can be secured.

Alternative 1 (No Action)

Alternative 1 would result in the continued contracting for intermodal services at the current facility or at a new location. The transportation facilities and operations under Alternative 1 were analyzed in detail as the year 2028 no-action conditions and are described under the heading “Affected Environment” in the discussion of Alternative 2 (Harbor Island Terminal 10). Alternative 1 would not result in adverse impacts on transportation facilities or operations if it remained at the existing intermodal facility. Impacts are uncertain if intermodal facilities are contracted at another location.

Comparative Summary of Alternatives

None of the action alternatives (Alternatives 2 through 5) would adversely affect traffic operations in the vicinity of the associated sites. Traffic operations in the vicinity of the Harbor Island Terminal 10 site and the Harbor Island Terminal 10/Pendleton site (Alternatives 2 and 3) would be the best relative to operations near the Corgiat Drive site (Alternative 4) and the Edmunds Street site (Alternative 5), because the Harbor Island sites are the farthest from the congestion near Interstate 5 and the principal north-south arterials.

All of the action alternatives would require further negotiations with BNSF and UP to address issues related to facility operations and track use.

Noise

This section provides a summary of the noise analysis; the complete analysis is provided in Appendix D.

Noise is defined as excessive or undesired sound. Human sensitivity to sound depends on its intensity, frequency composition, and duration. Noise intensity is measured on a logarithmic scale that represents the wide range of sounds audible to the human ear. It is measured in units called *decibels* (dB). An increase in sound level of 10 dB is perceived as a doubling of apparent loudness and an increase of 3 dB is noticeable under typical listening conditions. Sound levels from a number of sources combine nonlinearly, for example doubling the number of noise-producing machines such as motor vehicles, cardboard compactors, or front-end loaders, would increase the sound level by 3 dB. The sound level that reaches a specific location is called the *sound pressure level*.

The greater sensitivity of the human ear to certain frequencies is approximated by weighting the decibel scale toward those frequencies. The weighted decibel scale that best approximates the response of the human ear is known as the A-weighted scale and the units on this scale are referred to as A-weighted decibels (dBA). A metric that is widely used for analysis purposes is the energy *equivalent sound level* (Leq), which is the level of a constant sound having the same sound energy as the fluctuating levels measured over a period of time. Another metric frequently used in this analysis is *Lmax*, which is defined as the maximum instantaneous root-mean squared sound level recorded during a noise measurement. *Lmax* is the noise metric used in comparing the noise resulting from a project to the City of Seattle maximum permissible sound levels. *Lmin* is the minimum instantaneous root-mean squared sound level recorded during a noise measurement. The magnitudes of typical noises and the associated human responses are shown in Table 3-7.

Noise levels are affected by distance and physical buffers. Noise levels decrease as the distance from the source increases. As the distance from a point source (such as a bulldozer) doubles, the noise level would decrease by 6 dBA. Noise attenuation is greater over soft or rough ground compared to hard smooth surfaces such as concrete, asphalt, or water. Dense trees can reduce noise levels if their trunks and branches completely block the view between the source and the receptor or if the tree roots have loosened the soil. A dense and deep 328-foot (100-meter) buffer of evergreen vegetation can reduce the noise levels by a maximum of 10 dBA. Massive barriers such as hills, berms, or concrete walls are effective in reducing sound levels by 10 to 15 dBA if they block the line-of-sight between the noise source and a receiver.

Noise Regulations

The Washington State Department of Ecology has developed maximum permissible noise levels, which vary depending on the land uses at the noise source and the receiving property. The

maximum permissible noise level is the decibel level of noise generated by the project as measured at the property line of adjacent land uses; it is not the combined noise of a project and background noise. The City of Seattle has developed maximum permissible sound levels based on those of the Department of Ecology. The City’s maximum permissible sound levels are shown in Table 3-8.

Table 3-7. A-weighted sound levels and associated human responses.

Sound Source	dBA	Human Response
Aircraft carrier operation	140	
Jet takeoff (200 feet away)	120	Painfully loud
Riveting machine	110	Maximum vocal effort
Shout (0.5 feet away)	100	
Heavy truck (50 feet away)	90	
Busy street	80	Hearing damage with continuous exposure
Freeway traffic (50 feet away)	70	Telephone use difficult
Air conditioning unit (20 feet away)	60	
Light automobile traffic	50	Quiet
Bedroom or library	40	
Soft whisper	30	Very quiet
Broadcasting studio	20	
	10	Just audible
	0	Threshold of hearing

Source: U.S. Council on Environmental Quality 1970.
dBA = A-weighted decibels.

Table 3-8. City of Seattle maximum permissible sound levels.

Land Use at Noise Source	Land Use at Receiving Property		
	Residential (dBA)	Commercial (dBA)	Industrial (dBA)
Residential	55	57	60
Commercial	57	60	65
Industrial	60	65	70

dBA = A-weighted decibels.

All of the alternative intermodal sites are located on property that is zoned for industrial uses. All of the intermodal sites are surrounded on all sides by industrial zones.

The City of Seattle’s noise regulations also state that between 10:00 p.m. and 7:00 a.m. on weekdays and between 10:00 p.m. and 9:00 a.m. on weekends, the maximum limits for receivers within residential zones must be reduced by 10 dBA. For noises of short duration, these limits can be exceeded by a maximum of 5 dBA for 15 minutes per hour, 10 dBA for 5 minutes per hour, or 15 dBA for 1.5 minutes per hour.

Depending on the type of noise-causing equipment, noise from construction activities in Seattle is allowed to exceed the levels shown in Table 3-8 by the following amounts during daytime hours (Seattle Municipal Code, Section 25.08.425):

- 25 dBA (measured at affected property line or 50 feet, whichever is greater) for crawlers, tractors, bulldozers, cranes, compressors, etc.
- 20 dBA for portable powered equipment such as chainsaws, chippers, and powered hand tools.
- 15 dBA for power tools used for lawn maintenance and landscaping.
- Sounds from impact machinery such as pavement breakers, pile drivers, and jackhammers may exceed the levels in Table 3-8 for a period of 1 hour from 8:00 a.m. to 5:00 p.m. but cannot exceed an Leq of 90 dBA continuously, an Leq of 93 dBA for 30 minutes per hour, an Leq of 96 dBA for 15 minutes per hour, or an Leq of 99 dBA for 7.5 minutes per hour.

Some types of noise are fully exempt from the maximum permissible sound level standards; an example of exempt noises is those from construction activities within commercial and industrial zones. Safety equipment, such as backup alarms used on heavy equipment, is also exempt from these standards.

Motor vehicle traffic on public roads is exempt from noise regulation; however, the City of Seattle and the Department of Ecology have established motor vehicle performance standards for the maximum noise level from individual vehicles (and not applicable to general traffic noise) measured under specific testing criteria. These performance standards would be applicable to vehicles operating on private roads, including those within the project area.

As indicated in Table 3-8, the relevant noise standard is determined by the land use at the noise source and the receiving property. For the purposes of this analysis, it was assumed that current zoning within the project area would be applicable in the future.

Alternatives 2 and 3 (Harbor Island Terminal 10 and Harbor Island Terminal 10/Pendleton)

Affected Environment

There are no residential areas adjacent to the Harbor Island Terminal 10 and Pendleton sites, which are on the west side of Harbor Island. These sites are subject to noise from truck traffic on Klickitat Avenue SW and from the ship and cargo handling operations of the Port of Seattle. Both sites currently consist of vacant property.

Short-term noise measurements of 30-minute duration were taken to characterize the existing noise environment at each site. Figure 3-1 shows the locations of the noise measurements at the Harbor Island Terminal 10 and Pendleton sites, and Table 3-9 summarizes the data.

Table 3-9. Summary of noise measurements at the alternative intermodal sites.

Noise Measurement Location	Leq (dBA)	Lmax (dBA)	Lmin (dBA)
M-7 (Pendleton)	63.6	79.5	53.8
M-8 (Harbor Island Terminal 10)	66.1	78.3	59.9
M-9 (Corgiat Drive)	75.4	100.4	65.7
M-10 (Edmunds Street)	71.1	91.3	61.5

Leq = equivalent sound level.

Lmax = maximum instantaneous root-mean squared sound level recorded during a sound measurement.

Lmin = minimum instantaneous root-mean squared sound level recorded during a sound measurement.

Impacts

The impacts from construction would be similar under all four action alternatives. Table 3-10 indicates the types of equipment that would be needed during the construction phase and the range of noise levels to be expected from such equipment.

Under Alternatives 2 and 3, truck traffic on Klickitat Avenue SW is estimated to increase by 86 vehicles during the PM peak hour. Nearly all of these vehicles would be trucks. Both the Harbor Island Terminal 10 site and the Pendleton site are surrounded by land uses that would not be sensitive to the small amount of additional noise from truck traffic generated by Alternatives 2 and 3. The closest residential areas are approximately one-half mile away; therefore, there would be no noise impacts on residential areas. However, a small park immediately south of the Pendleton site would experience higher noise levels as a result of Alternatives 2 and 3, particularly Alternative 3 (Harbor Island Terminal 10/Pendleton).

Mitigation Measures

Under Alternative 2 and 3, the following mitigation measures would apply:

- Keep all machinery well lubricated and mufflers in good working condition.
- If stationary generators or compressors are used, they can be muffled with portable sound barrier walls.

Significant Unavoidable Adverse Impacts

Significant noise impacts are defined as levels of project-generated noise that exceed federal, state, or regional standards. Alternatives 2 and 3 are unlikely to result in significant unavoidable adverse impacts.



Not to scale

Figure 3-1. Locations of noise measurements at the Harbor Island Terminal 10 and Pendleton sites.

Table 3-10. Range of noise levels from construction equipment at a distance of 50 feet.

Types of Equipment	Range of Noise Levels (dBA)
Earth-Moving Equipment	
Compactors	70 to 75
Front-end loaders	70 to 84
Backhoes	70 to 94
Tractors	75 to 97
Scrappers/graders	80 to 94
Pavers	85 to 88
Trucks	77 to 95
Materials Handling	
Concrete mixers	75 to 91
Concrete pumps	80 to 85
Cranes	74 to 86
Stationary Equipment	
Pumps	66 to 74
Generators	72 to 82
Compressors	75 to 88
Impact Equipment	
Pneumatic wrenches	85 to 88
Jack hammers	82 to 98
Pile drivers (peak)	95 to 108

Source: U.S. EPA 1971.
dBA = A-weighted decibels.

Alternative 4 (Corgiat Drive)

Affected Environment

The Corgiat Drive site is occupied by a number of businesses and is used for storage.

Short-term noise measurements of 30-minute duration were taken at South Corgiat Drive and 18th Avenue South to characterize the existing noise environment at the Corgiat Drive site. Figure 3-2 shows the location of the noise measurements, and Table 3-9 summarizes the data.

Impacts

The impacts from construction would be similar under all four action alternatives. Table 3-10 indicates the types of equipment that would be needed during the construction phase and the range of noise levels to be expected from such equipment.



Not to scale

Figure 3-2. Location of noise measurements at the Corgiat Drive site.

Under Alternative 4, truck traffic on South Corgiat Drive is estimated to increase by 86 vehicles during the PM peak hour, and nearly all of these vehicles would be trucks. The Corgiat Drive site is surrounded by land uses that would not be sensitive to the small amount of additional noise from the truck traffic generated by the action alternatives. Alternative 4 would result in an increase in traffic noise levels of approximately 3 to 4 dBA in residential areas south of South Bailey Street. Noise levels would be less than 60 dBA at locations that do not adjoin South Bailey Street. Two residences on South Bailey Street would have noise levels of 65 dBA. These traffic noise levels and increases would not be considered a noise impact. Alternative 4 would result in no noise impacts on other residentially zoned areas, such as Beacon Hill.

Mitigation Measures

The mitigation measures for Alternative 4 would be the same as those discussed for Alternatives 2 and 3.

Significant Unavoidable Adverse Impacts

As with Alternatives 2 and 3, significant unavoidable adverse impacts are unlikely to result from Alternative 4.

Alternative 5 (Edmunds Street)

Affected Environment

There are no residential uses adjacent to the Edmunds Street site. This property is currently used for the storage and reloading of shipping containers. Currently noise comes from onsite truck traffic and front-end loaders that are handling the containers. The adjoining land uses are commercial and industrial.

Short-term noise measurements of 30-minute duration were taken to characterize the existing noise environment at the Edmunds Street site. Figure 3-3 shows the location of the noise measurements, and Table 3-9 summarizes the data.

Impacts

The impacts from construction would be similar under all four action alternatives. Table 3-10 indicates the types of equipment that would be needed during the construction phase and the range of noise levels to be expected from such equipment.

Under Alternative 5, the truck traffic on South Edmunds Street is estimated to increase by 86 vehicles during the PM peak hour. Nearly all of these vehicles would be trucks. This site



Figure 3-3. Location of noise measurements at the Edmunds Street site.

is surrounded by land uses that would not be sensitive to the small amount of additional noise from truck traffic generated by the action alternatives. Alternative 5 would result in no noise impacts on residential areas.

Mitigation Measures

The mitigation measures for Alternative 5 would be the same as those discussed for Alternatives 2 and 3.

Significant Unavoidable Adverse Impacts

As with Alternatives 2 and 3, significant unavoidable adverse impacts are unlikely to result from Alternative 5.

Alternative 1 (No Action)

The impacts described for the action alternatives would not occur under Alternative 1.

Comparative Summary of Impacts

The noise impacts resulting from the various alternatives would vary depending upon the volume of truck and train traffic, the routes trucks use to access and exit the sites, and the number of people working in businesses adjacent to the alternative intermodal sites and traffic routes. Alternative 2 would result in the least noise impacts, and Alternative 3 would result in slightly more impacts because of the higher truck/train volumes from the combined city-county operations. Alternative 4 would result in impacts very similar to those of Alternative 3. Alternative 5 would result in the most impacts because of the greater number of businesses near the Edmunds Street site.

Air Quality and Odor

The first step in performing an air quality study is a characterization of the existing environmental conditions in the project vicinity. The data used for this study included local meteorological information, the current air quality levels as measured by state and local agencies, and information related to other sources of pollution in the vicinity of the alternative intermodal sites. This section includes a summary of the air quality analysis; the complete analysis is provided in Appendix E.

Applicable Regulations

Air quality is regulated in the Puget Sound region by federal, state, and local agencies. With the enactment of the Clean Air Act of 1970 and subsequent amendments, the U.S. Environmental Protection Agency (U.S. EPA) established national ambient air quality standards for a limited number of pollutants, which are termed *priority pollutants*. In 1997, the U.S. EPA established revised ambient air standards for fine particulate matter (particulate matter with a diameter of 10 micrometers or less [PM₁₀]), ozone, and very fine particulate matter (particulate matter with a diameter of 2.5 micrometers or less [PM_{2.5}]). Table 3-11 summarizes the ambient air quality standards.

In 1991, most of the urbanized (western) portions of Snohomish, King, and Pierce Counties were declared to be “nonattainment areas” for carbon monoxide. In 1997, they were redesignated as attainment areas that were subject to “maintenance area” requirements.

The emission of odorous compounds and any types of emissions that might be injurious to human health, plant life, and animal life or that interfere with one’s “enjoyment of life and property” is regulated by the Puget Sound Clean Air Agency. The Puget Sound Clean Air Agency investigates complaints about odor and will take enforcement action if odors are found to be “distinct and definite, any unpleasant characteristics recognizable” (Puget Sound Clean Air Agency’s, Regulation 1, Section 9.11).

Regional Climate and Meteorology

The project area is located in central Puget Sound and is subject to the same general climatic conditions that control weather in Seattle and most of the Puget Sound basin. The climate is characterized by moderate temperatures, wet winters, and frequent onshore flows of moist marine air. Monthly average temperatures range from the 30 degrees Fahrenheit (30°F) to 40°F in the winter and from the 50s to the mid-70s in the summer. Annual precipitation, concentrated in the winter months, ranges from 35 to 40 inches, with a long-term average of more than 61 inches. There are 150 days a year with rainfall of 0.01 inches or more.

Table 3-11. Ambient air quality standards.

Pollutant	National		Washington State	Puget Sound Region
	Primary	Secondary		
Total Suspended Particulate Matter				
Annual geometric mean ($\mu\text{g}/\text{m}^3$)	NS	NS	60	NS
24-hour average ($\mu\text{g}/\text{m}^3$)	NS	NS	150	NS
Fine (Inhalable) Particulate Matter (PM_{10})				
Annual arithmetic mean ($\mu\text{g}/\text{m}^3$)	50	50	50	50
24-hour average ($\mu\text{g}/\text{m}^3$)	150	150	150	150
Very Fine Particulate Matter ($\text{PM}_{2.5}$)				
Annual arithmetic mean ($\mu\text{g}/\text{m}^3$)	15	15	15	15
24-hour average ($\mu\text{g}/\text{m}^3$)	65	65	65	65
Carbon Monoxide				
8-hour average (ppm)	9	NS	9	9
1-hour average (ppm)	35	NS	35	35
Ozone				
1-hour average (ppm)	0.12	0.12	0.12	0.12
8-hour average (ppm)	0.08	0.08	0.08	0.08
Nitrogen Dioxide				
Annual average (ppm)	0.053	0.053	0.053	0.053
Lead				
Quarterly average ($\mu\text{g}/\text{m}^3$)	1.5	1.5	NS	1.5

Source: PSCAA 2003.

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

NS = no standard established.

$\text{PM}_{2.5}$ = particulate matter with a diameter of 2.5 micrometers or less.

PM_{10} = particulate matter with a diameter of 10 micrometers or less.

ppm = parts per million.

Winds generally range south to southwest in the winter or during other rainy periods with southwest winds predominating. Winds during fair periods, and generally throughout the warm months, are west to northwest. Easterly winds occur frequently during periods of high pressure.

Description of Pollutants

The examination of existing air quality focused on pollutants that are a concern in the Puget Sound region and that are likely to be emitted by the proposed project. The pollutants with the greatest impact on air quality in the Puget Sound region are particulate matter, carbon monoxide, and ozone (formed as a result of chemical reactions between hydrocarbons, oxides of nitrogen, and sunlight). The primary impacts on air quality resulting from this type of project are due to the dispersion of dust particles as a result of turbulence created by trucks. These dust emissions are typically termed *fugitive dust*. Other pollutants typically generated by projects of this type

include carbon monoxide, oxides of nitrogen, and sulfur dioxide emissions from the diesel engines of trucks and the complex hydrocarbon emissions from diesel engines.

Objectionable odors are another form of air pollution, and they are caused by a variety of compounds. Odors are generated by some of the existing operations of the City of Seattle's solid waste system, such as the diesel exhaust of trucks and decaying garbage and yard waste. The pollutants likely to be emitted by the proposed project are discussed in more detail in the following subsections.

Particulate Matter

Particulate matter consists of particles of wood smoke, diesel smoke, dust, pollen, and other materials. It has traditionally been measured in two forms: total suspended particulate and PM₁₀. PM₁₀ (inhalable or fine particulate matter) is a subset of total suspended particulate and is defined as particulate matter with a diameter of 10 micrometers or less. Due to concerns about the effect of very fine particulate matter (diameter of 2.5 micrometers or less) such as that found in wood smoke and combustion engine exhaust, in 1997 the U.S. EPA established separate regulations for PM_{2.5}.

Coarse particles with a diameter greater than 10 micrometers settle out of the air fairly close to where they are produced. PM₁₀ (and to an even greater degree PM_{2.5}) remains suspended in the air for long periods of time and can be readily inhaled deep into the smaller airways of human lungs. High ambient concentrations of PM₁₀ and PM_{2.5} contribute to impaired respiratory functioning. Fine particulate matter is primarily responsible for the haze that reduces the visibility of distant objects.

Studies by the Washington State Department of Ecology have shown that the burning of wood in stoves and fireplaces has historically accounted for more than 80 percent of the PM₁₀ concentrations in areas of heavy woodstove use during the winter. This percentage is declining as fewer people use wood as their primary source of heat. The diesel engines of trucks, heavy equipment, and ships constitute another important source of particulate matter. Particulate matter from diesel engines and other sources has come under increasing scrutiny as a significant source of hazardous air pollutants (HAPs) in urban areas.

Ozone

Ozone is a pungent-smelling, colorless gas. It is a pulmonary irritant that affects lung tissues and respiratory functions and, at concentrations between 0.15 and 0.25 parts per million (ppm), causes lung tightness, coughing, and wheezing.

Ozone is produced in the atmosphere when nitrogen oxides and some hydrocarbons chemically react under the effect of strong sunlight. Unlike carbon monoxide, however, ozone and the other reaction products do not reach their peak levels closest to the source of emissions, but rather at

downwind locations that are affected by the urban plume after the primary pollutants have had time to mix and react under sunlight.

Sulfur Dioxide

Sulfur dioxide is a colorless, corrosive, bitter-tasting gas that has been associated with respiratory diseases. Sources of sulfur dioxide include power plants, paper mills, and smelters. Sulfur dioxide reacts with atmospheric moisture to form sulfuric acid.

Nitrogen Dioxide

Nitrogen dioxide is a brownish poisonous gas that reacts with water vapor to form nitric acid. It has been associated with respiratory diseases and is one of the essential precursors in the formation of ozone. Nitrogen dioxide is formed from the high-temperature combustion of fuels (such as diesel engines) and subsequent atmospheric reactions. It reacts with atmospheric moisture to form nitric acid which, together with sulfuric acid, falls as “acid rain,” damaging vegetation and freshwater marine ecosystems.

Hazardous Air Pollutants

Hazardous air pollutants (HAPs) consist of a wide variety of pollutants emitted by gasoline- and diesel-powered motor vehicles, including formaldehyde, benzene, and heavy metals. The health effects of HAPs include potential cancer risks and the pollution of ground water supplies. Useful mitigation measures have been undertaken on a regional basis, such as the phaseout of lead in gasoline, the upcoming introduction of low-sulfur diesel fuel, and the installation of particulate traps on diesel buses. The particulate matter emissions from diesel engines have been shown to contain several types of HAPs.

Carbon Monoxide

Carbon monoxide is a toxic, clear, odorless gas that interferes with the blood’s ability to absorb oxygen and impairs the heart’s ability to pump blood. Carbon monoxide is the primary priority pollutant associated with motor vehicle traffic. Monitoring for carbon monoxide is performed throughout the Puget Sound region by the Department of Ecology and the Puget Sound Clean Air Agency. The highest concentrations of carbon monoxide are found adjacent to large congested intersections and arterials. Concentrations rapidly decrease as one moves farther away from these sources. Existing locality-wide background concentrations of carbon monoxide are primarily traffic generated and can be assumed to range from 2 to 5 ppm as an 8-hour average compared to the 9 ppm standard.

Alternatives 2 and 3 (Harbor Island Terminal 10 and Harbor Island Terminal 10 / Pendleton)

Affected Environment

Both the Harbor Island Terminal 10 site and the Pendleton site are located in the Duwamish industrial area, historically an area of high PM₁₀ levels. This area was designated as being a nonattainment area until 1998, when attainment of the standards was achieved. Industrial emissions and diesel truck traffic are the major sources of air pollution at these two sites.

Close to both sites is a particulate monitoring station that measures both PM_{2.5} and PM₁₀ (the Duwamish site at 4762 East Marginal Way South). A monitoring site on Harbor Island was discontinued in 1999. The Duwamish monitoring location is considered representative of the conditions on Harbor Island. New daily and annual standards for very fine particulate matter (PM_{2.5}) went into effect in 1997, and the monitoring data indicate that the new standards have been attained in the region.

Pollutants

Carbon monoxide is not monitored at the Duwamish monitoring location; therefore, there are no carbon monoxide monitoring sites close enough to be representative of conditions on Harbor Island.

Nitrogen dioxide has been monitored at sites in Seattle and Enumclaw since 1996. The monitor closest to Harbor Island is located on Beacon Hill, in a residential neighborhood, approximately 2 miles southeast of Harbor Island. The monitored nitrogen dioxide levels are far lower than the standards. Nitrogen dioxide levels on the Harbor Island sites can be assumed to be somewhat higher than the levels on Beacon Hill.

Sulfur dioxide is monitored at several locations in the heavily industrial areas of Everett, Seattle, and Tacoma. The monitor closest to Harbor Island is located on Beacon Hill, approximately 2 miles southeast of Harbor Island. The Puget Sound region is in compliance with federal and state standards for sulfur dioxide, with no exceedances from 1988 to 2003. Sulfur dioxide concentrations at the Harbor Island Terminal 10 site and the Pendleton site are expected to be well below these standards.

Ozone is monitored primarily around the edges of the central Puget Sound urban metropolis; however, there is a monitoring site in Seattle, on Beacon Hill, approximately 2 miles southeast of Harbor Island. No exceedances of the national ambient air quality standards have been recorded; in 2003 the highest reading was 0.072 ppm compared to the 0.12 ppm standard.

Odors

The Harbor Island Terminal 10 site is currently vacant. Any existing odors come from diesel truck traffic serving the Port of Seattle and cargo ship and tugboat traffic on the Duwamish Waterway.

Impacts

The construction phase would include numerous tasks, each generating a variety of pollutants (Table 3-12). The primary emissions associated with most tasks at these sites would be particulate matter, either PM₁₀, PM_{2.5}, or fugitive dust.

Table 3-12. Pollutants generated by construction activities at sites associated with Alternatives 2 through 5.

Construction Task	Site	Source of Emissions	Emissions
Demolition of existing buildings	Harbor Island Terminal 10	Backhoes, track/wheel loaders, cranes, bulldozers, and haul trucks	Carbon monoxide, PM₁₀ , PM_{2.5} , nitrogen oxides, sulfur dioxide, fugitive dust , and HAPs
Removal of concrete and paved surfaces	Harbor Island Terminal 10, Pendleton, Corgiat Drive, Edmunds Street	Track/wheel loaders, bulldozer, and haul trucks	Same as above
Recycling of concrete debris	Harbor Island Terminal 10	Haul trucks, primary crusher, and aggregate screens	Same as above
Regrading of sites	Harbor Island Terminal 10, Pendleton, Corgiat Drive, and Edmunds Street	Track/wheel loaders, bulldozer, and grader	Same as above
Installation of trenching for new utilities	Harbor Island Terminal 10, Pendleton, Corgiat Drive, and Edmunds Street	Backhoe and gravel trucks	Same as above
Construction of new transfer buildings and other buildings	Harbor Island Terminal 10, Pendleton, Corgiat Drive, Edmunds Street	Concrete trucks and construction workers' vehicles	Same as above
Paving of roads and work surfaces	Harbor Island Terminal 10, Pendleton, Corgiat Drive, and Edmunds Street	Concrete trucks, asphalt trucks, and asphalt rollers	Carbon monoxide, PM ₁₀ , PM _{2.5} , nitrogen oxides, sulfur dioxide, fugitive dust, odorous compounds , and HAPs
Striping of roadways and painting of buildings	Harbor Island Terminal 10, Pendleton, Corgiat Drive, and Edmunds Street	Spray painting equipment	Odorous compounds and HAPs

Note: The pollutants that would be emitted in the greatest amounts and those associated with the greatest probability of health effects are shown in **bold**.

HAPs = hazardous air pollutants.

PM_{2.5} = particulate matter with a diameter of 2.5 micrometers or less.

PM₁₀ = particulate matter with a diameter of 10 micrometers or less.

The Harbor Island Terminal 10 and Pendleton sites would be designed to minimize vehicle queues. Under peak conditions, the queue is not expected to extend beyond the site boundaries (Heffron 2005). Neither the quality of air surrounding the queued vehicles nor the staff at the weigh station would be adversely affected.

The Harbor Island Terminal 10 and Pendleton sites are not likely to result in complaints of odors for two basic reasons: their location and their design. There are no residential neighborhoods adjacent to these sites. The closest residential neighborhood is one-half mile to the south. Historically, unpleasant odors from the existing recycling and disposal sites have been apparent only within a few blocks of the facility.

The proposed design of the new transfer buildings would feature solid side walls with large openings in the end walls for vehicle access and exit. The building design would include engineering controls to minimize dust and odor emissions.

Mitigation Measures

At all of the alternative sites, the construction must adhere to certain regulations and construction practices to reduce air quality impacts. The Puget Sound Clean Air Agency has specific regulations pertaining to fugitive dust (Regulation 1, Sections 9.11, 9.15, and 9.20), which require the use of best available control technology to control fugitive dust emissions. Some especially relevant techniques for controlling fugitive dust emissions are the following:

- Treat construction sites with water or chemical stabilizers
- Use paved or riprap exit aprons for haul trucks
- Clean vehicle undercarriages and tires before vehicles exit the site to travel on public streets
- Cover or wet down truck loads of earth to prevent windblown dust
- Maintain all construction machinery in good working order and operate equipment within load limits and run engines at a low enough revolutions per minute (rpm) to minimize exhaust smoke
- Sweep adjacent streets whenever soil from excavation and grading is visible
- If soil contamination is found, the Department of Ecology will impose site-specific requirements for soil cleanup and disposal.

Significant Unavoidable Adverse Impacts

Significant impacts are defined as levels of pollutants that are higher than federal, state, or regional standards. Alternatives 2 and 3 are unlikely to result in significant unavoidable adverse impacts on air quality. Significant unavoidable adverse impacts on air quality are not predicted on the transportation routes serving the Harbor Island Terminal 10 or the Pendleton intermodal sites.

Alternative 4 (Corgiat Drive)

Affected Environment

The Corgiat Drive site is located in Georgetown, at the eastern edge of the Duwamish industrial area, historically an area of high PM₁₀ levels. This area was designated as being a nonattainment area until 1998, when attainment of the standards was achieved. Industrial emissions and diesel truck traffic are the major sources of air pollution at the Corgiat Drive site.

The particulate (PM_{2.5} only) monitoring station closest to the Corgiat Drive site is located on Beacon Hill (Charlestown and 15th Avenue South). However, this monitor is in a residential neighborhood and is less representative of conditions at the Corgiat Drive site than the Duwamish monitor. New daily and annual standards for very fine particulate matter (PM_{2.5}) went into effect in 1997, and the monitoring data indicate that the new standards have been attained in the region.

Pollutants

Carbon monoxide is monitored on Beacon Hill, approximately 1.6 miles north of the Corgiat Drive site. This monitor is located in a residential area that would have lower carbon monoxide levels than the Corgiat Drive site, which borders Interstate 5.

Nitrogen dioxide has been monitored at sites in Seattle and Enumclaw since 1996. The monitor closest to the Corgiat Drive site is located on Beacon Hill, approximately 1.6 miles north. The monitored nitrogen dioxide levels are far lower than the standards. Nitrogen dioxide levels at the Corgiat Drive site can be assumed to be less than the levels on Beacon Hill.

Sulfur dioxide is monitored at several locations in the heavily industrial areas of Everett, Seattle, and Tacoma. The monitor closest to the Corgiat Drive site is located on Beacon Hill, approximately 1.6 miles north of the site. The Puget Sound region is in compliance with federal and state standards for sulfur dioxide, with no exceedances from 1988 to 2003. Sulfur dioxide concentrations at the Corgiat Drive site are expected to be well below these standards.

Ozone is monitored primarily around the edges of the central Puget Sound urban metropolis; however there is a monitoring site in Seattle, on Beacon Hill, approximately 1.6 miles north of the Corgiat Drive site. No exceedances of the national ambient air quality standards have been

recorded; in 2003 the highest reading was 0.072 ppm compared to the 0.12 ppm standard. Ozone levels at the Corgiat Drive site would be similar to the levels on Beacon Hill.

Odors

The Corgiat Drive site is currently used for freight storage and several small businesses. The existing odors come from diesel truck traffic on nearby Interstate 5 and Michigan Avenue.

Impacts

The Corgiat Drive site would be designed to minimize vehicle queues; therefore, the emissions from idling vehicles would be low. Under peak conditions, the vehicle queues are not expected to extend beyond the site boundaries (Heffron 2005). Neither the quality of air surrounding the queued vehicles nor the staff at the weigh station would be adversely affected.

The Corgiat Drive site is not likely to result in complaints of odors because of its location and its design. There are no residential neighborhoods adjacent to the proposed site. Historically, unpleasant odors from the existing recycling and disposal sites have been apparent only within a few blocks of the facility.

The proposed design of the new transfer buildings would feature solid side walls with large openings in the end walls for vehicle access and exit. The building design would include engineering controls to minimize dust and odor emissions.

Mitigation Measures

The mitigation measures for Alternative 4 would be the same as those discussed for Alternatives 2 and 3.

Significant Unavoidable Adverse Impacts

As with Alternatives 2 and 3, significant unavoidable adverse impacts on air quality are not predicted for Alternative 4.

Alternative 5 (Edmunds Street)

Affected Environment

The Edmunds Street site is located at the eastern edge of the Duwamish industrial area, historically an area of high PM₁₀ levels. This area was designated as a nonattainment area until 1998, when attainment of the standards was achieved. Industrial emissions and diesel truck traffic are the major sources of air pollution at the Edmunds Street site.

The particulate (PM_{2.5} only) monitoring station closest to the Edmunds Street site is located on Beacon Hill (Charlestown and 15th Ave South). However, this monitor is in a residential neighborhood and is less representative of conditions at the Edmunds Street site than the Duwamish monitor. New daily and annual standards for very fine particulate matter (PM_{2.5}) went into effect in 1997, and the monitoring data indicate that the new standards have been attained in the region.

Pollutants

Carbon monoxide is monitored on Beacon Hill, approximately 1.0 mile north of the Edmunds Street site. This monitor is located in a residential area that would have lower carbon monoxide levels than the Edmunds Street site, which borders Interstate 5. The arterials serving the Corgiat Drive site currently operate at an acceptable level of service (LOS C), indicating minimal vehicle delays at the signalized intersections of South Albro Street, South Corgiat Drive, and Swift Avenue South.

Nitrogen dioxide has been monitored at sites in Seattle and Enumclaw since 1996. The monitor closest to the Edmunds Street site is located on Beacon Hill, approximately 1.0 mile north. The monitored nitrogen dioxide levels are far lower than the standards. Nitrogen dioxide levels at the Edmunds Street site can be assumed to be to be somewhat higher than the levels on Beacon Hill.

Sulfur dioxide is monitored at several locations in the heavily industrial areas of Everett, Seattle, and Tacoma. The monitor closest to the Edmunds Street site is located on Beacon Hill, approximately 1.0 mile north. The Puget Sound region is in compliance with federal and state standards for sulfur dioxide, with no exceedances from 1988 to 2003. Sulfur dioxide concentrations at the Edmunds Street site are expected to be somewhat higher than the levels on Beacon Hill.

Ozone is monitored primarily around the edges of the central Puget Sound urban metropolis; however there is a monitoring site in Seattle, on Beacon Hill, approximately 1 mile north of the Edmunds Street site. No exceedances of the national ambient air quality standards have been recorded; in 2003 the highest reading was 0.072 ppm compared to the 0.12 ppm standard. Ozone levels at the Edmunds Street site would be similar to the levels on Beacon Hill.

Odors

The Edmunds Street site is currently used for freight storage and several small businesses. The existing odors come from diesel truck traffic on nearby Interstate 5 and other arterials.

Impacts

The Edmunds Street site would be designed to minimize vehicle queues; therefore, the emissions from idling vehicles would be low. Under peak conditions, the vehicle queue is not expected to

extend beyond the site boundaries (Heffron 2005). Neither the quality of air surrounding the queued vehicles nor the staff at the weigh station would be adversely affected.

The Edmunds Street site is not likely to result in complaints of odors for two reasons: its location and its design. There are no residential neighborhoods adjacent to the proposed site. Historically, unpleasant odors from the existing recycling and disposal sites have been apparent only within a few blocks of the facility.

The proposed design of the new transfer buildings would feature solid side walls with large openings in the end walls for vehicle access and exit. The building design would include engineering controls to minimize dust and odor emissions.

Mitigation Measures

The mitigation measures for Alternative 5 would be the same as those discussed for Alternatives 2 and 3.

Significant Unavoidable Adverse Impacts

As with Alternatives 2 and 3, significant unavoidable adverse impacts on air quality are not predicted for Alternative 5.

Alternative 1 (No Action)

The impacts described for the action alternatives would not occur under Alternative 1.

Comparative Summary of Impacts

The air quality impacts resulting from the various alternatives would vary depending upon the volume of truck and train traffic, the tonnage of solid waste handled, the routes that trucks use to access and exit the sites, and the number of people working in businesses adjacent to the alternative intermodal sites and traffic routes. Alternative 2 would result in the least impacts, and Alternative 3 would result in slightly more impacts because of the higher truck/train volumes and the greater solid waste tonnage from the combined city-county operations. Alternative 4 would result in impacts greater than those of Alternative 2 but less than those of Alternative 3. Alternative 5 would result in the most impacts because of the greater number of businesses near the Edmunds Street site.

Land and Shoreline Use

Land use impacts from the proposed project would take place within a framework of adopted policies and regulations, as well as existing land uses. The framework includes policies and regulations in Seattle’s Comprehensive Plan (Seattle 2002), the land use and zoning code (Seattle Municipal Code, Title 23 [SMC 23]), the Shoreline Master Program, and neighborhood plans that have been approved by the Seattle City Council.

This section describes the Comprehensive Plan and zoning policies that apply to all of the proposed sites (Alternatives 2 through 5). It also discusses each alternative site in terms of the land use policies and zoning regulations that apply specifically to the site, the existing land uses on and in the immediate vicinity of the site, the effects of the proposed project on land use on the site, and the project consistency with applicable elements of adopted land use policies and regulations for the site. The zoning standards and project effects associated with noise, air quality, parking, traffic, and visual quality (e.g., light, glare, signs, views, screening, landscaping, setbacks, and structural height, bulk, and scale) are not considered in this section; they are addressed in other sections in Part 3 of this supplemental EIS.

Seattle’s Comprehensive Plan includes goals and policies that address how and under what circumstances growth should occur in Seattle within the 20-year timeframe of the plan. Countywide planning policies have identified urban centers and manufacturing/industrial centers, and Seattle’s Comprehensive Plan recognizes three categories in addition to these designations: (1) urban center villages within urban centers, (2) hub urban villages, and (3) residential urban villages. The preferred development pattern (referred to as the “urban village” strategy) acknowledges Seattle’s existing densely developed and complex urban environment. This strategy is designed to accommodate future growth in areas designated as centers and villages—areas already functioning as high-density, concentrated employment centers with access to regional transit—while allowing a more limited density of development in areas outside these centers. Neighborhood anchors are specific areas outside of centers and urban villages that are designated to provide a service and transit focus for their surrounding areas, which generally are intended to maintain existing densities of development. The Comprehensive Plan describes specific development and land use goals and policies for each type of center and the areas outside the centers, as well as for specific uses, zones, and overlay districts.

Policies that apply to all City of Seattle utilities (including solid waste services), regardless of their location in Seattle, are addressed in the Utilities Element of Seattle’s Comprehensive Plan. The City is legally obligated to continue to provide utility service to existing and new customers in all areas of Seattle. Ongoing maintenance of utility infrastructure reliability is identified as the first priority for utility capital expenditures. The City is also committed to providing critical maintenance of, and remedying existing deficiencies in, utility capital facilities. When developing new utility facilities, ongoing operation and maintenance costs are to be considered. Waste reduction, cost-effective reuse, and recycling are to be encouraged through the implementation of appropriate policies and programs, including those that encourage the

efficient use of resources by utility customers. Public input regarding the siting and design of utility facilities is acknowledged as critical, and the City is committed to working with neighborhood and community representatives in siting utility facilities. As discussed in the section “Aesthetics and Visual Quality” in Part 3 of this supplemental EIS, all above-grade City utility capital improvement projects are subject to the Seattle Design Commission review process. Seattle’s Comprehensive Plan policies that apply to specific proposed project sites are addressed in the following discussions of each alternative, where relevant to the proposed project.

The Seattle land use and zoning code establishes the allowed uses (permitted outright or as conditional uses), prohibited uses, and development standards that apply to specific zoning districts in Seattle, including the industrial, commercial, and residential zones. Land uses associated with Seattle’s solid waste management facilities include solid waste transfer stations (where discarded materials are collected for transfer to another location for disposal); recycling centers (where recyclables are collected, stored, and/or processed); and recycling collection stations (where recyclables or secondhand goods are collected in weather-resistant containers) (Seattle Municipal Code, Chapter 23.84 [SMC 23.84]). All of the alternative sites are within the General Industrial (IG) zone. Under the City’s current zoning code, recycling centers and recycling collection stations are permitted outright in the IG zone, while solid waste transfer stations are allowed as an Administrative Conditional Use (Seattle Municipal Code, Section 23.50.012 [SMC 23.50.012], Chart A for Section 23.50.012). In all residential, commercial, and industrial zones, uses in public facilities that do not meet the development standards for the zone may be permitted by Seattle City Council if certain conditions are met. The proposed location must be necessary for delivering specific public services that are not provided by the private sector. The relationship of the project to the surrounding area must also be considered in the design, siting, landscaping, and screening of the solid waste intermodal transfer facility.

The policies and regulations of Seattle’s Shoreline Master Program and Seattle City Council–approved neighborhood plans that affect specific proposed sites (alternatives) are discussed in the following subsections, where relevant to the proposed project.

Alternative 2 (Harbor Island Terminal 10)

Affected Environment

The Harbor Island Terminal 10 site consists of one 10.7-acre parcel of commercial property on Harbor Island (Figure 2-2). Harbor Island is a 445-acre manmade island that has been extensively developed with major shipyards, deep-sea terminals, petroleum storage facilities, industrial and commercial enterprises, and roadways and rail lines that support these uses. The Harbor Island Terminal 10 site lies within an area designated in Seattle’s Comprehensive Plan as the Duwamish Manufacturing/Industrial Center. The site is bordered on the west primarily by industrial docks and the tidelands along the West Waterway of the Duwamish River, but it also extends to the waterfront in several places. Approximately 4 acres of the proposed 10.7-acre site

lie within 200 feet of the shoreline, designated in the Shoreline Master Program as Urban Industrial (UI) shoreline environment (Seattle 2003b).

Relevant Seattle Comprehensive Plan Policies

Consistent with county planning policy, Seattle's Comprehensive Plan (Future Use Map) identifies Manufacturing/Industrial Centers with the goal of preserving industrial land for industrial uses and protecting viable marine and rail-related industries from uses that compete for scarce land resources (goal LG49). Particular emphasis is given to maintaining, for continued industrial use, land that is uniquely accessible to rail, regional highway, and waterway systems that can be used for the movement of goods (policy L27).

The Duwamish Manufacturing/Industrial Center is the largest concentration of industrial land in Seattle. Land in the Duwamish Manufacturing/Industrial Center is to be maintained for industrial uses, as well as transportation, utilities, and commercial fishing activities (goal GD-G3). The City recognizes that industrial land is a limited resource that is in high demand by private industrial businesses within the Duwamish Manufacturing/Industrial Center and commits to considering these conditions when siting public facilities within the Manufacturing/Industrial Center (goal GD-G7).

Seattle's Shoreline Master Program

Management of Seattle's shorelines is guided by area objectives established in Seattle's Comprehensive Plan (Seattle 2002). The shoreline environment designations and shoreline use regulations and development standards are set forth in the land use code (SMC 23). Combined, these elements constitute Seattle's Shoreline Master Program. The purpose of the Shoreline Master Program is "to accommodate a variety of functions and activities unique to shoreline areas, especially water-dependent businesses and shoreline recreation activities, and to protect and enhance public access, natural areas and views of the water" (Seattle 2002).

Principal uses on waterfront lots generally must be water-dependent, water-related, or non-water-dependent with public access (SMC 23.60.90 [B]). While allowing for non-water-dependent uses, the Comprehensive Plan emphasizes that priority will be given to the development of uses that are water-dependent (policy L316). Land adjacent to deep water is to be designated for uses that require this condition, such as industry or commerce (policy L340). A goal of the Comprehensive Plan is to locate all non-water-dependent uses in upland areas to optimize shoreline use and shoreline access (goal LG89). Shoreline uses that provide long-term benefits are favored over those with short-term benefits (goal LG87).

Any use permitted in the shoreline district must be permitted in both the shoreline environment and the underlying land use zone in which it is located (SMC 23.60.90 [A]). Water-related solid waste transfer stations and water-related or water-dependent public facilities and recycling operations are permitted outright on waterfront lots in the UI environment (SMC 23.60.840). Non-water-dependent or non-water-related public facilities, non-water-dependent solid waste

transfer stations, and non-water-related recycling operations are prohibited on waterfront lots in the UI environment (SMC 23.60.848).

Commercial and industrial uses that use or process substances that are potentially harmful to public health or aquatic life must provide a means to prevent point and non-point discharges of hazardous substances (Comprehensive Plan policy L333). The land use code establishes standards and requirements for structure height, lot coverage, view corridors, and setbacks in the UI shoreline environment (SMC 23.60, Subchapter XV). Comprehensive Plan policy L322 (4) requires public agencies (for example, the City of Seattle or King County) to provide public access opportunities at new shorelines facilities. In the UI shoreline environment, public access may be provided on public lands or else in conformance with an area-wide public access plan (SMC 23.60.220 [C] [11] [a]). The City adopted a public access plan for the Duwamish River area (Port of Seattle 1985), but development of the Harbor Island Terminal 10 site was not considered in that plan (Blomberg 2005 personal communication).

Zoning within the Project Site

The Harbor Island Terminal 10 site is zoned IG1 U/85 (Seattle 2003b). In this zone, there is no structural height restriction for industrial uses, including solid waste utilities (SMC 23.50.022.A). The applicable maximum floor area ratio (the ratio of floor area to site area), the setback requirements, and the venting requirements are specified for development in the IG1 zone (SMC 23.50).

Zoning in the Project Site Vicinity

Zoning in the vicinity of the Harbor Island Terminal 10 site is the same as the zoning for the site (IG1 U/85) (Seattle 2003b).

Existing Land Use

The existing land use on the Harbor Island Terminal 10 site is marine terminal. The site primarily consists of an open, paved area that is used for the storage and handling of large shipping containers. There are no permanent buildings currently located on the site.

Adjacent Land Uses

The land immediately adjacent to the Harbor Island Terminal 10 site is developed for light and heavy industrial uses and transportation. The west side of the site is bordered by industrial docks and the tidelands of the West Waterway (the Duwamish shipping lanes). The area immediately north of the site is paved and occupied by a Petrocard fueling station (Pacific Pride fueling pumps), a Petrocard Express drive-through coffee stand, and an underground storage tank farm operated by BP West Coast Products. The west frontage road extends along the east side of the site, while the Pendleton flour mill and associated buildings lie immediately to the south. Although the property formerly owned by Pendleton Flour Mills L.L.C. has been purchased by King County and the large mill building is currently vacant, one tenant (Puratos Bakery Supply)

continues to occupy other buildings on the property for light industrial activities. The existing conditions of the Pendleton site are described in the subsection “Alternative 3 (Harbor Island Terminal 10/Pendleton Site.”

Other industrial and transportation development in the vicinity of the Harbor Island Terminal 10 site includes additional BP West Coast Products facilities (a loading shed, a fuel tank farm, and an operations building) located on the north side of SW Lander Street and the extensive Todd Pacific Shipyards operations located immediately north of SW Florida Street. East of and parallel to the west frontage road, multiple sets of parallel railroad tracks, 16th Avenue SW, and Port of Seattle marine terminal properties (some vacant) constitute the major land uses to the east of the site.

Impacts

Under Alternative 2, the proposed public utility use (solid waste transfer station, recycling center, and recycling collection station) is compatible with the existing and permitted industrial uses in the area and consistent with the IG1 zoning requirements and standards. However, when siting public uses within the Manufacturing/Industrial Center, the City must consider that industrial land is a limited resource that is in high demand by private industrial businesses within the Duwamish Manufacturing/Industrial Center (Comprehensive Plan goal GD-G7). In addition, the project must be designed as a water-dependent or water-related use to be allowed under Seattle’s Shoreline Master Program (SMC 23.60.848). In order to be considered water dependent or water related, the project would have to include a pier or dock for shipping.

Siting the solid waste intermodal transfer facility on property with waterfront access may provide important long-term benefits to the City, as well as the region, consistent with the Comprehensive Plan goal to favor shoreline uses that provide long-term benefits over those with short-term benefits (goal LG87). In the future, if it proves economically and logistically efficient or necessary for the City’s transfer station operations to expand the quantity or type of solid waste or recycling materials handled by the intermodal transfer facility, a waterfront location would allow for the transport of materials by water, as well as by truck and rail. This condition would arise from demands not anticipated during the 20-year planning horizon of the original Comprehensive Plan (1994–2014). However, it is not unrealistic to anticipate that water transport may be important to this operation at some point in the future. If the need for water transport arises, the Harbor Island Terminal 10 site would be uniquely positioned to accommodate this need based on its access to the waterfront. Currently, over 25,000 tons per year of solid waste is shipped by barge to Seattle in intermodal containers; some of which is unloaded at Harbor Island. The development of a solid waste intermodal transfer facility on Harbor Island could facilitate trans-shipment of waste received in Seattle by water at a facility specifically designed for this cargo.

Construction of the new transfer building and associated facilities (Figure 2-3) would not require the demolition of any existing structures on the site. The construction phase would include site grading, excavation, and the hauling of material to and from the site, as well as workers entering

and leaving the project site. The excavation would be minor, limited to that necessary for installation of utilities and perhaps piling. The proposed project is expected to comply with local, state, and regional regulations (identified in the section “Description of the Proposed Project” in Part 2) for controlling noise, vehicle traffic, and dust generated from construction. Impacts on neighboring industrial businesses as a result of site access during construction or operation of the project, as well as noise and air quality impacts in the project vicinity, are addressed in more detail in the other sections of Part 3.

Mitigation Measures

Compliance with existing regulations would mitigate all the land use impacts resulting from Alternative 2.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated as a result of Alternative 2 (Harbor Island Terminal 10).

Alternative 3 (Harbor Island Terminal 10/Pendleton)

Affected Environment

The Harbor Island Terminal 10/Pendleton site includes the Harbor Island Terminal 10 site in combination with the seven adjacent parcels associated with Pendleton Flour Mills immediately south of the Harbor Island Terminal 10 site. Combined, these parcels cover 23.1 acres of industrial property on Harbor Island (Figure 2-4).

Relevant Seattle Comprehensive Plan Policies

The policies in Seattle’s Comprehensive Plan that apply to the Harbor Island Terminal 10 site also apply to the Harbor Island Terminal 10/Pendleton site (see discussion for Harbor Island Terminal 10 site).

Zoning within the Project Site

Similar to the Harbor Island Terminal 10 site, zoning within the Harbor Island Terminal 10/Pendleton site is IG1 U/85 (see discussion for Harbor Island Terminal 10 site) (Seattle 2003b).

Zoning in the Project Site Vicinity

Zoning in the vicinity of the Harbor Island Terminal 10/Pendleton site is the same as the zoning for the site (IG1 U/85) (Seattle 2003b).

Existing Land Use

Existing land uses on the Harbor Island Terminal 10/Pendleton site include marine terminal, light and heavy industrial, tidelands, and a parking lot. The Harbor Island Terminal 10 portion of the site, as previously described, is primarily an open, paved area, used to for storage and handling of shipping containers and processing dredge spoils for disposal. The Pendleton portion of the Alternative 3 site contains the Pendleton flour mill, and associated brick office building and warehouse buildings. Puratos Bakery Supply leases warehouse space as well as the adjacent railroad for transferring grain products from rail to truck for transporting (Fugii 2004 personal communication). In addition to these uses, a tower for cellular telephone communications is mounted on top of the mill building. The southernmost portion of the site contains a small paved parking lot.

Adjacent Land Uses

The Harbor Island Terminal 10/Pendleton site is located immediately adjacent to the West Waterway of the Duwamish River. The west frontage road, 16th Avenue SW, and multiple sets of railroad tracks run parallel to the site along its eastern edge. Immediately to the south, the site is bordered by a small Port of Seattle marine terminal parcel, while the northern border is as described for Alternative 2 (i.e., SW Lander Street and Todd Pacific Shipyard facilities). Other land uses in the vicinity of the Harbor Island Terminal 10/Pendleton site include a Port of Seattle marine terminal with a small pocket park (public access provided in conjunction with development of Terminal 18), a small Port of Seattle warehouse, some vacant industrial land, and a small property with three cylindrical storage towers belonging to a cement company.

Impacts

The Harbor Island Terminal 10/Pendleton site (Alternative 3) would be a joint City of Seattle–King County intermodal site and would involve expanded transport capacity to handle greater volumes of materials than the volumes that would be handled under Alternative 2, including the development of more railroad tracks.

Under Alternative 3, the land use effects resulting from the project would be similar to those described for the Harbor Island Terminal 10 site (Alternative 2), but they would involve seven additional waterfront lots (approximately 1,700 additional linear feet along the waterfront) and a greater area (approximately 8.5 additional acres) of land within the UI shoreline environment. In addition, Alternative 3 would displace one industrial business, which could relocate to another area within the Duwamish Manufacturing/Industrial Center.

Under Alternative 3, the construction phase of the project would involve the demolition of existing structures, as well as the construction of the new facilities (Figure 2-5) and minor excavation. Similar to Alternative 2, under Alternative 3, the project would be expected to comply with local, state, and regional regulations for controlling noise, vehicle traffic, and dust generated from construction.

Mitigation Measures

The mitigation measures for Alternative 3 are similar to those described for the Harbor Island Terminal 10 site (Alternative 2).

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated as a result of Alternative 3 (Harbor Island Terminal 10/Pendleton).

Alternative 4 (Corgiat Drive)

Affected Environment

The Corgiat Drive site includes 11 parcels, which together total approximately 16.55 acres of commercial property in the south Georgetown neighborhood near the north end of King County International Airport, between South Corgiat Drive and the southbound lanes of Interstate 5 (Figure 2-6). The site lies within the Duwamish Manufacturing/Industrial Center (Seattle 2002).

Relevant Seattle Comprehensive Plan Policies

As described for the Harbor Island Terminal 10 site, Seattle's Comprehensive Plan establishes a goal to maintain land in the Duwamish Manufacturing/Industrial Center for industrial uses, as well as transportation and utilities (goal GD-G3). As previously discussed, industrial land is a limited resource that is in high demand by private industrial businesses within the Duwamish Manufacturing/Industrial Center, and the City is committed to taking this into consideration when siting public uses within the Duwamish center.

Zoning within the Project Site

The Corgiat Drive site is zoned IG2 U/65 (Seattle 2003b). In this zone, industrial structures, including those associated with solid waste management uses, are not subject to height limits (SMC 23.50.022.A). Similar to the IG1 zone, the IG2 zone specifies the maximum floor area that may be used for offices, the maximum floor area ratio (the ratio of floor area to site area), the setback requirements, and the venting requirements (SMC 23.50).

Zoning in the Project Site Vicinity

Zoning in the vicinity of the Corgiat Drive site is primarily IG2 west of Interstate 5, with a small pocket of property zoned Commercial 2 with a 40-foot height limit (C2-40) and Neighborhood Commercial 3 with a 40-foot height limit (NC3-40) to the northwest of the site (Seattle 2003b). Zoning in the area east of Interstate 5 is Single Family 5000 (SF 5000) with a minimum lot size of 5,000 square feet.

The Commercial zone, including the C2 zone, supports automobile-oriented and heavy commercial uses. The NC3-40 zone is intended to promote neighborhood-oriented commercial and mixed uses, with an emphasis on pedestrian accessibility. The SF 5000 zone is intended for detached, single-family dwellings.

Existing Land Use

The existing land uses on the Corgiat Drive site include operational and warehouse facilities for small-scale general purpose industry, associated offices, parking areas, utility roads, rights-of-way, and utility equipment and vehicle storage areas, as well as some vacant industrial property. The largest single use is the Puget Sound Energy (PSE) facility, which includes a large secured (fenced) equipment yard and associated utility roads. The Puget Sound Energy facility is located in the center of the Corgiat Drive site and accounts for almost half of its land area.

Clustered to the north of Puget Sound Energy, in the northern portion of the site, are a Davis Manufacturing warehouse (skylights); two Nichols/NW Truck and Transmission Exchange garages; a small office building; a small (50-square-foot) vacant lot; an asphalt-paved yard used for storing and handling large concrete construction blocks; and a storage yard and office for Marine Vacuum Service (24-hour emergency spill response). At the southern end of the site is a cluster of warehouses and operations buildings and associated small office buildings and parking areas for light industrial manufacturing enterprises, including Envelope Converting Service, Inc., Pacific Multiforms, Inc., and Neon Signs, as well as two vacant warehouse buildings, one bearing a for-lease sign.

Adjacent Land Uses

Land immediately adjacent to the Corgiat Drive site is occupied predominantly by multiple transportation corridors and associated transportation-related facilities. The long, narrow site is confined between South Corgiat Drive to the east and a wide set of Union Pacific Railroad (UP) tracks to the west. North of the site, the land uses include a small industrial warehouse and offices and the continuation of the UP track and yards.

Land in the vicinity of the Corgiat Drive site is used predominantly for transportation and light industry. Immediately east of South Corgiat Drive, Interstate 5 runs the entire length of the site. Airport Way South and King County International Airport (air terminal, offices, warehouses, and airplane hangars) lie just west of the UP tracks that border the site to the west. The area north of the site contains a mixture of uses, including UP right-of-way, light industrial warehouses, service buildings, office buildings, retail stores, unimproved space, a grocery, taverns and restaurants, an apartment building, a few single-family residences, and a church. East of Interstate 5, the land is developed with single-family residences, a cemetery, and some vacant undeveloped land that is owned by the Seattle Parks and Recreation Department.

Impacts

Alternative 4 is compatible with the existing and permitted industrial uses on and immediately adjacent to the Corgiat Drive site and consistent with the IG2 zoning requirements and standards. Alternative 4 would use and expand upon the existing rail and truck transportation access at this site. Transfer and recycling operations would not be expected to conflict with or result in increased disturbance to the adjacent airport uses or the residential uses in the vicinity because the proposed site is already developed with industrial and heavy transportation uses.

As previously discussed, when siting public facilities in the Duwamish Manufacturing/Industrial Center, the City must consider the limited amount of land that is available for industrial development in the Manufacturing/Industrial Center relative to the demand for it by private businesses. Alternative 4 would displace nine private businesses that currently operate within the proposed site boundaries, including Puget Sound Energy. These businesses could relocate to another location within the Duwamish Manufacturing/Industrial Center.

Under Alternative 4, the construction phase would involve the demolition of existing structures and the construction of the new facilities (Figure 2-7). Similar to Alternative 2, under Alternative 4, the project would be expected to comply with local, state, and regional regulations for controlling noise, vehicle traffic, and dust generated from construction.

Mitigation Measures

Compliance with the existing regulations would mitigate all the land use impacts resulting from Alternative 4.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated as a result of Alternative 4 (Corgiat Drive).

Alternative 5 (Edmunds Street)

Affected Environment

The Edmunds Street site includes four parcels totaling 7.47 acres in the southern area of Seattle, south of downtown (Figure 2-8). The site lies within the boundaries of the Duwamish Manufacturing/Industrial Center.

Relevant Seattle Comprehensive Plan Policies

As described for the other proposed sites (Harbor Island Terminal 10 site, the Harbor Island Terminal 10/Pendleton site, and the Corgiat Drive site), Seattle's Comprehensive Plan

establishes a goal to maintain land in the Duwamish Manufacturing/Industrial Center for industrial, transportation, and utility uses (goal GD-G3). As previously discussed, industrial land is a limited resource that is in high demand by private industrial businesses within the Duwamish Manufacturing/Industrial Center, and the City is committed to taking this into consideration when siting public uses within the Duwamish center.

Zoning within the Project Site

Zoning within the Edmunds Street site is IG1 U/85 (see the discussion of the IG1 U/85 for Alternative 2 [Harbor Island Terminal 10]) (Seattle 2003b).

Zoning in the Project Site Vicinity

The areas immediately west and south of the Edmunds Street site are in the same zone as the site (IG1 U/85). The areas immediately east and north of the site are within the IG2 U/85 zone. The IG1 and IG2 zones are described in the discussions of zoning for Alternative 2 (Harbor Island Terminal 10) and Alternative 4 (Corgiat Drive). East of the IG2 U/85 zone and across Interstate 5, the property is zoned SF 5000.

Existing Land Use

Most of the Edmunds Street site is currently used for intermodal transportation, including rail and truck terminals and warehouses of Consolidated Freightways, Pacer International, Macmillan-Piper, Conex, and SPO, Inc. The site also currently supports warehousing for Emerald City Bindery and Power Distributing. The Paper Merchant warehouse on the site is currently vacant.

Adjacent Land Uses

The Seattle Intermodal Logistics Facility, Northwest Container Services, is located immediately north and west of the Edmunds Street site, at the western terminus of South Edmunds Street. The northern boundary of the site is South Edmunds Street, with a Federal Express terminal situated on City-owned land immediately north of the street. Airport Way South borders the eastern edge of the site, with light industrial manufacturing businesses and warehouses located on the east side of Airport Way South. The south end of the site tapers to a point, where it is abutted by Airport Way South and warehouses to the east and UP tracks to the west. The western boundary of the property is bordered by UP tracks.

In addition to the uses immediately adjacent to the site, the land use in the immediate vicinity of the Edmunds Street site is predominantly transportation-related, with some additional light manufacturing and warehousing, primarily north of the site. Multiple sets of Burlington Northern Santa Fe Railway tracks and UP operations dominate the areas to the west and south, while Interstate 5 dominates the area to the east and south.

Impacts

Alternative 5 is consistent with existing and permitted uses in the Industrial zone. As discussed for the other alternative sites, siting public facilities in the Duwamish Manufacturing/Industrial Center requires consideration of the demand for industrial land by private industry in the area. Alternative 5 would displace the seven private businesses that currently operate within the boundaries of the Edmunds Street site. These businesses could relocate to other locations within the Duwamish Manufacturing/Industrial Center.

Under Alternative 5, the construction phase would involve the demolition of existing structures and the construction of the new facilities (Figure 2-9). Similar to the other alternative site, under Alternative 5, the project would be expected to comply with local, state, and regional regulations for controlling noise, vehicle traffic, and dust generated from construction.

Mitigation Measures

Compliance with the existing regulations would mitigate all the land use impacts resulting from Alternative 5.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated as a result of Alternative 5 (Edmunds Street).

Alternative 1 (No Action)

Under Alternative 1, none of the impacts described for Alternatives 2 through 5 would occur. The current land uses on the sites would continue, or the sites could be redeveloped at some future date.

Comparative Summary of Alternatives

The Harbor Island Terminal 10 site (Alternative 2) and the Harbor Island Terminal 10/Pendleton site (Alternative 3) would provide an opportunity for an additional mode of transportation (water transport) for municipal solid waste transfer operations. Under Alternative 3, the project could have the added benefit of providing solid waste handling for both the City of Seattle and King County, which may provide economies of scale and use less industrial land than the amount of land that would be necessary for two separate operations. On the other hand, Alternatives 2 and 3 would require the development of public facilities on an industrial shoreline that is in limited supply and in high demand by private businesses in the Duwamish Manufacturing/Industrial Center.

The Corgiat Drive site (Alternative 4) is located in an area that has a greater mix of adjacent zoning districts than the other alternatives, which are located in areas with adjacent zoning that is similar to that of the project site (General Industrial). Therefore, to the extent that the proposed project would result in adverse land use impacts associated with these dissimilar uses, Alternative 4 would have greater effects on the adjoining properties than the other alternatives.

Three of the alternatives would result in the displacement of private businesses. The Harbor Island Terminal 10/Pendleton site (Alternative 3) would displace one industrial business. The Corgiat Drive site (Alternative 4) would displace nine commercial and industrial businesses. The Edmunds Street site (Alternative 5) would displace seven commercial and industrial businesses. The businesses displaced by these three alternatives could relocate to other locations within the Duwamish Manufacturing/Industrial Center. Alternative 2 would not displace any existing businesses.

Aesthetics and Visual Quality

This section documents the existing visual quality, or aesthetics, of the landscape and the change that can be predicted in terms of the visual quality of the landscape as a result of the proposed alternatives. The term aesthetics refers to the pleasing appearance, or effect, of a visual experience.

Methods

Assessment of the existing visual condition and impacts of the Harbor Island Terminal 10, Harbor Island Terminal 10/Pendleton, Corgiat Drive, and Edmunds Street sites was conducted according to the guidelines in *Visual Impact Assessment for Highway Projects* (FHWA 1981). This methodology is a standard, accepted method for assessing aesthetic impacts that can be easily modified to address projects that do not involve highways.

- The Seattle Municipal Code was reviewed to identify codes and neighborhood plans that provide guidance on view preservation within the Seattle city limits.
- Site visits were conducted and field forms were completed to document the site conditions.
- Viewers, viewer sensitivity, landscape units, intervisibility, light and glare, shade and shadow, and temporal activities were assessed.
 - **Viewers.** Viewers are individuals who will see the proposed action.
 - **Viewer sensitivity.** Viewer sensitivity is defined as the activities of the viewers that make the viewers less or more sensitive to visual change. Recreationists and residents are the most sensitive viewers. Commuters have a moderate level of sensitivity. Workers in industrial areas have the lowest level of sensitivity to visual change.
 - **Landscape units.** Landscape units are areas that can be delineated from adjacent areas based on their visual character.
 - **Intervisibility.** Intervisibility is defined as visibility from one area to the other and vice versa. Generally, areas that are visible from the area of the proposed action have views of the action area.
 - **Light and glare.** Light is the amount of illumination that is cast into the sky or onto an adjacent surface. Glare is the amount of light reflected from a surface.

- **Shade and shadow.** Shade is the dark area on the side of an object away from the sun. A shadow is cast on the ground by an object that is blocking the sun.
- **Temporal activities.** Temporal activities are unfixed activities that change the visual experience of the space, or the appreciation of the visual experience of a space, for a short period. An example of a temporal activity is a train that blocks the view for short period.
- Change in the existing views was analyzed and documented.

Seattle has many visually striking views of the Cascade and Olympic Mountains, Lake Union, Lake Washington, Elliott Bay, Puget Sound, and the city skyline. In certain locations in the city, these views are protected (Seattle 2004a) as valuable visual resources. In other parts of the city, these views are constrained by varying topography, development, and tall trees. The view locations that were assessed in this analysis are not protected.

Two neighborhoods are proposed to host improved or developed solid waste facilities: Harbor Island and Georgetown. The existing visual condition on Harbor Island and in Georgetown is light industrial, which is compatible with the proposed facilities.

The proposed structures for the intermodal sites are expected to be similar to other large recycling and disposal stations built in King County and Snohomish County over the past several years. Photographs of recently constructed solid waste transfer stations (Figure 3-4) provide an indication of the general architectural style and massing that can be expected from the new intermodal sites.

Alternatives 2 and 3 (Harbor Island Terminal 10 and Harbor Island Terminal 10 / Pendleton)

Affected Environment

The general visual context of both the Harbor Island Terminal 10 site and the Pendleton site is marine industrial. The existing visual experience of Harbor Island is industrial, with a large component of the visual experience being multimodal transportation elements, including the wide, complex, and interwoven roadways and rail lines. Tractor-trailers and passenger cars move constantly through the landscape. The buildings are imposing in scale and similar to warehouses in style. A portion of Harbor Island north of the sites is developed with large fuel storage tanks.

Harbor Island may be viewed from West Seattle, Pigeon Point, and to some extent from downtown Seattle and the west side of Beacon Hill.



Snohomish County Southwest Recycling and Transfer Station, Mountlake Terrace, Washington



Photo source: R. W. Beck 2004

Airport Road Recycling and Transfer Station, Everett, Washington



Enumclaw Recycling and Transfer Station, Enumclaw, Washington

Figure 3-4. Examples of recently constructed solid waste transfer stations in western Washington.

Although the landscape is not pedestrian scale, on sunny days pedestrians are visible along the recreational path that leads along the south end of Harbor Island and passes the Terminal 18 open space that is located south of the Harbor Island Terminal 10 site. The pedestrian path ends south of the Pendleton site. Although the Terminal 18 open space has views of the existing buildings at the Pendleton flour mill, views of the Harbor Island Terminal 10 site are blocked by the Pendleton flour mill buildings. Other viewers on Harbor Island are generally conducting activities, such as working or driving, that distract from their appreciation of the views.

Recreational boaters who use the Duwamish West Waterway have views of the water side of the buildings on the Pendleton site and the open lot at the Harbor Island Terminal 10 site.

The Admiral Viewpoint in Belvedere Park (also known as the Belvedere Viewpoint), which is located on Admiral Way SW, provides a panoramic view of the Pendleton and Harbor Island Terminal 10 sites. Although these sites are clearly distinguishable, they do not distract the eye from views of the Seattle skyline or the maritime activity in the Duwamish West Waterway.

Trains coming and going in the viewshed would alter the viewers' experience. From time to time, views of the sites or portions of the site would be blocked by parked train cars.

Harbor Island Terminal 10 Site

The existing Harbor Island Terminal 10 site is an open paved lot filled with construction equipment and materials (Figure 3-5). Views of the water from 16th Avenue SW are possible, depending on the size of material stored on the site and whether a large boat is anchored adjacent to the site.

Currently, the Harbor Island Terminal 10 site is not illuminated and is significantly darker than the background level of illumination on Harbor Island and in the surrounding areas.

The existing open lot at the Harbor Island Terminal 10 site lacks any striking visual elements and is easily lost visually in the background clutter of the intermodal marine industrial setting. Views of the existing site are considered to be low in aesthetic value.

Pendleton Site

The Pendleton site contains several buildings (Figure 3-6). A low, modern building is located in the southern portion of the site; an attractive two-story brick office building separates the modern building from the columnar stacks and sagging wooden structures of the mill itself. The buildings block the views to the west from the pedestrian trail and 16th Avenue SW toward the water.

Currently, the site is minimally illuminated. When viewed from the Admiral Viewpoint located on Admiral Way SW, the site is significantly darker than the background level of illumination on Harbor Island and in the surrounding areas.

The existing grain elevators on the Pendleton site are striking visual references that make them memorable in an otherwise cluttered landscape. Although the view of the Pendleton site is consistent with its intermodal marine industrial setting, it is not a view that is in itself highly aesthetic.

Impacts

Alternative 2 (Harbor Island Terminal 10 Site)

The visual components of the Harbor Island Terminal 10 site would include the site entrances and exits, scale facilities, the transfer building, an office building, ramps and access roads, containers in a storage area, railroad tracks, a parking area, and additional scales.

The dominant visual element would be the transfer building. A building measuring approximately 375 feet by 250 feet would be constructed over the existing asphalt. The structure would be approximately 40 feet tall. Aesthetic architectural details would not be included in the design of this structure. Fenestration would be limited to doorways required for commerce and safety. Landscaping would be limited.

The colorful stacked railway cars would be visible from 16th Avenue SW and might obscure the transfer structure itself. The scale facility and the site entrance would be readily visible to the users of the fueling station located on SW Lander Street to the north of the Harbor Island Terminal 10 site. Viewers from this location would be able to see a parking area, the office building, the entrance and access roads, scales, and the north end of the transfer building where vehicles would exit after emptying their loads.

Under Alternative 2, the visual impacts that would occur during construction would be similar to the visual impacts that would occur during the operation of the solid waste intermodal transfer facility. Light and heavy trucks and tractor-trailers would be observed entering the site. Limited foot traffic would be visible on the site, and a greater number of trucks and automobiles would be observed moving along the neighboring streets. In the evening, a reduced level of activity would be visible, and the site would be brightly lit for security and safety purposes.

Birds, rodents, and dust are not a nuisance at the current solid waste intermodal transfer facility at the Argo Intermodal Yard. However, the current facility receives only waste that is already in intermodal transport containers. The newly constructed solid waste intermodal transfer facility would be designed to minimize ancillary visual impacts. Although the newly constructed intermodal transfer facility, activities associated with the facility, and increased lighting would be visible from the Admiral Viewpoint located on Admiral Way SW, the activities would be compatible with the scale and type of activities occurring on Harbor Island and would not stand out by comparison.



Legend


 Photograph point location

Figure 3-5. Existing view looking southwest toward the Harbor Island Terminal 10 intermodal site.



Legend


 Photograph point location



Figure 3-6. Existing view looking northwest toward the Pendleton site.

Alternative 3 (Harbor Island Terminal 10/Pendleton Site)

Alternative 3 has similar project elements and would result in visual impacts similar to those of Alternative 2. However, under Alternative 3, the visually memorable grain silos on the Pendleton site would be removed. Also, abandoned buildings and the deteriorating dock along the Duwamish West Waterway would be removed. Additional railroad tracks would probably be added on the east side of the site along 16th Avenue SW. Railway cars parked on the tracks would obscure the view of the new structure from 16th Avenue SW. When railway cars are not present, views of the structure over the scale would be possible from the road and the parking lot on the corner of 16th Avenue SW.

Mitigation Measures

Mitigation for Construction Impacts

Mitigation measures for impacts during construction include the maintenance of an organized and clean work site, control of queuing to prevent vehicles from lining up along the roads, and prompt completion of construction to reduce the duration of the impacts.

Design Commission Review and Neighborhood Plans

Full details of the project design are unavailable at this time. However, the project will undergo a mandatory review by the Seattle Design Commission. The Seattle Design Commission was established in 1968 to serve in an advisory capacity to the City of Seattle with regard to environmental and design aspects of City capital improvement projects (Seattle Municipal Code, Section 3.58.010 [SMC 3.58.010]). As a required part of the City's formalized design review process, the Seattle Design Commission reviews projects funded in any part with City money or on City land and makes recommendations as the projects develop.

The Seattle Design Commission encourages early and frequent consultations with project proponents and facilitates coordination with other reviewing agencies and the community. Nine design professionals, representing the fields of art, architecture, urban planning, engineering, environmental planning, and landscape architecture, serve on the Design Commission, along with one lay member. Commission meetings are held on the first and third Thursdays of each month and are open to the public. The Design Commission also convenes workshops, creates exhibits on selected City projects, and makes available to the public the minutes from its regular meetings, in which project review takes place.

The design of the proposed project elements will follow the requirements of the Design Review Program (Seattle 2004a). In addition, the City may consider including the following design elements to mitigate the potential visual impacts of the project:

- Installation of landscape vegetation or solid fences to provide ornamental screening

- Architectural treatments (e.g., windows or window-like apertures)
- Surface treatments of the building walls and doors (e.g., texture or color).

Significant Unavoidable Adverse Impacts

Although visual impacts would occur and the existing visual condition would change at the Terminal 10 and Pendleton sites on Harbor Island, the newly constructed solid waste intermodal transfer facility would not significantly alter the aesthetic resource of Harbor Island. No significant unavoidable adverse impacts would result from the newly constructed facility.

Alternative 4 (Corgiat Drive)

Affected Environment

The general visual context of the south Georgetown area is air industrial associated with the King County International Airport (Boeing Field) and transportation associated with Interstate 5, Airport Way South, and the main rail lines of the Burlington Northern Santa Fe Railway (BNSF) and Union Pacific Railroad (UP). Tractor-trailers, trains, automobiles, and small planes move through the landscape on parallel tracks. The elements in the landscape are segregated. The structures in the area are low and industrial in nature and are clustered in groups between roadway and railway. Small planes are parked on the tarmac at the north end of Boeing Field, and people are frequently moving around the airplanes.

The Corgiat Drive site contains a cluster of scattered, small-scale industrial buildings confined between an elevated section of Interstate 5 on the east side of the site and a wide section of railroad tracks parallel to Interstate 5 on the west side of the site (Figure 3-7). North of the site, a small area of commercial structures would remain adjacent to South Albro Place.

Located near the north end of the King County International Airport, the Corgiat Drive site may be viewed from Beacon Hill, Swift Avenue South, from elevated South Albro Place, and from Airport Way South.

Although the landscape is not pedestrian scale, many pedestrians use the sidewalk along South Albro Place. This sidewalk provides an elevated view southeast toward the Corgiat Drive site. Views toward the site from the residences along Swift Avenue South are blocked by the topography and the evergreen trees growing along Interstate 5. Views from Ruby Chow park, located just north of the airport, are blocked by trees along Airport Way South and South Hardy Street. Viewers at the airport, on Airport Way South or Interstate 5 are generally conducting activities, such as working or driving, that distract them from the views of the Corgiat Drive site.

Trains coming and going in the viewshed would alter the viewers' experience. From time to time, views from west of the site would be blocked by parked train cars.



Legend


 Photograph point location

Figure 3-7. Existing view looking southeast toward the Corgiat Drive site.

The north end of the Corgiat Drive site is rimmed by a clutter of several small light-industrial buildings. A large asphalt lot containing large concrete blocks is located adjacent to the railway. Graffiti and weeds are present along the railway side of the site. The south end of the Corgiat Drive site is filled with five large warehouse-type structures that are surrounded by asphalt.

The existing light-industrial clutter of the Corgiat Drive site is neither memorable nor cohesive. Views of the existing site are considered to be low in aesthetic value.

Impacts

The visual components of the Corgiat Drive site would include a new site entrance and an alternative service entrance, a scale facility, an office, a container storage area, a parking area, a fueling area, and access ramps. A building measuring approximately 325 feet by 250 feet would be constructed over the existing surface. Many large warehouse-type manufacturing and commercial structures and ancillary structures would be demolished to provide adequate space for construction of the Corgiat Drive site.

The Corgiat Drive site would be visible from Airport Way South when trains are not present on the railroad tracks. The north end of the Corgiat Drive site might be visible from Interstate 5 southbound, especially during periods of slow traffic. Light from security luminaires affixed to tall poles might cause glare for southbound drivers on Interstate 5.

Under Alternative 4, the visual impacts that would occur during construction would be similar to the visual impacts that would occur during the operation of the solid waste intermodal transfer facility. Light and heavy trucks and tractor-trailers would be observed entering the site. Pedestrian activity on the site would intensify and a greater number of trucks and automobiles would be observed parked along the neighborhood streets. During the regular workday, there would be activity on the site. In the evening, the site would be brightly lit for security and safety purposes.

Birds, rodents, and dust are not a nuisance at the current solid waste intermodal transfer facility at the Argo Intermodal Yard. However, the current facility receives only waste that is already in intermodal transport containers. The newly constructed solid waste intermodal transfer facility would be designed to minimize ancillary visual impacts.

Although the new intermodal transfer facility would appear comparatively clean, organized and modern, the existing light industrial clutter of the Corgiat Drive site and adjacent properties would remain neither memorable or cohesive. Views of this proposed action would be considered to be low in aesthetic value.

Mitigation Measures

The mitigation measures for Alternative 4 would be the same as those discussed for Alternative 2.

Significant Unavoidable Adverse Impacts

Although visual impacts would occur and the existing visual condition would change at the Corgiat Drive site, the newly constructed solid waste intermodal transfer facility would not significantly alter the aesthetic resource of the Georgetown community. No significant unavoidable adverse impacts would result from the newly constructed facility.

Alternative 5 (Edmunds Street)

Affected Environment

The general visual context of the Edmunds Street site is light industrial and intermodal, with a large component of the visual experience being the large bridges on Fourth Avenue South and Airport Way South that cross over the railroad tracks south of the site, which run diagonally northwest to southeast. The area is developed with older one- to four-story light-industrial buildings. Most of the buildings are wood or concrete; however, a few brick and stone structures are evident. Although there are broad sidewalks along Airport Way South, there are no sidewalks or curbs on the side streets and parking is haphazard. Tractor-trailers and passenger cars move constantly along the major arterials, and train cars are parked along the tracks.

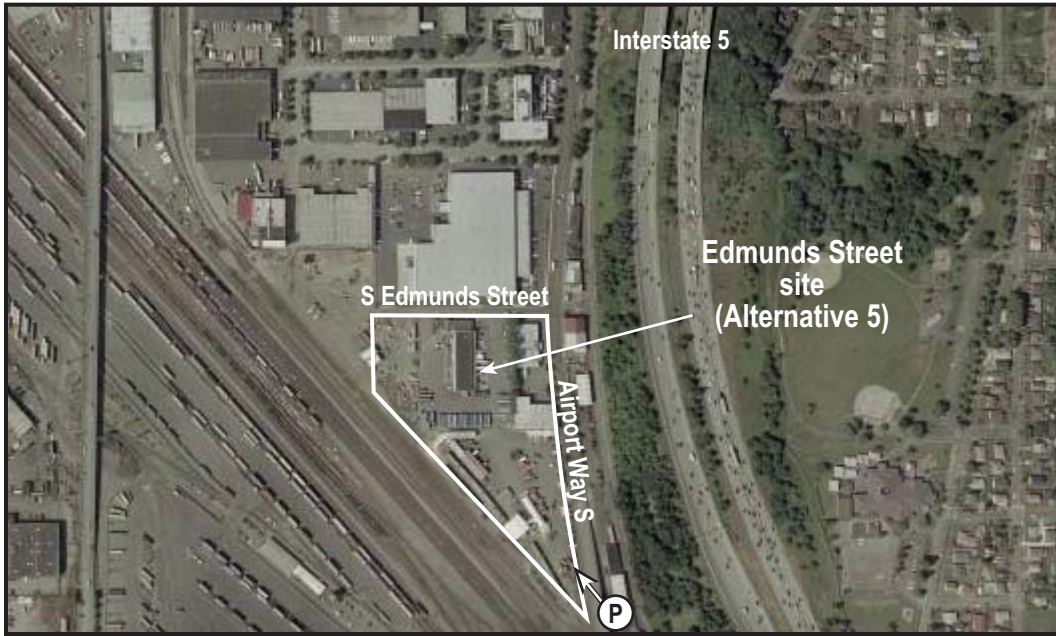
The area in which the Edmunds Street site is located may be viewed locally from the elevated roadways. Although Beacon Hill, West Seattle, and downtown Seattle are all visible in the background of views from the site, the site itself is far in the background of views from these locations and would be difficult to identify.

The landscape is not pedestrian scale, and few pedestrians who are not walking between parking and commerce activities are visible. Viewers in the landscape are primarily in transit or are working and focused on activities other than viewing. There are no residences or recreational areas in this viewshed.

Trains coming and going in the viewshed would alter the viewers' experience. From time to time, views of the site from the south would be blocked by parked train cars.

The existing Edmunds Street site is rimmed with low light-industrial structures (Figure 3-8). The Emerald City Bindery, located on the corner of South Edmunds Street and Airport Way South, is an attractive and interesting stone building. This building and the Paper Merchant building, located on Airport Way South near the bridge, obscure the view of the site from Airport Way South. Adjacent buildings block the view of the site from the northwest. The western portion of the site is occupied by a large open asphalt lot. Intermodal freight activities are evident. Many large tractor-trailers are parked around the buildings and on the lot, and their drivers are visible walking between their vehicles and the structures. Small stacks of multicolored shipping containers are stacked neatly around the site.

The existing light industrial and commercial clutter of the Edmunds Street site is neither memorable nor cohesive. Views of the existing site are considered to be low in aesthetic value.



Legend


 Photograph point location

Figure 3-8. Existing view looking northwest toward the Edmunds Street site.

Impacts

The visual components of the Edmunds Street site would include an entrance off South Edmunds Street, scale facilities, an office building, container storage, a fueling station, and a parking area. The dominant visual element would be the transfer building. Several buildings that front South Edmunds Street and Airport Way South would be demolished. A building measuring approximately 350 feet by 250 feet would be constructed at the north end of the existing site, adjacent to South Edmunds Street.

The structure would be approximately 40 feet tall. Architectural details would not be included in the design of this structure except as necessary. Fenestration would be limited to doorways required for commerce and safety. Landscaping would be limited, and visual barrier fencing would not be included.

The sense of pedestrian-scale small business in the area would be reduced by the removal of the buildings that front South Edmunds Street and Airport Way South. The views of the site from the east side would be more open. The view from the east could be blocked by a stack of colorful containers.

Under Alternative 5, the visual impacts that would occur during construction would be similar to the visual impacts that would occur during the operation of the solid waste intermodal transfer facility. Light and heavy trucks and tractor-trailers would be observed entering the site. Pedestrian activity on the site would intensify, and a greater number of trucks and automobiles would be observed parked along the neighborhood streets. During the regular workday, there would be activity on the site. In the evening, the site would be brightly lit for security and safety purposes.

Birds, rodents, and dust are not a nuisance at the current solid waste intermodal transfer facility at the Argo Intermodal Yard. However, the current facility receives only waste that is already in intermodal transport containers. The newly constructed solid waste intermodal transfer facility would be designed to minimize ancillary visual impacts.

Although the new intermodal transfer facility would appear comparatively clean, organized, and modern, the proposed structures would be neither memorable nor cohesive in the context of the landscape. Views of the existing site are considered to be low in aesthetic value. The reduction in pedestrian-scale experience and the demolition of several attractive and well-maintained structures along Airport Way South would contribute to the low aesthetic rank for this location.

Mitigation Measures

The mitigation measures for Alternative 5 would be the same as those discussed for Alternative 2.

Significant Unavoidable Adverse Impacts

Although visual impacts would occur and the existing visual condition would change at the Edmunds Street site, the newly constructed solid waste intermodal transfer facility would not significantly alter the aesthetic resource of the Georgetown community. No significant unavoidable adverse impacts would result from the newly constructed facility.

Alternative 1 (No Action)

Under Alternative 1, the visual impacts that are expected to occur include gradually growing lines of idling automobiles, light trucks, and tractor-trailers at the gates to the existing transfer stations.

Comparative Summary of Alternatives

Aesthetics and visual resources would be most significantly affected by Alternative 3, constructing the new solid waste intermodal transfer facility on the Harbor Island Terminal 10/Pendleton site. This site is visible from the Admiral Viewpoint in West Seattle and adjacent to the public open space at Terminal 18. Alternative 2 (the Harbor Island Terminal 10 site) would have impacts similar to those of Alternative 3. Alternative 4 (the Corgiat Drive site) would have the second highest level of impacts on aesthetics and visual resources because of its proximity to Interstate 5 and the King County International Airport and possible views of the site from both locations. Alternative 5 (the Edmunds Street site) would result in the least impacts on aesthetics and visual resources.

All four alternatives would result in a relatively similar level of impacts on aesthetics and visual resources. None of the alternatives would result in significant adverse effects on a high-quality visual resource.

Plants and Animals

This section discusses impacts on plants and animals due to the construction and operation of the proposed solid waste intermodal transfer facility. It also discusses the potential for the intermodal transfer facility to attract animals and thus result in impacts on activities in the vicinity of the facility.

Alternative 2 (Harbor Island Terminal 10)

Affected Environment

The Harbor Island Terminal 10 site is almost entirely surfaced by impervious materials (pavement and gravel) and supports no vegetation. Animals that occur on the site are limited to those that are adapted to very urbanized conditions and include a few bird species (e.g., gull) and mammal species (e.g., Norway rat). However, the site lies adjacent to the Duwamish West Waterway, where the Duwamish Waterway enters Elliott Bay and Puget Sound, and the Duwamish Waterway and Elliott Bay provide important habitat for many species of plants and animals.

The Duwamish River watershed has been highly modified from its historical state in terms of physical armoring, channelization, and habitat. Most of the shoreline in the lower Duwamish River estuary is industrial, with extensive bulkheads, armoring, and riprap. The portion of the lower Duwamish River from the south end of Boeing Field to the mouth of the river is referred to as the Duwamish Waterway.

At mid to lower intertidal elevations in the vicinity of the Harbor Island Terminal 10 site, riprap and pilings support a typical epibiota dominated by barnacles (*Balanus glandula*), mussels (*Mytilus trossulus*), and rockweed (*Fucus gardneri*). Where the intertidal area is covered by ballast rock, this substratum supports seaweeds (extensive *Fucus*, some *Enteromorpha*, and *Mastocarpus*). Upstream of the site in the Duwamish Waterway, small pocket-beaches support an infauna with polychaetes and oligochaetes. Shore crabs (*Hemigrapsus oregonensis*) have been found in these habitats as well.

The Duwamish estuary provides nursery habitat for numerous marine fish species and juvenile salmonids. Studies conducted in the lower Duwamish River have identified more than 20 marine and anadromous fish species (Parametrix 1980; Warner and Fritz 1995). Marine fish species found in abundance include the English sole (*Pleuronectes vetulus*), starry flounder (*Platichthys stellatus*), Pacific staghorn sculpin (*Leptocottus armatus*), shiner perch (*Cymatogaster aggregata*), and Pacific herring (*Clupea pallasii*). Juvenile English sole species and Pacific staghorn sculpin have been found in the estuary throughout the entire year.

The lower 6 to 10 miles of the Duwamish estuary is an important transition zone, where juvenile salmonids acclimate to salt water (Parametrix 1980). The Green River (located upstream of the Duwamish) and the lower reaches of its tributaries provide important spawning habitat.

Studies have shown that of the five Pacific salmon species, chinook salmon (*Oncorhynchus tshawytscha*) are most dependent on estuaries during the early stages of their life cycle (Varanasi et al. 1993). Juvenile chinook salmon were found to be most abundant near Kellogg Island (located in the Duwamish Waterway about 1½ miles south of Terminal 10 between April and June (Parametrix 1982), and juvenile chum salmon (*O. keta*) were most abundant in April and May. Coho salmon (*O. kisutch*) have been found in fewer numbers near Kellogg Island and do not appear to use this habitat as extensively as chum and chinook salmon. The diet of juvenile chinook salmon was found to consist of copepods, amphipods, insects, annelids, and small fish (Varanasi et al. 1993).

Nine mammal species have been observed in the Duwamish River estuary (Tanner 1991). Aquatic species include the harbor seal (*Phoca vitulina*), killer whale (*Orcinus orca*), Steller sea lion (*Eumetopias jubatus*), muskrat (*Ondatra zibethicus*), and river otter (*Lontra canadensis*), while terrestrial species include the Norway rat (*Rattus norvegicus*), raccoon (*Procyon lotor*), and Townsend vole (*Microtus townsendii*).

Eighty-four bird species have been observed in the Duwamish River estuary (Tanner 1991). Kellogg Island provides important nesting habitat for birds. Nests observed during surveys conducted in the late 1970s were those of the Canada goose (*Branta canadensis*), gadwall (*Anas strepera*), killdeer (*Charadrius vociferus*), red-winged blackbird (*Agelaius phoeniceus*), song sparrow (*Melospiza melodia*), and spotted sandpiper (*Actitis macularia*) (Canning et al. 1979), and some of these birds may occur on the Harbor Island Terminal 10 site or in areas near the site. Nesting habitat for songbirds and other terrestrial bird species is found on the comparatively less developed hillsides flanking the Duwamish River valley.

Impacts

Under Alternative 2 (Harbor Island Terminal 10), no in-water work and no direct loss of habitat would occur. The potential for impacts on habitat and species in the Duwamish West Waterway and adjacent portions of the Duwamish Waterway and Elliott Bay is associated with the potential water-related impacts described in detail in the section “Water” in Part 3 of this supplemental EIS. These impacts could include erosion, sedimentation, and spills during construction and runoff during site operations.

The increase in noise and general activity on the site during construction and operation is unlikely to significantly affect fish, mammals, and birds using the Duwamish West Waterway and adjacent areas because south Elliott Bay and the lower Duwamish River valley currently are heavily industrialized, and construction and operation of the solid waste intermodal transfer facility would not result in a significant change in noise levels or general activity in the area.

Mitigation Measures

Mitigation for possible impacts on plants and animals resulting from site runoff during the construction and operation of the Harbor Island Terminal 10 site include a variety of best management practices that are described in the section “Water” in Part 3.

Significant Unavoidable Adverse Impacts

With effective implementation of the best management practices for water quality described in the section “Water” in Part 3, no significant unavoidable adverse impacts on plants and animals would occur as a result of Alternative 2 (Harbor Island Terminal 10).

Alternative 3 (Harbor Island Terminal 10/Pendleton)

Affected Environment

The affected environment for Alternative 3 (Harbor Island Terminal 10/Pendleton) would be the same as that described for Alternative 2 (Harbor Island Terminal 10).

Impacts

Under Alternative 3 (Harbor Island Terminal 10/Pendleton), the impacts would be similar to those described for Alternative 2 (Harbor Island Terminal 10). However, the potential for impacts under Alternative 3 would be somewhat greater than the potential under Alternative 2 because of the larger site area and the larger scale of operation under Alternative 3.

Mitigation Measures

The mitigation measures for Alternative 3 (Harbor Island Terminal 10/Pendleton) would be the same as those described for Alternative 2 (Harbor Island Terminal 10).

Significant Unavoidable Adverse Impacts

With effective implementation of best management practices for water quality described in the section “Water” in Part 3, no significant unavoidable adverse impacts on plants and animals would occur as a result of Alternative 3 (Harbor Island Terminal 10/Pendleton).

Alternative 4 (Corgiat Drive)

Affected Environment

The Corgiat Drive site currently supports a variety of industrial activities and has little vegetation and very limited habitat for animals. Animals that do occur on the site are limited to species that

are adapted to very urbanized conditions (e.g., starlings (*Sturnus* sp.), crows (*Corvidae* sp.), gulls (*Larus* sp.), and various rodents).

The Corgiat Drive site lies approximately 1,600 feet northeast of the north end of the runway at King County International Airport (Boeing Field). The safety of aviation operations at the airport can be adversely affected by the presence of some bird species, particularly large birds such as gulls that tend to flock and fly in patterns that can conflict with aircraft flight paths. During the process of determining the scope of this supplemental EIS, King County Airport staff expressed concern that intermodal operations at the Corgiat Drive site could be sufficiently attractive to birds that safety at the airport would be adversely affected.

Impacts

Because of the limited habitat on the Corgiat Drive site, impacts on plants and animals under Alternative 4 would be minimal.

Exposed putrescible solid waste can attract various animal species, which may become a nuisance, and in some situations, as noted above, a hazard. However, solid waste transfer facilities can be designed and operated in a manner that does not create wildlife nuisance problems. For example, Snohomish County's new Airport Road Recycling and Transfer Station, which opened October 21, 2003, at the Paine Field airport, has not created any bird-aircraft safety hazards since it opened.

Mitigation Measures

Incorporation of the following mitigation measures and design features into Alternative 3 would minimize the likelihood of attracting nuisance animals to the Corgiat Drive site as a result of intermodal operations:

- Putrescible solid waste will only be handled within the main, enclosed transfer building.
- Bird exclusion material (e.g., brush spikes) will be installed on those portions of onsite structures that could serve as bird perches.
- Vehicle entrances and exits in the main transfer building will be designed to inhibit bird movement into the building interior.
- The tipping floor of the main transfer building will be washed down as required to minimize the attraction of wildlife.
- All putrescible solid waste stored outside the main transfer building will be contained in sealed containers.

Significant Unavoidable Adverse Impacts

With implementation of the mitigation measures and design features described above, the solid waste intermodal transfer facility at the Corgiat Drive site (Alternative 4) would not attract large numbers of birds and other animals that could become a nuisance or pose a safety hazard to the operations of aircraft at the King County International Airport.

Alternative 5 (Edmunds Street)

Affected Environment

The affected environment for plants and animals at the Edmunds Street site is similar to that described for the Corgiat Drive site (Alternative 4). However, the Edmunds Street site is farther (approximately 1½ miles) from the north end of the runway at King County International Airport.

Impacts

Under Alternative 5 (Edmunds Street), the impacts on plants and animals would be minimal, and the potential for the solid waste intermodal transfer facility to result in a bird-aircraft safety hazard for the airport is low.

Mitigation Measures

Although the potential for impacts on safety at the King County International Airport is low, the same measures and design features for controlling the facility's attractiveness to animals that are described for the Corgiat Drive site (Alternative 4) would be implemented for the solid waste intermodal transfer facility at the Edmunds Street site (Alternative 5).

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on plants and animals would result from Alternative 5 (Edmunds Street).

Alternative 1 (No Action)

Under Alternative 1 (No Action), impacts on plants and animals associated with the construction and operation of a new solid waste intermodal transfer facility would not occur.

Comparative Summary of Alternatives

Alternative 5 (Edmunds Street) is associated with the least likelihood of impacts on plants and animals, and Alternative 3 (Harbor Island Terminal 10/Pendleton) is associated with the greatest likelihood of impacts. However, the differences among the alternatives in terms of their potential for impacts on plants and animals are not significant, and none of the alternatives would result in significant unavoidable adverse impacts on plants and animals.

Earth

This section describes the existing geologic, topographic, and underlying soil conditions on the four alternative sites for the solid waste intermodal transfer facility. It also evaluates the potential impacts of each alternative in terms of changes in site topography and risks of damage to onsite structures during an earthquake.

Alternative 2 (Harbor Island Terminal 10)

Affected Environment

The Harbor Island Terminal 10 site is located on Harbor Island in the lower Duwamish River estuary. Harbor Island was constructed in approximately 1909 of artificial fill placed on top of preexisting alluvium (Phelps 1978). The island has since been enlarged and now covers approximately 400 acres. The Harbor Island Terminal 10 site is flat and currently covered by pavement and gravel.

Just west of the Washington coast lies the boundary between two major tectonic plates: the Juan de Fuca plate and the North American plate. The Juan de Fuca plate moves northeastward with respect to the North American plate (which underlies most of the North American continent) at a rate of approximately 4 centimeters per year. As it collides with the North American plate, the Juan de Fuca plate thrusts beneath the North American plate and sinks into the earth's mantle. Because of this tectonic activity, the Seattle area is seismically active and experiences periodic earthquakes of several types.

In the historical record, the most frequent earthquakes have been low-magnitude (magnitude 2.5 to 5.5) shallow earthquakes located in the North American plate. Deeper earthquakes located in the descending Juan de Fuca plate, some of sufficient magnitude to cause significant damage, are also recorded in the historical record. Examples of these deeper, more powerful earthquakes include the Puget Sound events in 1949, 1965, and 2001, each of which exceeded a magnitude 6.5 (Galster and Laprade 1991; PNSN 2002a).

Recent research has revealed evidence that two additional types of strong earthquakes have affected the Seattle area in the past. One of these additional types (a "subduction zone" earthquake) occurs along the boundary between the Juan de Fuca and North American plates off the coast of Washington. The geologic record indicates that these subduction zone earthquakes can be quite large (up to approximately magnitude 9) and would cause considerable damage over a wide area. Evidence indicates that the most recent subduction zone earthquake between the two plates occurred approximately 300 years ago and that the period between great earthquakes along the subduction zone is between 400 and 600 years (PNSN 2002b).

The other additional type of earthquake occurs along the Seattle fault zone. The Seattle fault zone trends east-west across Puget Sound and the adjacent lowlands and passes through Harbor

Island. Earthquakes along this fault zone are shallow and potentially powerful (magnitude 7 or greater), and therefore can cause enormous damage. Evidence indicates that the most recent strong earthquake along the Seattle fault zone occurred about 1,100 years ago and that the period between strong earthquakes along the Seattle fault zone is approximately 500 years or more (Blakely et al. 2002).

The central Puget Sound area, including the Seattle area, is mapped in the Uniform Building Code as seismic zone 3. The Uniform Building Code scale ranges from seismic zone 0 (areas with minimal risk of damage from earthquakes) to seismic zone 4 (areas with highest risk of damage from earthquakes). The Harbor Island Terminal 10 site and its surroundings are mapped by the City of Seattle as a critical area because of the liquefaction hazard. Liquefaction is a process by which water-saturated sediment temporarily loses strength and acts as a fluid. Liquefaction can be induced by the shaking associated with an earthquake and can result in damage to foundations of structures.

Impacts

Because of the low topographic relief on the Harbor Island Terminal 10 site, the extent of site grading would be limited and would result in minimal topographic changes.

The alluvial soils and manmade fill underlying the site are subject to liquefaction during a strong earthquake, and onsite structures would be at risk of damage during such an event.

Mitigation Measures

Under Alternative 2, the design of all the proposed structures on the Harbor Island Terminal 10 site would conform with the requirements of the Uniform Building Code. In addition, a geotechnical study would be undertaken during the final design to determine any special foundation or construction techniques that would be necessary to reasonably minimize the potential for damage during an earthquake.

Significant Unavoidable Adverse Impacts

If a geotechnical study is undertaken during the design and the recommendations of the study are followed, no significant unavoidable adverse impacts related to topography and earthquake hazard would occur as a result of Alternative 2 (Harbor Island Terminal 10).

Alternative 3 (Harbor Island Terminal 10/Pendleton)

Affected Environment

Under Alternative 3 (Harbor Island Terminal 10/Pendleton), the affected environment would be the same as that described for Alternative 2 (Harbor Island Terminal 10).

Impacts

The impacts resulting from Alternative 3 (Harbor Island Terminal 10/Pendleton) would be similar to those described for Alternative 2 (Harbor Island Terminal 10).

Mitigation Measures

The mitigation measures for Alternative 3 (Harbor Island Terminal 10/Pendleton) would be the same as those described for Alternative 2 (Harbor Island Terminal 10).

Significant Unavoidable Adverse Impacts

As for Alternative 2 (Harbor Island Terminal 10), there would be no significant unavoidable adverse impacts related to topography or earthquake hazard as a result of Alternative 3 (Harbor Island Terminal 10/Pendleton).

Alternative 4 (Corgiat Drive)

Affected Environment

Under Alternative 4 (Corgiat Drive), the affected environment would be similar to that described for Alternative 2 (Harbor Island Terminal 10).

Impacts

The impacts resulting from Alternative 4 (Corgiat Drive) would be similar to those described for Alternative 2 (Harbor Island Terminal 10).

Mitigation Measures

The mitigation measures for Alternative 4 (Corgiat Drive) would be the same as those described for Alternative 2 (Harbor Island Terminal 10).

Significant Unavoidable Adverse Impacts

As for Alternative 2 (Harbor Island Terminal 10), there would be no significant unavoidable adverse impacts related to topography or earthquake hazard as a result of Alternative 4 (Corgiat Drive).

Alternative 5 (Edmunds Street)

Affected Environment

Under Alternative 5 (Edmunds Street), the affected environment would be the same as that described for Alternative 2 (Harbor Island Terminal 10).

Impacts

The impacts resulting from Alternative 5 (Edmunds Street) would be similar to those described for Alternative 2 (Harbor Island Terminal 10).

Mitigation Measures

The mitigation measures for Alternative 5 (Edmunds Street) would be the same as those described for Alternative 2 (Harbor Island Terminal 10).

Significant Unavoidable Adverse Impacts

As for Alternative 2 (Harbor Island Terminal 10), there would be no significant unavoidable adverse impacts related to topography or earthquake hazard as a result of Alternative 5 (Edmunds Street).

Alternative 1 (No Action)

Under Alternative 1 (No Action), the potential for impacts described for the action alternatives would not exist.

Comparative Summary of Alternatives

The four alternative sites exhibit similar geologic characteristics. Each site has low topographic relief, and each site is underlain by a combination of alluvial soils and manmade fill. Each site is mapped by the City of Seattle as having a high potential for liquefaction during an earthquake. The potential impacts resulting from each action alternative are similar.

Water

This section documents the existing water resource conditions on the alternative intermodal sites, as well as the potential impacts on water resources that are expected as a result of the proposed alternatives. Because all of the alternative sites eventually drain to the Duwamish Waterway (and eventually to Elliott Bay), the focus of the discussion is on the existing conditions and potential impacts on the Duwamish Waterway.

Alternative 2 (Harbor Island Terminal 10)

Affected Environment

The existing Harbor Island Terminal 10 site is generally characterized by developed land with limited formal surface water conveyance systems. The total site area is approximately 10.7 acres, consisting primarily of gravel and paved areas, with small localized areas of stormwater ponding in depressed areas. Stormwater runoff appears to discharge in sheet flows either onto the adjacent west frontage road area and into the associated surface water drainage system, or directly to the Duwamish Waterway along the site's western boundary. Activity on the existing site consists primarily of processing contaminated dredge spoils from the Duwamish River. Concerns related to the current quality of stormwater runoff may include increased turbidity due to exposed gravel areas and material stockpiles.

The water resources in the vicinity of the Harbor Island Terminal 10 site include the lower Duwamish Waterway and Elliott Bay (Figure 1-1). Harbor Island is at the extreme lower end of the Duwamish Waterway where it flows into Elliott Bay; therefore, both water bodies are described below. There are no ground water resources of concern in the vicinity of the Harbor Island Terminal 10 site. No wells, wellhead protection areas, or sole-source aquifers were identified in the vicinity of the site.

The following information is based primarily on information in the *City of Seattle Proposed 2004 Comprehensive Drainage Plan* (Seattle 2004b) and the *Baseline Water and Sediment Quality Characterization* (Seattle 2003c) prepared by Seattle Public Utilities.

The Duwamish Waterway flows for 4.6 miles within the Seattle city limits before draining into Elliott Bay. The waterway has historically been developed and altered mainly for commercial and industrial uses. It receives runoff from approximately 11,600 acres of land in south Seattle. Land use within the Seattle drainage areas that are tributary to the Duwamish Waterway is evenly distributed between roadways (27 percent), residential (22 percent), and industrial (28 percent) uses, with lesser amounts of commercial (6 percent), open space/vacant (14 percent), and other miscellaneous (3 percent) land uses. Drainage conveyance systems in these areas consist mostly of piped networks.

Most of the Duwamish Waterway (from the south end of Harbor Island in the north to beyond the Seattle city limits in the south) has been designated as a Superfund site due to the presence of contaminated sediments. Contaminants include polychlorinated biphenyls (PCBs), metals, petroleum hydrocarbons, and other organic compounds. A preliminary risk assessment determined that the highest risk for human health is associated with the consumption of contaminated seafood, and the highest risk for aquatic health is associated with benthic invertebrates living in the contaminated sediment (Windward 2003). The East and West Waterways of the Duwamish, which straddle Harbor Island are also the subject of remedial investigations because of contaminated sediments. The Washington State Department of Ecology's 1998 Clean Water Act Section 303(d) List of Impaired and Threatened Water Bodies (Ecology 1998), as well as the draft 2002/2004 Section 303(d) list (Ecology 2005) identify several additional sources of sediment and water quality impairment in the Duwamish Waterway and River.

The Washington state portion of Puget Sound includes the section of the sound stretching from the Washington/Canada border south, running north of the San Juan Islands, and then through the middle of the Strait of Juan de Fuca. Two-thirds of Washington state's population (3,915,000) live within the Puget Sound basin. In addition, the population in this area is expected to increase by 29 percent by the year 2020, with similar increases occurring along the Georgia Strait in British Columbia. This extensive urban development has had a significant impact on the water quality of Puget Sound. Since 1980, one-quarter of the area classified for commercial shellfish harvesting has been downgraded or taken out of production. This downgrade is attributed in part to contaminated stormwater runoff and inadequately treated sewage from municipal water treatment facilities. The Department of Ecology's 1998 Section 303(d) list indicates that the water quality of Elliott Bay is impaired due to the presence of elevated concentrations of heavy metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and other organic compounds (Ecology 1998). The draft 2002/2004 303(d) list also indicates multiple types of impairment (water column and sediment) for Elliott Bay (Ecology 2005).

The surface water quality standards for Washington state are established by the Department of Ecology in Chapter 173-201A of the Washington Administrative Code (WAC 173-201A). Until recently, the state water quality standards were implemented by category. Each water body in the state was assigned to one of several standard classifications (i.e., AA for extraordinary quality, A for excellent quality, B for good quality, C for fair quality, and lake class); and each classification was assigned a standard set of characteristic uses with a standard set of water quality criteria to support that group of uses. In July, 2003, the state water quality standards were amended by the Department of Ecology (WAC 173-210A). However, these changes will not be effective for federal Clean Water Act programs until the revised standards have been approved by the U.S. Environmental Protection Agency (U.S. EPA), which to-date has not occurred (Ecology 2004). The main elements of the proposed new standards are (1) uses that are designated for protection in specific water bodies, (2) narrative and numeric criteria that assist in protecting designated uses, and (3) an antidegradation program that provides additional protection for high-quality waters (WAC 173-201A). The new water body classification system

establishes the level of protection and designated uses for that particular resource and defines the acceptable limits for various water quality parameters. This new classification structure aims to more closely align the protective criteria to the uses and, in turn, to more accurately assign the uses and their associated criteria to specific water bodies. Tables 3-13 and 3-14 outline the proposed new designated uses associated with the Duwamish River (fresh water) and Elliott Bay (marine water), respectively.

Table 3-13. Designated uses of the Duwamish River according to the Washington State Department of Ecology’s amended state water quality standards of July 1, 2003.

Water Body	Designated Uses																	
	Aquatic Life					Recreational			Water Supply				Miscellaneous					
	Char	Core Salmon/Trout	Noncore Salmon/Trout	Salmon/Trout Rearing	Redband Trout	Warm-Water Species	Ex-Primary Contact	Primary Contact	Secondary Contact	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
WRIA 9: Duwamish River from (mouth side of defined line) to Black River (river mile 11.0)				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓

Source: Washington Administrative Code, Chapter 173-201A.
WRIA = water resource inventory area.

Table 3-14. Designated uses of Elliott Bay according to the Washington State Department of Ecology’s amended state water quality standards of July 1, 2003.

Water Body	Designated Use											
	Aquatic Life				Recreation		Shellfish Harvest	Miscellaneous				
	Extraordinary Quality	Excellent Quality	Good Quality	Fair Quality	Primary Contact	Secondary Contact	Shellfish Harvest	Wildlife Habitat	Harvest	Commerce/Navigation	Boating	Aesthetics
Elliott Bay east of line between Pier 91 and Duwamish Head		✓			✓		✓	✓	✓	✓	✓	✓

Source: Washington Administrative Code, Chapter 173-201A.

Impacts

The impacts associated with the Alternative 2 (Harbor Island Terminal 10) are separated into construction-related impacts and impacts associated with long-term operation of the proposed project.

Construction Impacts

Demolition and reconstruction activities at the Harbor Island Terminal 10 site could result in short-term impacts due to erosion associated with clearing and grading activities and due to spills or leaks of toxic construction products and equipment fluids. Soil erosion is typically the greatest water quality concern related to active construction sites, because it can result in offsite deposition of sediments as well as impacts associated with the transport of contaminants that are attached to sediment particles. The primary water quality impact associated with eroded soil and sediments on construction sites is increased turbidity (cloudiness) in downstream waters, which may adversely affect fish and other aquatic organisms. Current state regulations (WAC 173-201A) allow an increase in turbidity in the Duwamish River that can be no more than 10 nephelometric turbidity units (NTU) over background, or 20 percent over background if the background turbidity is more than 50 NTU.

Because the existing Harbor Island Terminal 10 site is already developed, most of the site construction disturbance would occur over soils that have been significantly affected by the existing impervious surfaces. The existing storm drain systems would be either capped or protected from receiving sediment-laden stormwater runoff from the construction site in accordance with the City's grading permit requirements. Therefore, significant transport of sediments to the offsite storm drainage system is not expected. However, given the urban setting, onsite soils adhering to the tires and undercarriages of construction vehicles leaving the site could be transported offsite and deposited on adjacent streets, then carried into nearby storm drains during rain events. Likewise, any soil hauled off the site could be inadvertently spilled onto nearby streets and could enter the storm drain system and ultimately reach downstream surface waters. Construction-phase best management practices will be required to control erosion and sediment transport from the site (see the discussion under the heading "Mitigation Measures").

The history of heavy industrial activity near the Harbor Island Terminal 10 site also indicates a risk that contaminated sediment could be encountered during construction. All of the intermodal sites under consideration are within the heavily industrialized areas of south Seattle, and there is a high likelihood of encountering contaminated soils at these sites. At this time, detailed investigations of site contamination have not been performed. Therefore, it is assumed that there is a risk of soil contamination at all the alternative sites. If contaminated soils are encountered at the Harbor Island Terminal 10 site specifically, the contaminants could be transported to the Duwamish Waterway by means of soil erosion and transport and/or by means of water discharges during the dewatering process. During the construction phase, the use of temporary erosion and sedimentation controls and best management practices (see the discussion under the

heading “Mitigation Measures”), particularly along the perimeter shoreline areas, would be essential for protecting the Duwamish Waterway. Mitigation for potential issues related to contaminated soil is discussed in the subsection “Mitigation Measures.”

The operation of heavy equipment would require fueling and engine maintenance activities that involve oil, grease, solvents, and other toxic engine fluids. These materials could become entrained in stormwater runoff as a result of leaks in material storage areas, spills due to the improper handling of liquids, miscellaneous accidents, drips from the undercarriages of vehicles, the use of water to clean equipment and control dust, and improper disposal of waste liquids. Soils that become contaminated by spills, drips, leaks, equipment washwater, and miscellaneous accidents could carry the adsorbed contaminants offsite if the soil becomes eroded by wind or runoff or transported by vehicles. The types of contaminants that could be adsorbed to soil and sediments include nutrients naturally present in the soils, heavy metals, petroleum hydrocarbons, and organic compounds. This is a particular concern for the Harbor Island Terminal 10 site because of the existing problems with contaminated sediments in the Duwamish Waterway.

Impacts on aquatic life in the Duwamish Waterway could occur if an uncontrolled spill of fuel or other toxic material occurs during construction and the material is transported offsite by stormwater runoff or water from the dewatering process. There is a potential for spills of fuel or other related products from the heavy equipment used for construction. Spilled material could also contaminate shallow ground water beneath the construction site. Lesser impacts could be caused by the cumulative effects of miscellaneous leaks and drips of fuel, antifreeze, solvents, concrete-curing compounds, asphalt emulsifier, paints, and other materials used during construction.

Finally, the removal of existing structures and pavement could result in short-term impacts from dust and debris associated with demolition activities. Water quality impacts typically associated with demolition activities include increased debris loadings to stormwater conveyance systems and increased particulate loadings in runoff that enters receiving waters. Excessive debris loadings to offsite drainage systems may clog drainpipes and decrease the flow conveyance capacity and may also reduce the ability of catch basins to trap other pollutants. Finally, because of the proximity of the Harbor Island Terminal 10 site to the Duwamish Waterway, contaminants associated with dust particles may be transported to the river via wind or surface runoff, resulting in increased pollutant loadings. However, the existing Harbor Island Terminal 10 site is fairly level and already partially developed; therefore, limited sediment-laden surface runoff and construction debris are expected to leave the site.

Operation Impacts

The storm drainage system associated with the Harbor Island Terminal 10 site would be designed in accordance with the City of Seattle’s Stormwater, Grading, and Drainage Control Code and associated Director’s Rules (Seattle 2000). This includes the installation of stormwater treatment facilities for any pollution-generating areas such as site driveways and parking lots. The designs of the stormwater facilities have not been identified or developed at this time, but the treatment

facilities would likely include both a water quality treatment vault and an oil/water separator, media filter, or similar technology for “high-use” sites (Seattle 2000). It is assumed that any material handling, transfer, or storage facilities at the Harbor Island Terminal 10 site either would be covered (protected from precipitation) or would drain to the sanitary sewer system and not to stormwater drainage systems, thereby preventing an impact on water resources. In addition, the intermodal site would be required to obtain Industrial Stormwater General Permits from the Washington State Department of Ecology, which may require additional measures to reduce potential impacts on water resources.

Potential impacts on water resources associated with operation of the Harbor Island Terminal 10 site include risks to water quality associated with truck traffic moving to and from the solid waste intermodal transfer facility, as well as material handling. As described previously, the storm drainage system associated with the Harbor Island Terminal 10 site would include, at a minimum, stormwater treatment facilities for any pollution-generating areas such as site driveways, parking lots, and material storage and handling areas that are exposed to stormwater. However, stormwater treatment facilities are not 100 percent efficient and therefore would allow low levels of pollutants (e.g., sediment, debris, metals, oil, and grease) to reach the Duwamish Waterway. Because there is essentially no pollution-generating activity at the current Harbor Island Terminal 10 site, the net result would be a slight increase in water quality impacts compared to the existing conditions.

Finally, the existing Harbor Island Terminal 10 site is already developed and consists primarily of impervious surfaces. Therefore, the proposed action would not result in increases in impervious surfaces or associated increases in stormwater runoff rates or volumes. As a result, no flow-control-related impacts are anticipated as a result of Alternative 2.

Mitigation Measures

Mitigation for Construction Impacts

Under Alternative 2 (Harbor Island Terminal 10), construction-phase water quality protection efforts would be required according to the City of Seattle grading permit conditions. These efforts should emphasize appropriate erosion and sedimentation controls; prevention of spills, leaks, and drips of toxic materials; control of offsite sediment tracking on vehicle tires; and proper storage and handling of fuels and construction products that are potential sources of contamination.

An emergency spill containment kit should be located on the construction site, and a spill prevention, control, and countermeasures plan should be prepared to address the prevention and cleanup of accidental spills. In addition, best management practices for erosion and sedimentation control should be implemented during the construction phase. Either Seattle Public Utilities or the contractor should prepare and implement a temporary erosion and sedimentation control plan identifying best management practices for erosion and sedimentation control in accordance with the minimum water pollution and erosion control requirements for

City of Seattle and Washington State Department of Ecology construction projects (i.e., National Pollutant Discharge Elimination System [NPDES] construction permit requirements). Additional requirements or modifications of these specifications may be set forth in the contract specifications or related permits.

In accordance with City of Seattle requirements, measures should be included to minimize erosion and offsite sediment transport and to reduce potential water quality impacts on storm drainage systems and receiving waters. The City establishes water pollution and erosion control requirements related to the following:

- Pollution management
- Construction access and roadway management
- Construction sequence for erosion control
- Construction limit and critical area identification
- Onsite materials for erosion control
- Clearing and grubbing
- Onsite stormwater conveyance management
- Dewatering controls
- Sediment trapping
- Temporary stabilization
- Permanent stabilization
- Implementation, inspection, and maintenance of best management practices for erosion control
- Removal of best management practices for temporary erosion control
- Protection of wetlands and adjacent properties.

Because of the potential for contamination at the Harbor Island Terminal 10 site, a formalized plan for removal, treatment, or other management of contaminated soil and ground water also should be prepared prior to any excavation and construction. The soil and ground water management plan should specify methods and procedures for stockpiling, transport, disposal, and treatment of contaminated soil, as well as ground water removal, storage, treatment, discharge (e.g., to sanitary sewer), transport, and disposal. This plan will be developed using the results of more detailed investigations of site contamination after a preferred alternative has been selected.

Adherence to City of Seattle requirements (and any other applicable permit requirements) for construction activities would minimize construction impacts to the maximum extent practical. No additional mitigation is proposed or recommended for potential impacts on water resources resulting from construction of the project under Alternative 2.

Mitigation for Operation Impacts

For the Harbor Island Terminal 10 site, mitigation measures may be necessary to reduce long-term impacts on water resources. Specifically, additional or more efficient stormwater treatment systems than those required by the City of Seattle may be warranted to minimize impacts. In addition, the Industrial Stormwater General Permit for the site may require additional stormwater treatment to ensure no increase in water or sediment quality impacts on the Duwamish Waterway. Alternatively, the project could consider providing offsite stormwater treatment for adjacent existing untreated areas to ensure no overall increase in pollutant loading to the Duwamish Waterway. These issues should be resolved during the development of final designs for stormwater systems for the project.

As described in the discussion of impacts, no increase in surface water runoff rates or volumes is expected under Alternative 2. In addition, flow control of stormwater runoff (for the protection of aquatic resources) is not required for sites draining to the Duwamish Waterway (Seattle 2000).

Significant Unavoidable Adverse Impacts

The combination of a low risk of impacts and the mitigation measures described above is expected to preclude any significant adverse impacts on water resources that might result from Alternative 2 (Harbor Island Terminal 10).

Alternative 3 (Harbor Island Terminal 10/Pendleton)

Affected Environment

The existing Harbor Island Terminal 10 site is briefly described in the previous discussion of Alternative 2. The existing Pendleton site is similar to the Harbor Island Terminal 10 site and is characterized by developed land with limited formal surface water conveyance systems. Likewise, the Pendleton site is primarily gravel and pavement, with small localized areas of stormwater ponding in depressed areas that discharge either in sheet flows onto the adjacent roadway area or directly to the Duwamish Waterway along the site's western boundary. The total site area of the Harbor Island Terminal 10 and Pendleton sites is approximately 23.1 acres. Unlike the Harbor Island Terminal 10 site, activity on the Pendleton site has included railway activity and truck transportation of vegetable oils and raw materials. Concerns related to the current quality of stormwater runoff may include elevated concentrations of grease, oil, and petroleum hydrocarbons associated with the truck traffic, elevated concentrations of organic

contaminants associated with the handling of oilseed material, and increased turbidity due to exposed gravel areas and material stockpiles.

The affected water resource environment for Alternative 3 (Harbor Island Terminal 10/Pendleton) is the same as that discussed for Alternative 2 (Harbor Island Terminal 10).

Impacts

Construction Impacts

For the Harbor Island Terminal 10/Pendleton site, the types of potential construction impacts on water resources would be very similar to those described for Alternative 2 (Harbor Island Terminal 10), but they would be of greater magnitude because of the larger site area (roughly 12.4 acres more of disturbed area than for Alternative 2) and the need for more substantial demolition activity. In particular, the demolition of several of the existing structures on the Pendleton site would pose a greater risk to water quality because it would result in more extensive dust and debris that could inadvertently reach the Duwamish Waterway. No impacts on runoff quantity (runoff rates and volumes) are anticipated because the sites are already developed and consist of predominantly impervious surfaces. In addition, flow control of stormwater runoff (for the protection of aquatic resources) is not required for sites draining to the Duwamish Waterway (Seattle 2000).

Operation Impacts

Impacts associated with the operation of the Harbor Island Terminal 10/Pendleton site would be similar to those described for Alternative 2 (Harbor Island Terminal 10), but slightly greater in magnitude because of the larger site area (12.4 acres more than the area for Alternative 2) and the increased activity associated with facility operations.

Mitigation Measures

Mitigation for Construction Impacts

Construction-phase mitigation measures for Alternative 3 (Harbor Island Terminal 10/Pendleton) would include the same measures outlined for Alternative 2 (Harbor Island Terminal 10), plus more extensive protective measures during the demolition of several existing structures on the Pendleton site. Adherence to these requirements for construction activities would minimize construction impacts to the maximum extent practical. The mitigation measures associated with contaminated soils that were discussed for Alternative 2 would also apply to Alternative 3. The building demolition activities under Alternative 3 would require additional focus on dust and debris containment to prevent adverse short-term effects on the Duwamish Waterway.

Mitigation for Operation Impacts

The measures recommended for mitigating the operation impacts of Alternative 2 (Harbor Island Terminal 10) would also apply to Alternative 3 (Harbor Island Terminal 10/Pendleton). If

additional offsite stormwater treatment is provided (to offset impacts associated with the operation of the site), a larger offsite area may be necessary for Alternative 3 because of the slightly larger site area.

Significant Unavoidable Adverse Impacts

The combination of a low risk of impacts and the mitigation measures described above is expected to preclude any significant adverse impacts on water resources that might result from Alternative 3 (Harbor Island Terminal 10/Pendleton).

Alternative 4 (Corgiat Drive)

Affected Environment

The Corgiat Drive site is located in south Seattle, immediately west of Interstate 5. The site includes approximately 16.6 acres of active and developed area with several site structures, parking areas, and areas for material storage. The site is primarily gravel- and asphalt-covered, with small localized areas of stormwater ponding in depressed areas. The surface water runoff patterns at the site are unclear, and the available information on existing stormwater systems (e.g., stormwater conveyance system maps and “as-built” drawings from the City of Seattle) is inconclusive. Based on the available data, it appears that the site area drains to the nearby stormwater system, with runoff eventually conveyed via a manmade drainage infrastructure (catch basins and pipes) west to the Duwamish Waterway (as discussed in detail for Alternative 2). Concerns regarding the current quality of stormwater runoff may include elevated concentrations of grease, oil, and petroleum hydrocarbons associated with the vehicle traffic and parking on the site, as well as increased turbidity due to the exposed gravel areas. There do not appear to be any stormwater treatment systems on the site.

There are no ground water resources of concern in the vicinity of the Corgiat Drive site. No wells, wellhead protection areas, or sole-source aquifers were identified in the vicinity of the site.

Impacts

Construction Impacts

For the Corgiat Drive site, the types of potential construction impacts on water resources would be very similar to those described for Alternatives 2 and 3 (Harbor Island Terminal 10 and Harbor Island Terminal 10/Pendleton). Demolition and construction activities could result in short-term impacts from fugitive dust and debris, soil erosion (and offsite transport), as well as spills or leaks of fluids from construction equipment. The history of heavy industrial activity near the Corgiat Drive site (and the other proposed intermodal sites) also indicates a risk of encountering contaminated sediment and ground water during construction. If contaminated soils or ground water are encountered, the contaminants could be transported to the Duwamish

Waterway by means of soil erosion and transport and/or by means of water discharges during the dewatering process. Because the existing Corgiat Drive site is fairly level and already partially developed, limited sediment-laden surface runoff and construction debris are expected to leave the site. In addition, because the Corgiat Drive site is not located directly adjacent to a surface water body (as is the case with Alternatives 2 and 3), the risk of impacts on water resources is low. Nonetheless, the use of temporary erosion and sedimentation controls and best management practices during the construction phase (see the discussion under the heading “Mitigation Measures”) would be necessary to protect water quality in the Duwamish Waterway and conveyance capacity in the city storm drain system during construction.

Operation Impacts

The types of impacts on water resources associated with the operation of the Corgiat Drive site would be essentially the same as those described for Alternatives 2 and 3 (Harbor Island Terminal 10 and Harbor Island Terminal 10/Pendleton), which include risks to water quality associated with truck traffic moving to and from the solid waste intermodal transfer facility, as well as material handling. As for Alternatives 2 and 3, required stormwater treatment systems would minimize the operation impacts but would not completely prevent an increase in pollutant loads relative to the existing conditions. Because there is limited activity at the current Corgiat Drive site, the net result would likely be a slight increase in water quality impacts relative to the existing conditions. In addition, the Corgiat Drive site is approximately 6.5 acres smaller than the Harbor Island Terminal 10/Pendleton site (Alternative 3) and 5.9 acres larger than the Harbor Island Terminal 10 site (Alternative 2). No impacts on runoff quantity (runoff rates and volumes) are anticipated because the site is already developed and consists of predominantly impervious surfaces. In addition, flow control of stormwater runoff (for the protection of aquatic resources) is not required for sites draining to the Duwamish Waterway (Seattle 2000).

Mitigation Measures

Mitigation for Construction Impacts

Construction-phase mitigation measures for Alternative 4 (Corgiat Drive) would include the same types of measures outlined for Alternatives 2 and 3 (Harbor Island Terminal 10 and Harbor Island Terminal 10/Pendleton). Because the Corgiat Drive site does not directly border any surface water body, the perimeter containment measures for Alternative 4 would not have to be as robust as those required for Alternatives 2 and 3. Adherence to applicable requirements for construction activities would minimize the construction impacts to the maximum extent practical. No additional mitigation is proposed or recommended for potential impacts on water resources resulting from construction under Alternative 4.

As for Alternatives 2 and 3, because of the potential for contamination at the Corgiat Drive site, a formalized plan for removal, treatment, or other management of contaminated soil and ground water should be required prior to excavation and construction on the site. The soil and ground water management plan should specify methods and procedures for stockpiling, transport,

disposal, and treatment of contaminated soil, as well as ground water removal, storage, treatment, discharge (e.g., to the sanitary sewer), transport, and disposal.

Mitigation for Operation Impacts

The measures recommended for mitigating the operation impacts of Alternatives 2 and 3 (Harbor Island Terminal 10 and Harbor Island Terminal 10/Pendleton) would also apply to Alternative 4 (Corgiat Drive).

Significant Unavoidable Adverse Impacts

The combination of a low risk of impacts and the mitigation measures described above is expected to preclude any significant adverse impacts that might result from Alternative 4 (Corgiat Drive).

Alternative 5 (Edmunds Street)

Affected Environment

The Edmunds Street site is located in south Seattle, just west of Interstate 5. The existing Edmunds Street site covers approximately 7.5 acres, consists of an existing intermodal transfer facility, and is characterized by buildings, as well as paved and gravel areas for vehicle access and parking and material storage. The Edmunds Street site appears to be the most active site of the four alternative sites. Stormwater runoff appears to discharge in sheet flows across gravel and paved areas to manmade stormwater conveyance systems on the site (catch basins and pipes) before being conveyed north to the Duwamish Waterway (as discussed in detail for Alternative 2 [Harbor Island Terminal 10]). Concerns related to the current quality of stormwater runoff may include elevated concentrations of grease, oil, and petroleum hydrocarbons associated with the vehicle traffic and parking on the site, as well as increased turbidity due to the exposed gravel areas. There do not appear to be any stormwater treatment systems on the site.

There are no ground water resources of concern in the vicinity of the Edmunds Street site. No wells, wellhead protection areas, or sole-source aquifers were identified in the vicinity of the site.

Impacts

Construction Impacts

The types of potential impacts on water resources associated with construction of the Edmunds Street site would be very similar to those described for Alternative 4 (Corgiat Drive). Demolition and construction activities could result in short-term impacts from fugitive dust and debris, soil erosion (and offsite transport), as well as spills or leaks of fluids from construction equipment. The history of heavy industrial activity near this site (and the other proposed

intermodal sites) also indicates a risk of encountering contaminated sediment and ground water during construction. If contaminated soils or ground water are encountered, the contaminants could be transported to receiving waters by means of soil erosion and transport and/or by means of water discharges during the dewatering process. Because the existing Edmunds Street site is fairly level and already partially developed, limited sediment-laden surface runoff and construction debris are expected to leave the site. In addition, because the Edmunds Street site is not located directly adjacent to a surface water body (as is the case with Alternatives 2 and 3 [Harbor Island Terminal 10 and Harbor Island Terminal 10/Pendleton) and is the smallest of the alternative sites under consideration, the risk of impacts on water resources is low. Nonetheless, the use of temporary erosion and sedimentation controls and best management practices during the construction phase (see the discussion under the heading “Mitigation Measures”) would be necessary to protect water quality in the Duwamish Waterway and conveyance capacity in the city storm drain system during construction.

Operation Impacts

Because the Edmunds Street site is an existing intermodal transfer facility and does not appear to include updated stormwater treatment facilities, the proposed development (and associated stormwater facility upgrade) would result in an improvement in the quality of stormwater leaving the site compared to the existing conditions. Specifically, pollutant loading from roadway and parking areas would be reduced due to improved stormwater runoff facilities. Likewise, areas that are proposed to be used for material handling, transfer, or storage would be designed to drain either to stormwater treatment systems or to the sanitary sewer system. Therefore, the operation of the Edmunds Street site is expected to result in a decrease in adverse impacts on surface waters compared to the existing conditions. No impacts on runoff quantity (runoff rates and volumes) are anticipated because the site is already developed and consists of predominantly impervious conditions. In addition, flow control of stormwater runoff (for the protection of aquatic resources) is not required for sites draining to the Duwamish Waterway (Seattle 2000).

Mitigation Measures

Mitigation for Construction Impacts

Construction-phase mitigation measures for Alternative 5 (Edmunds Street) would include the same types of measures outlined for Alternative 4 (Corgiat Drive).

As for the other three action alternatives, because of the potential for contamination at the Edmunds Street site, a formalized plan for removal, treatment, or other management of contaminated soil and ground water should be required prior to excavation and construction on the site. The soil and ground water management plan should specify methods and procedures for stockpiling, transport, disposal, and treatment of contaminated soil, as well as ground water removal, storage, treatment, discharge (e.g., to the sanitary sewer), transport, and disposal.

Adherence to applicable requirements for construction activities would minimize the construction impacts to the maximum extent practical. No additional mitigation is proposed or

recommended for potential impacts on water resources resulting from construction under Alternative 5 (Edmunds Street).

Mitigation for Operation Impacts

Because the proposed development of the Edmunds Street site would require the design of permanent stormwater treatment facilities in accordance with the City of Seattle's Stormwater, Grading, and Drainage Control Code and associated Director's Rules (Seattle 2000), mitigation for long-term operation of these facilities (i.e., inclusion of stormwater treatment systems) is discussed in the previous subsection "Impacts," under the heading "Operation Impacts." Adherence to City requirements would minimize the operation impacts to the maximum extent practical. The operation of the Edmunds Street site is expected to result in a decrease in adverse impacts on surface waters compared to the existing conditions. Therefore, no additional mitigation is proposed or recommended for potential impacts on water resources resulting from operation of the project under Alternative 5.

Significant Unavoidable Adverse Impacts

The combination of a low risk of impacts and the mitigation measures described above is expected to preclude any significant adverse impacts that might result from Alternative 5 (Edmunds Street).

Alternative 1 (No Action)

Construction Impacts

Under Alternative 1, no project-related development would occur at any of the alternative sites. Therefore, the construction-related impacts on water resources would be negligible.

Operation Impacts

Under Alternative 1, all the alternative sites would continue to operate with substandard stormwater treatment facilities. Although the sites currently contain some stormwater treatment facilities (e.g., oil/water separators), the sites are likely contributing some pollutants to the Duwamish Waterway. These ongoing impacts could exacerbate the existing water quality problems and sediment contamination in both receiving water systems.

Comparative Summary of Alternatives

Each of the action alternatives is associated with a similar level of risk of impacts on water resources. The relative impacts anticipated for each alternative can be summarized as follows:

- All the action alternatives pose a risk of encountering contaminated soils and ground water. The selected alternative should develop and adhere to specific plans for removal, treatment, or other management of contaminated soil and ground water prior to excavation and construction on the site.
- The size of each alternative site reflects the relative amount of water quality pollution that could be generated (and therefore could leave the site and enter downstream waterways) during both construction and operation. The site areas for Alternatives 2 through 5 are 10.7 acres (Harbor Island Terminal 10), 23.1 acres (Harbor Island Terminal 10/Pendleton), 16.6 acres (Corgiat Drive), and 7.5 acres (Edmunds Street).
- Among the four action alternatives, Alternative 5 (Edmunds Street) is the least likely to result in impacts on water resources relative to the existing conditions. Because the Edmunds Street site is already an active intermodal transfer facility, redeveloping it as a similar facility with upgraded stormwater treatment systems is expected to result in a net reduction in pollutant loads to surface waters. The Edmunds Street site is also the smallest of the alternative sites under consideration. The construction impacts would be minor, assuming that the required construction-phase best management practices and mitigation measures are implemented.
- Alternative 4 (Corgiat Drive) is expected to result in only slightly greater impacts on water resources relative to Alternative 5 (Edmunds Street). The Corgiat Drive site is already developed but does not have the level of existing activity that the Edmunds Street site has. Therefore, the site development and inclusion of stormwater treatment facilities is not expected to result in a net improvement in water quality conditions (because the existing impacts are negligible). The construction impacts would be minor, assuming that the required construction-phase best management practices and mitigation measures are implemented.
- Alternative 2 (Harbor Island Terminal 10) poses a risk of impacts similar to that of Alternative 4 (Corgiat Drive). However, the close proximity of the Harbor Island Terminal 10 site to the Duwamish Waterway increases the risk of both construction impacts and operation impacts on water resources. Providing stormwater treatment for currently untreated areas in the site vicinity would mitigate any operation impacts and could result in a net benefit equal to or greater than that expected under Alternative 5 (Edmunds Street).

- Alternative 3 (Harbor Island Terminal 10/Pendleton) poses a greater risk to water resources, although only slightly greater than the risk associated with similar Alternative 2 (Harbor Island Terminal 10). The increased risk is a result of the larger site area. As with Alternative 2, providing stormwater treatment for currently untreated areas in the site vicinity would mitigate any operation impacts and could result in a net benefit equal to or greater than that expected under Alternative 5 (Edmunds Street).

Hazardous Materials

This section discusses the potential associated with each alternative for encountering released hazardous materials that could result in long-term cleanup or short-term control requirements for the project or that could increase risks to human health and the environment. It also discusses the potential for the introduction of new sources of hazardous materials contamination (e.g., petroleum products associated with construction vehicles and equipment).

Facilities or properties that have released hazardous materials or waste to the environment or that manage hazardous materials or waste in significant quantities are required to report these activities to both federal and state regulatory agencies. The first step in evaluating the potential for encountering existing hazardous materials or contamination consisted of reviewing current databases maintained by these agencies. Records were obtained using Environmental Data Resources, Inc. (EDR), a commercial database search service that searches records maintained by the U.S. Environmental Protection Agency (U.S. EPA) and the Washington State Department of Ecology. EDR database searches were conducted for the Harbor Island Terminal 10, Pendleton, Corgiat Drive, and Edmunds Street sites. The executive summary from each EDR database search report, including maps with site identification locations, is provided in Appendix F.

Also reviewed were Sanborn Fire Insurance Maps, which include information about historical uses of properties and, in some cases, may indicate the presence of underground storage tanks (USTs), the names of businesses, the types of business conducted, and the types of activities performed. Sanborn Maps were reviewed for the Harbor Island Terminal 10, Pendleton, Corgiat Drive, and Edmunds Street sites (Sanborn Maps 1905–1968).

Project staff identified and classified sites within 1 mile of the alternative sites according to whether (1) chemical releases from the site to the environment have been identified or (2) hazardous materials are managed at the site, but no release has been identified. Project staff mapped known sites within and adjacent to each of the alternative sites. In addition, project staff reviewed regulatory files compiled for each site with a reported environmental release to determine the magnitude of impact to the environment; the potential to affect project construction; and the potential to affect the health or safety of workers, residents, or travelers.

Hazardous Materials Regulations

Hazardous materials may be classified into various categories according to the laws and regulations that define their characteristics and use. These classifications include hazardous waste, dangerous waste, hazardous substances, and toxic substances, which are regulated by the following laws:

- The federal Resource Conservation and Recovery Act (RCRA) defines *hazardous waste*.
- The state Hazardous Waste Management Act provides for *dangerous waste* regulations that are consistent with and at least as stringent as the federal hazardous waste requirements.
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, defines *hazardous substances*.
- The state Model Toxics Control Act (MTCA) indicates appropriate responses to the release of hazardous substances to the environment, including releases of petroleum products that are not covered under federal statutes.
- The federal Toxic Substances Control Act (TSCA) addresses *toxic substances*, primarily applicable to polychlorinated biphenyls (PCBs) for this project.

Site Categories

Hazardous materials sites within 1 mile of the alternative sites fall into two categories: documented release sites and potential release sites.

Documented Release Sites

Documented releases to the environment as identified in regulatory agency files, directly affect soil or ground water or both. Releases to soil generally are limited in lateral extent and would result in potential impacts when found directly on the subject property for each alternative. Releases to ground water tend to extend farther away from the area of origin and can potentially result in impacts even when the source is located beyond the proposed project area.

Potential Release Sites

A potential for release is based on the activity registered with regulatory agencies, the development of site activities evident from historical documentation (e.g., a foundry site that became a service station and then was developed for an office building), or the current activity evident from visual observation (e.g., junk yard).

Known and Potential Hazardous Materials Sites

Sites within 1 mile of the alternative intermodal sites that have been identified as having had a reported release of hazardous materials to the environment or having a potential for a release are summarized below. A review of regulatory files for sites with reported releases identified the extent of contamination determined through past characterization efforts. Recorded releases to soil only may have also affected ground water, but ground water may not have been investigated.

Potential release sites were identified based on the following information:

- Reported current activities (e.g., hazardous waste generator)
- Reported current features (e.g., registered USTs)
- Recorded historical features (e.g., mapped tank farm)
- Visually identified activity or feature.

Sites with a potential for releases have not been characterized and may or may not have soil or ground water contamination. Sites of the highest concern include documented release sites located either on properties planned for construction (defined by the building footprint) or other development (i.e., surface parking, landscaping, or utilities).

Alternative 2 (Harbor Island Terminal 10)

Affected Environment

The Harbor Island Terminal 10 intermodal site consists of one parcel (subject property) totaling 10.7 acres (Figure 2-2). The southern portion of the site was occupied by a shipbuilding company in the early 1900s, whereas the northern portion was undeveloped. By the 1950s, the entire site was used for shipbuilding, which continued until the mid-1980s, when Lockheed-Martin closed its plant. The shipbuilding structures have been dismantled, and the Port of Seattle is the current property owner.

Impacts

A summary of regulatory database information and material from the Department of Ecology for the Terminal 10 site and surrounding properties is provided in Appendix G.

Documented Release Sites

- Lockheed Shipbuilding (subject property)
- Harbor Island Superfund site (subject property)
- Pendleton Flour Mills (adjacent property)
- Seafab Metal Surface Impoundment (adjacent property)
- BP West Coast Products (adjacent property).

Petroleum hydrocarbons and lead were released to soil and ground water from former USTs located at the former shipbuilding site. Elevated concentrations of volatile organic compounds (trichloroethylene [TCE] and tetrachloroethylene PCE)) and metals (copper, lead, and zinc) have been detected in ground water. The subject property is considered part of the Harbor Island Superfund site; the Record of Decision (ROD) indicated hot spot cleanup levels of 10,000 mg/kg for total petroleum hydrocarbons.

Petroleum hydrocarbons were released to soil and ground water from two former diesel USTs at the Pendleton Flour Mills to the south. Petroleum-contaminated soil was removed, but a sheen was visible on the ground water surface. This site is considered crossgradient of the subject property and contaminated ground water is unlikely to affect the subject property.

The Seafab Metal Surface Impoundment is located to the east, on the east side of 16th Avenue SW. The impoundment consists of several closed wastewater settling ponds containing battery chips from recycling automotive batteries. A lead smelter operated on the site from 1937 to 1984. Copper, cadmium, nickel, and zinc concentrations have exceeded the MTCA cleanup criteria. Contaminated ground water from this site could potentially affect the subject property.

The BP West Coast Products site is located adjacent to the north. It includes the former ARCO tank farm located north of SW Lander Street, which is now operated by BP, and a tank farm (USTs) located south of SW Lander Street, which is operated by Pacific Pride. A pump-and-treat system is currently in operation along the western bulkhead, north of SW Lander Street. Gasoline-range petroleum hydrocarbons remain in soil in the southeastern portion of the BP property, north of SW Lander Street. Ground water reportedly flows in a southwesterly direction toward the former Lockheed property. Sheet piling was installed along the south end of SW Lander Street to prevent contaminated ground water from entering the former Lockheed property. Contaminated ground water from this site could potentially affect the subject property.

Potential Release Sites

- Pacific Rendering Company (adjacent property)
- Seattle Port Terminal 18/Walashek Industrial Marine (adjacent property).

The Pacific Rendering Company and Seattle Port Terminal 18/Walashek Industrial Marine sites each contain USTs, have had no documented releases, and are unlikely to affect the proposed construction activities.

Mitigation Measures

An environmental site assessment would be completed for the preferred alternative, prior to construction. The assessment would be used to create a detailed site map of historical and current site conditions pertaining to the use of hazardous materials. Reports of site characterizations and remediation would be used to delineate areas of residual soil and ground water contamination. The proposed construction plans would be compared to these maps, and

site remediation would be performed, if necessary, prior to construction. In addition, a formalized plan for removal, treatment, or other management of contaminated soil and ground water would be required, prior to construction. Public health and safety measures would be implemented to minimize exposure through both airborne and direct contact routes. Increased setbacks, additional barriers to public access, and expeditious removal of contaminated materials may be required to limit contact by the public. The health and safety plan would also identify measures to ensure construction worker safety, outline emergency medical procedures, and specify reporting requirements.

The management plan for contaminated soil and water required for construction would specify methods and procedures for stockpiling, transporting, disposing of, and treating contaminated soil, as well as removing, storing, treating, discharging (to sewer), transporting, and disposing of ground water. Most encounters with hazardous materials are expected to involve petroleum products that can be managed using relatively standardized approaches.

The design documents would include specifications for controlling contractor activities associated with the use of hazardous materials, such as fuels, lubricants, and solvents that may be used during construction. Management of these items and the activities associated with them would be prescribed in the required plans, and the actions would be reviewed by inspectors in the field.

Throughout the construction process, encounters with hazardous materials would be documented and reported appropriately. Project planning would accommodate regulatory agency requirements as well as disposal or treatment facility requirements.

Potential impacts could be minimized by avoiding contaminated sites or portions of sites, as practical. Minimizing encounters with hazardous materials would reduce exposure risk, as well as potential delays, construction costs, and liability associated with site cleanup. Conversely, avoiding contaminated sites would also reduce the opportunity for beneficial impacts associated with cleanup.

Properties left with residual contamination in excess of standard or negotiated cleanup levels would be clearly identified in documentation provided to the Department of Ecology. Filing of restrictive covenants may be required for certain properties to place limits on property transfer, as well as to stipulate allowable conditions for future invasive work.

Significant Unavoidable Adverse Impacts

Under Alternative 2 (Harbor Island Terminal 10), no known significant unavoidable adverse impacts are associated with hazardous materials.

Alternative 3 (Harbor Island Terminal 10/Pendleton)

Affected Environment

The Harbor Island Terminal 10/Pendleton intermodal site consists of eight parcels totaling 23.1 acres (Figure 2-4). The Harbor Island Terminal 10 site is discussed in the previous section. The Pendleton property consists of seven parcels that were used for processing and storing flour for over 100 years. The property is currently being used for grain product packaging, storage, and shipment, but the grain silos, warehouses, and other buildings remain empty for the most part.

Impacts

A summary of regulatory database information and material from the Department of Ecology for the Pendleton property, the Harbor Island Terminal 10 site, and the surrounding properties is provided in Appendix G. The same documented and potential release sites discussed for Alternative 2 (Harbor Island Terminal 10) apply to Alternative 3. The release at the Pendleton Flour Mills site is considered to be on the subject property for Alternative 3.

Mitigation Measures

The mitigation measures discussed for the Harbor Island Terminal 10 site (Alternative 2) also apply to the Harbor Island Terminal 10/Pendleton site (Alternative 3).

Significant Unavoidable Adverse Impacts

Under Alternative 3 (Harbor Island Terminal 10/Pendleton), no known significant unavoidable adverse impacts are associated with hazardous materials.

Alternative 4 (Corgiat Drive)

Affected Environment

The Corgiat Drive intermodal site consists of 10 parcels totaling 16.6 acres (Figure 2-6). The north-central portion of the site was initially developed as a soap factory (North Coast Soap Company) in the 1920s. The factory continued to produce soap and other cleaning products until it closed in 1991 (the name of the company became North Coast Chemical some time after 1930). The plant was destroyed by fire in 1954, and rebuilt in 1956; a portion of the plant was destroyed by fire again in 1990. The site was razed and covered with asphalt pavement. Currently, it is occupied by a concrete block company.

Seattle Lighting Company operated a gas plant on the parcel south of the soap factory in the 1920s. The gas plant was listed as the Seattle Gas Company in 1949 and Washington Natural

Gas in 1966. Puget Sound Energy currently uses the property for offices and a maintenance yard.

Marine Vacuum Services operates a processing plant for nonhazardous waste that is collected in vacuum trucks from spills, sumps, ship bilges, and oil-water separators on the parcel to the north of the former soap company. The remaining parcels contain warehouses, office space, and parking.

Impacts

A summary of regulatory database information and material from the Department of Ecology for the Corgiat Drive site and surrounding properties is provided in Appendix G.

Documented Release Sites

- Puget Sound Energy/PSE Georgetown Base (subject property)
- Seattle Lighting Company (subject property)
- North Coast Chemical Company (subject property)
- Marine Vacuum Service Inc. (subject property).

Petroleum hydrocarbons were released to soil and ground water from a former gasoline UST at Puget Sound Energy. Ground water and free product were encountered in the tank excavation at depths of 10 to 12 feet below the ground surface, but petroleum hydrocarbon concentrations detected in surrounding monitoring wells were less than the MTCA method A cleanup criteria. The Puget Sound Energy site was also listed in the coal gas facility database, but no additional file information was available.

The former North Coast Chemical Company had a release of organic chemicals to soil and ground water. Concentrations of PCE, vinyl chloride, and TCE in excess of the MTCA method B cleanup criteria remain in ground water.

The Marine Vacuum Service had a reported release of metals and petroleum hydrocarbons to soil and ground water. No additional information regarding the site was available in the file.

Potential Release Sites

- Gibson Company (subject property)
- Ferguson property (subject property)
- Lester Corp DBA Universal Printing (subject property)
- CDT Oil Company Inc. (subject property).

The Gibson Company, Ferguson property, and CDT Oil Company each have USTs, and the Lester Corp is a small-quantity generator. There are no documented releases associated with

these four potential release sites listed on the subject property, but they may have had unreported releases that could potentially affect the proposed construction activities.

Mitigation Measures

The mitigation measures discussed for the Harbor Island Terminal 10 site (Alternative 2) also apply to the Corgiat Drive site (Alternative 4).

Significant Unavoidable Adverse Impacts

Under Alternative 4 (Corgiat Drive), no known significant unavoidable adverse impacts are associated with hazardous materials.

Alternative 5 (Edmunds Street)

Affected Environment

The Edmunds Street intermodal site consists of four parcels totaling 7.5 acres (Figure 2-8). In the early 1900s, the southernmost parcel was occupied by a grain company with a spur to the railroad. The parcel to the north bordering the railroad was occupied by a company that manufactured wire rope for over 50 years, after which the parcel was used by a trucking facility. Both of these parcels are currently used by the railroad as intermodal facilities.

A cabinet shop occupied the northeastern parcel for many years, and a warehouse was located on the parcel to the south. Currently, the northeastern parcel is used for industrial purposes, and the warehouse to the south is occupied by a paper merchant and power equipment distributor.

Impacts

A summary of regulatory database information and material from the Department of Ecology for the Edmunds Street site and surrounding properties is provided in Appendix G.

Documented Release Sites

- Consolidated Freightways/Alltrans Express Division TNT Canada (subject property)
- Seattle Barrel and Cooperage (adjacent property)
- Federal Express (adjacent property)
- SAMIS Land Company (adjacent property)
- Alaska Street/Steam Supply and Rubber (adjacent property).

Petroleum hydrocarbons were released to soil and ground water from a former Bunker C tank at Consolidated Freightways. Ground water was encountered at 9 feet below the ground surface during soil excavation and removal. Over 5,000 gallons of ground water were pumped from the excavation and treated offsite; petroleum-contaminated soil was removed from the site. A second source of petroleum hydrocarbon contamination was suspected, but a geophysical survey identified no other potential sources. The Department of Ecology determined that no further action was required for soil. The site could potentially affect the proposed construction activities.

Seattle Barrel and Cooperage is located on adjacent property to the east, across Airport Way South. The facility cleans 55-gallon drums, is a RCRA generator, and has a discharge permit for the sanitary sewer. A discharge violation was reported but is not expected to affect the proposed construction activities.

Ground water flow is reportedly to the north, based on monitoring wells completed on three adjacent sites north of South Edmunds Street, including Federal Express, SAMIS Land Company, and Alaska Street/Steam Supply and Rubber. TCE has been detected in ground water at each of the sites at concentrations exceeding the MTCA method A cleanup criterion. Reports for all three sites indicate the possibility of an upgradient source of the contamination. Because the subject property is immediately upgradient of these sites and solvents have historically been used on the property, there is a potential for solvent contamination in soil and ground water.

Potential Release Sites

- Historical use of solvents on subject property
- SAMIS Foundation (adjacent property)
- Olympic Foundry (adjacent property).

On the basis of the detection of volatile organic compounds in downgradient wells, it is suspected that a release of solvents may have occurred on the subject property. The presence of solvents in soil and ground water could affect the proposed construction activities.

The SAMIS Foundation and Olympic Foundry sites are RCRA small-quantity generators, have no documented releases, and are not expected to affect the proposed construction activities. The SAMIS Foundation property may be a part of the SAMIS Land Company site, with documented releases to soil and ground water.

Mitigation Measures

The mitigation measures discussed for the Harbor Island Terminal 10 site (Alternative 2) also apply to the Edmunds Street site (Alternative 5).

Significant Unavoidable Adverse Impacts

Under Alternative 5 (Edmunds Street), no known significant unavoidable adverse impacts are associated with hazardous materials.

Alternative 1 (No Action)

Under Alternative 1, no known release sites would be affected by the continuation of existing operations. Contamination that would otherwise be cleaned up or controlled during the implementation of the project would remain, with a potential to migrate. Also, potential existing sources (such as USTs) would remain in place and could result in releases.

Comparative Summary of Alternatives

The sites associated with Alternatives 2 through 5 have reported releases of volatile organic compounds to soil and ground water. Volatile organic compounds are more persistent in the environment than petroleum hydrocarbons and would be more expensive to dispose of or treat if encountered during construction. If these compounds are determined to fall under the jurisdiction of RCRA, additional disposal or treatment costs could be incurred. The Edmunds Street site (Alternative 5) reportedly had a release of petroleum hydrocarbons to soil and ground water. It has been cleaned up and the Department of Ecology has determined that no further action is required for soil. However, three downgradient properties immediately adjacent to the Edmunds Street site have reported detections of volatile organic compounds to ground water, indicating the Edmunds Street site as a possible source.

At the sites associated with Alternative 2 through 5, the reported depth to ground water is comparable, ranging from 9 to 12 feet below the ground surface. Based on the hazardous materials information available at this time, Alternatives 2 through 5 do not differ significantly.

Public Services and Utilities

During the scoping process, Seattle Public Utilities received no comments regarding public services and utilities. All the sites considered under the action alternatives are located on property previously or currently occupied by industrial uses. The proposed solid waste intermodal transfer facility is not expected to create any additional or unusual demand for services and utilities or to disrupt the existing utility service.

Seattle Public Utilities did identify solid waste services as a utility that could be adversely affected by Alternative 1 (No Action). The following text focuses on these potential impacts.

Alternatives

Affected Environment

The following description of Seattle's existing solid waste management has been excerpted from the 1998 solid waste plan titled *On the Path to Sustainability* (Seattle 1998a).

Seattle's waste is managed by a combination of services provided directly by the City of Seattle, private companies under contract with the City, state-regulated haulers, and recycling companies operating in a freely competitive market. The City of Seattle contracts with Waste Management, Inc., for solid waste disposal at Waste Management's Columbia Ridge Landfill in Arlington, Oregon. The current contract with Waste Management ends in 2028. Under current operations, waste to be disposed of is compacted into shipping containers at the two city transfer stations (the North Recycling and Transfer Station and the South Recycling and Transfer Station) and at two privately owned transfer stations (the Eastmont Transfer Station operated by Waste Management, Inc., and Rabanco's Recycling, Transfer, and Intermodal Facility operated by Allied Waste Industries) and then trucked to the Argo Intermodal Yard in south Seattle, where the containers are loaded onto trains for transport to the Columbia Ridge Landfill.

As described in Part 2 of this EIS, the current system is inefficient because the Rabanco facility is the only station that was originally designed to load intermodal containers, and all four stations lack the capacity for significant expansion. In addition, the intermodal containers must be trucked to a separate loading facility to be loaded onto trains for transport to the landfill in Arlington.

Impacts

Any one of the action alternatives would resolve the inefficiencies in the solid waste management system described above by combining a waste receiving facility with a container loading facility, by having sufficient space on nearby railroad tracks to build a train of sufficient length to accommodate the accumulated waste, and by having access to both Union Pacific

Railroad and Burlington Northern Santa Fe Railway lines and other modes of transportation. A separate facility for solid waste containerization and railway car loading would ensure the long-term availability of a suitable facility with adequate long-term capacity for waste transfer by means of a variety of transportation modes in a competitive manner.

Alternative 1 (No Action) by contrast would perpetuate the existing inefficient system and result in adverse long-term impacts on customers and ratepayers.

Mitigation Measures

No mitigation would be necessary under any of the action alternatives.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on public services and utilities would result from any of the action alternatives. Alternative 1 (No Action) would result in a significant unavoidable adverse impact on solid waste services in Seattle.

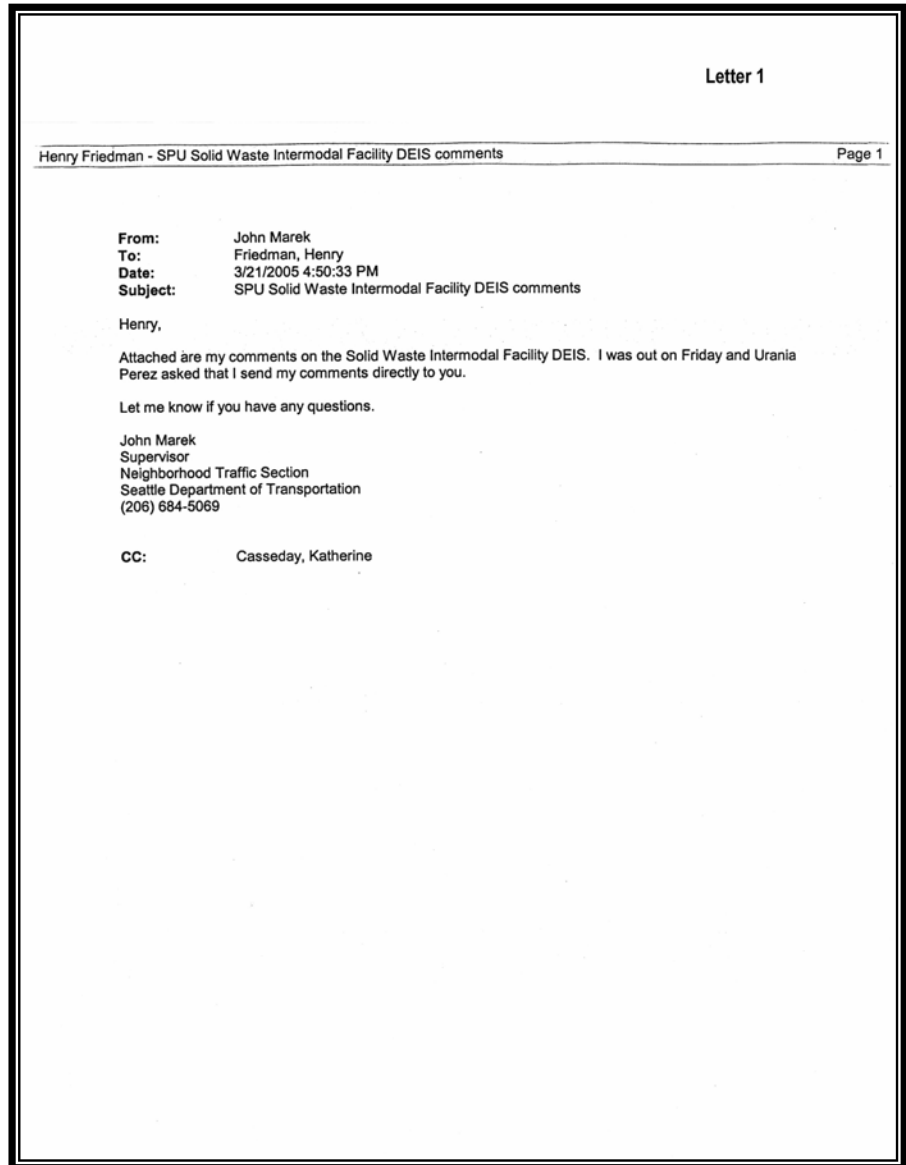
Comparative Summary of Alternatives

There is no difference in impacts among the action alternatives.

**Part 4: Comments on the
Draft Supplemental EIS and Responses**

Comments on the Draft Supplemental EIS and Responses

Letter 1 – John Marek, Seattle Department of Transportation



Letter 1 – John Marek, Seattle Department of Transportation (continued)

1.1—The development of a new solid waste intermodal transfer facility would not generate new vehicle trips. It simply would add one more facility to the network of solid waste transfer facilities to which Seattle Public Utilities could direct vehicles. The collection vehicles could continue to use the existing facilities in the future, or they could be redirected to the new intermodal transfer facility. In all likelihood, there would be a little of both.

The purpose of the EIS traffic modeling effort was to identify the maximum possible impact of the proposal in the future. The modeling results indicate a worst-case scenario with regard to traffic and do not necessarily represent the most efficient method of operation. However, one of the goals of the utility is to operate in an efficient manner that minimizes traffic impacts. Actual traffic routing will be modified on a routine basis to maximize efficiency and avoid traffic delays.

1.2—For planning purposes, Seattle Public Utilities (SPU) modeled the majority (more than 98 percent) of the municipal solid waste and yard waste collection trucks as going

directly to the intermodal transfer facility to unload in order to account for the maximum probable impact of the proposed facility. In actual practice, the traffic flow between stations changes frequently. However, SPU anticipates that in the future, a large percentage of the collection trucks would be directed to the intermodal facility on a regular basis, but probably not as many trucks as the number that was modeled for the studies related to this supplemental environmental impact statement (EIS). Some routes would be shorter and some would be longer if all the collection trucks are directed to the intermodal facility to unload. The net difference would be relatively small.

1.3—The addition of a city-owned intermodal transfer facility is not expected to have any different impacts on peak commute times along Interstate 5 or State Route 99, other than travel to and from the existing intermodal facilities.

1.4—The development of a new intermodal transfer facility would result in no new collection routes. Collection routes are adjusted frequently to maximize collection efficiency, prevent overweight conditions, avoid construction zones, and avoid traffic delays. The routing would continue to be flexible to maximize collection efficiency and minimize adverse impacts.

Letter 1-2

Solid Waste Intermodal Transfer Facility DEIS Comments

The proposed plan for the intermodal facility is to redirect the majority of residential and commercial collection trucks from the recycle / disposal stations to the intermodal facility. While this would reduce the number of short haul truck trips from NRDS and SRDS to the railheads, what impact does this have on collection trips?

1 |

2 | 1. Do collection routes times and trip lengths increase with the added travel distance to get to the intermodal facility?

3 | 2. What impact will new collection routes have on peak commute times along I-5 Highway 99?

4 | 3. How will new collection routes be impacted by peak commute times?

5 | 4. If collection trip lengths and times increase, will additional trucks be needed to maintain current service levels? What impact would this have pavement conditions / wear and on air quality.

6 | 5. What is the impact on total truck miles factoring in the reduced number of short haul trips?

Alternative 2 and 3 comments (Harbor Island site)

7 | This alternative was studied using based on conditions that the proposed Port project to reconstruct East Marginal Way to grade separate the roadway and railroad crossing. What are the impacts if the grade separation project does not occur or is substantially delayed?

Alternative 4 (Corgiat Drive)

It is estimated that 80% of the traffic will be coming from the north via I-5. While there in bound access is relatively direct from south bound I-5, it appears that the majority of exiting truck traffic will be traveling through the Georgetown area specifically along S. Stanley Avenue S, Bailey Street, and S Michigan Street.

8 | 1. What impact will increased truck traffic have on Georgetown area?

9 | 2. What will be impact at Bailey and Carleton Avenue S intersection as trucks route back to I-5.

10 | Corgiat site is also located relatively close to King County International Airport. Debris on runways may present safety concerns. Look at design features or necessary safety measures needed to ensure debris from facility or collecting trucks does not impact airport operations.

1.5—Adding a city-owned intermodal transfer facility would not necessarily result in a net increase in collection trip lengths or travel times. Under a scenario where almost all (more than 98 percent) of the municipal solid waste and yard waste collection trucks would be directed to a city-owned intermodal facility, there would be a net increase of approximately 17 percent in the number of miles traveled in a year. This increase would occur primarily on main arterial roads that are designed to handle trucks. This scenario would also result in a small net decrease in miles driven on the more vulnerable residential streets and alleys. The net increase in mileage would have negligible impacts on the condition and wear of pavement because the overall increase would be relatively small and most of the main arterial roads are designed to handle truck traffic.

The impacts on air quality are also estimated to be small (see Tables 4 and 5 in Appendix E). The use of low-emission vehicles in the future is also expected to minimize impacts on air quality because of lower emissions from garbage trucks.

1.6—Under a scenario where almost all (more than 98 percent) of the collection trucks that haul municipal solid waste and yard waste would be directed to a city-owned intermodal transfer facility, there would be a net increase of 80,000 miles per year (a 17 percent increase). As indicated in the response to question 5 above, almost all of the additional miles would be driven on main arterial roads.

1.7—The Port of Seattle does not anticipate any significant delays in the East Marginal Way grade-separation project, which is now funded. Because the design work for the intermodal transfer facility has not begun, it is likely that the East Marginal Way project will precede the operation of the intermodal facility. However, there would be additional blockage periods at these intersections if the grade separation is not constructed.

1.8—A majority of the collection trucks currently park in Georgetown, and they start and finish their routes in Georgetown. When the City of Seattle solicits bids for the collection contracts (bidding typically occurs every 7 years), the location of the truck yard could change, and the traffic that is routed through Georgetown could change. An additional analysis for an intersection in the heart of Georgetown has been performed, and the results are provided in this final supplemental EIS. The analysis is described in the following response.

1.9—New traffic counts and analysis were performed for the 13th Avenue South/South Bailey Street/Stanley Avenue South intersection. This all-way-stop intersection currently operates at level of service (LOS) B. If the project is not implemented, the level of service at this intersection would decline to LOS C by the year 2028 because of an increase in background traffic. Additional traffic generated by the new intermodal transfer facility would degrade operations at this intersection to LOS D. This is an acceptable level of service in Seattle, and changes in neither the lane geometry nor traffic control would be needed. Trucks from the Corgiat Drive site would also turn right from westbound South Bailey Street onto the Interstate 5 on-ramp. These right-turn movements would not be critical during the peak hours and are not expected to degrade operations at the intersection.

1.10—All transfer facilities are required to be designed and operated in a manner that controls litter. Putrescible solid waste and other solid waste that could become mobile would be handled within the main, enclosed transfer building. All putrescible or otherwise potentially mobile solid waste that is stored outside the main transfer building would be compacted and contained in sealed intermodal containers. Regulations require facility or collection trucks that leave the site to cover or secure all solid waste loads to avoid incidental spillage of solid waste.

Letter 1 – John Marek, Seattle Department of Transportation (continued)

1.11—Trucks arriving from the north on Interstate 5 would exit to South Forest Street, turn left to Sixth Avenue South, and then travel southbound across South Spokane Street to the Edmunds Street site. Trucks traveling to the Edmunds Street site from the south could elect to exit Interstate 5 in Georgetown and head north on Airport Way South. Any trucks that take the Spokane Street exit would have to make a U-turn west of Sixth Avenue South and then turn right onto Sixth Avenue to access the site. The routing of collection truck traffic is very flexible, and the refuse collection companies under contract with Seattle Public Utilities would determine the most efficient routing for their trucks. Given the low peak-hour volume of trucks, there should be no operational issues associated with these through or right-turn movements at the South Spokane Street/Sixth Avenue South intersection.

1.12—Please see the response to the previous question for a discussion of the Sixth Avenue South/South Spokane Street intersection. Trucks traveling through the Sixth Avenue South/Industrial Way South intersection would be coming to and from the north. These trucks would be taking southbound left turns or westbound right turns, which are not expected to be difficult movements at this low-volume intersection.

Letter 1-3

Alternative 5 (S. Edmunds)

S. Edmunds site does not have direct access from I-5. It is assumed that majority of trips generated by this site would be from the north and would arrive and depart via Spokane Street.

11 | 1. How would trips access site from Spokane Street off ramp? Currently left turns are restricted from westbound Spokane St to southbound 6th Avenue South. What are impacts to alternative route?

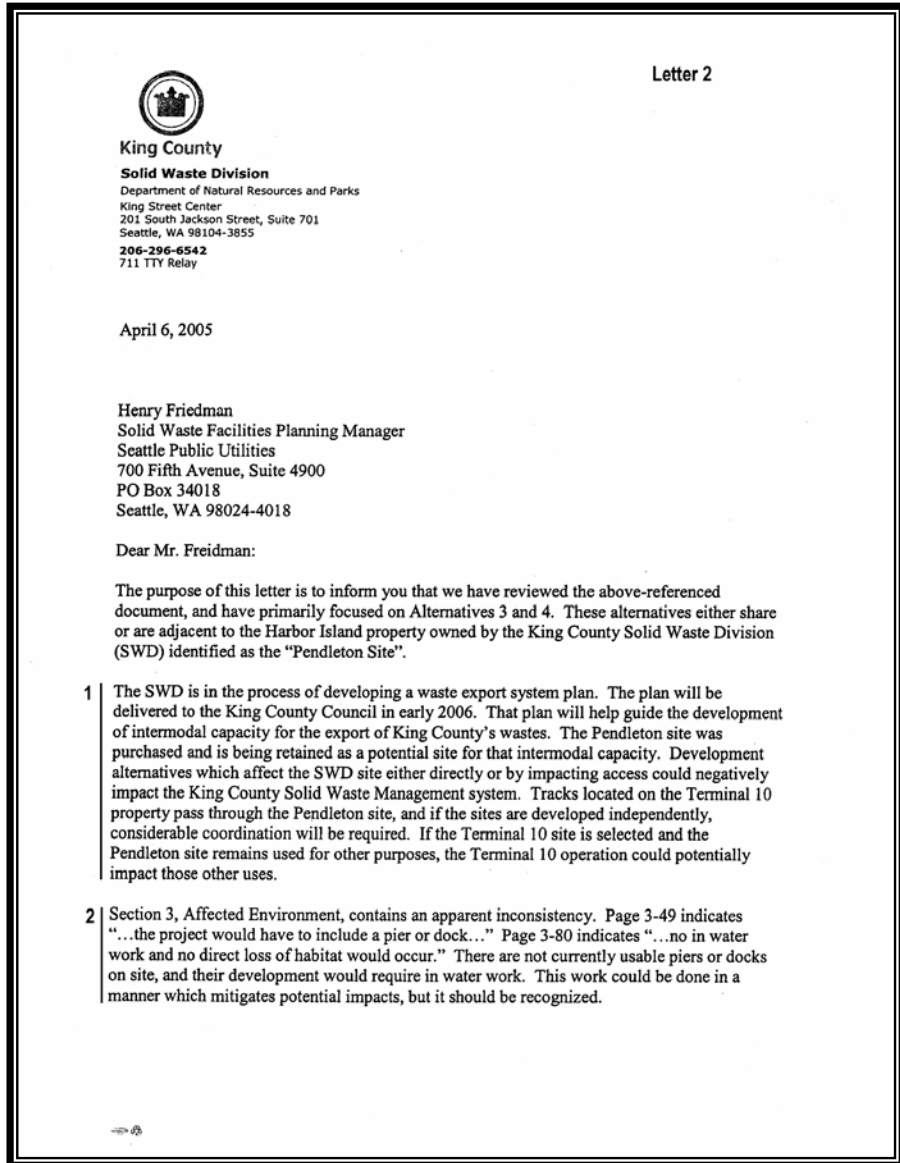
12 | 2. What impact does additional truck traffic have on 6th / Spokane Street and 6th / Industrial Way intersections?

John Marek, SDOT
Neighborhood Traffic Section
3/21/05

Letter 2 – Kevin E. Kiernan, P.E., King County Solid Waste Division

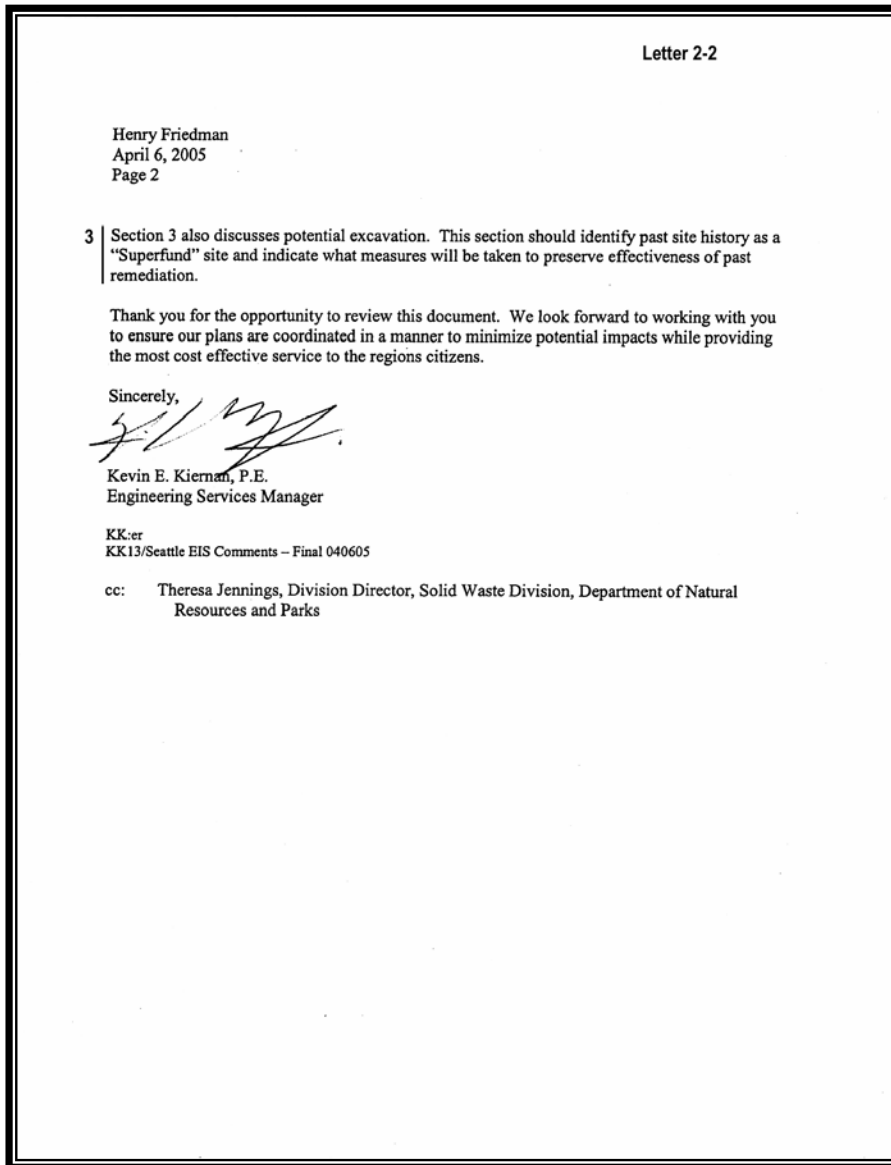
2.1—The City of Seattle is aware of King County’s interest in the Pendleton site for a solid waste intermodal transfer facility. Alternatives 2, 4, and 5 assume that the Pendleton site will support a county transfer facility, and Alternative 3 assumes that a joint city-county facility will be constructed on a combined Terminal 10/Pendleton site. Under Alternative 2, in which the City of Seattle will develop a separate intermodal transfer facility at Terminal 10, the City will coordinate with King County, the Port of Seattle, and the railroads (Union Pacific Railroad and Burlington Northern Santa Fe Railway) to ensure that both intermodal transfer facilities can operate adequately. The Port of Seattle is conducting a comprehensive study of rail operations on Harbor Island. That study and negotiations with the railroads will determine any needs for mitigation to address the possible impacts of the intermodal transfer facility at Terminal 10 on railroad operations.

2.2—As part of site remediation at the Harbor Island Terminal 10 site, the previous dock on the site would be restored and made usable. This work would not be part of the transfer facility project; therefore, it is not discussed in this supplemental EIS.



Letter 2 – Kevin E. Kiernan, P.E., King County Solid Waste Division (continued)

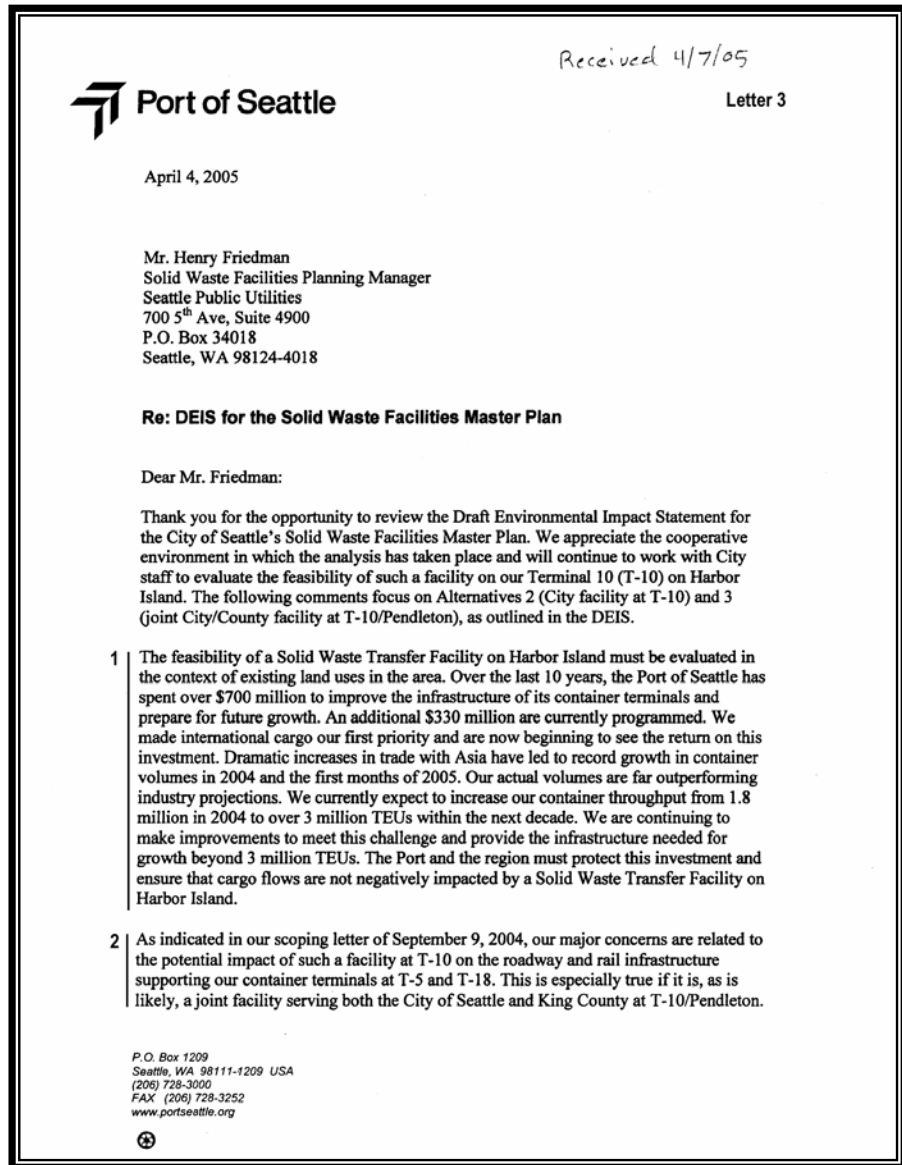
2.3—In the section “Hazardous Materials” in Part 3 this supplemental EIS, the discussion of Alternative 2 mentions that the Harbor Island Terminal 10 site is part of the Harbor Island Superfund site and describes previous contamination and cleanup levels mandated by the record of decision for the Superfund site. The discussion of Alternative 2 also includes a detailed description of the mitigation measures that would be implemented: completion of an environmental site assessment, a facility that is designed in accordance with the site assessment, implementation of a management plan for contaminated soil and water encountered during construction, and appropriate documentation and reporting throughout construction. These measures should preserve the effectiveness of past remediation.



Letter 3 – James Schone, Port of Seattle

3.1—Comment noted. See the responses to your other comments below.

3.2—The new road and rail infrastructure on Harbor Island was designed with excess capacity to accommodate future uses at Terminal 10. The traffic analysis determined that the roadways can accommodate the additional traffic that would be generated by the intermodal transfer facility.



Letter 3 – James Schone, Port of Seattle (continued)

3.3—The existing traffic volumes that were used as the basis for the future traffic projections were collected in 1996, when container terminals were in operation at Terminal 25 (T-25) and Terminal 30. These former volumes were used because they occurred at a time when volumes for the Port of Seattle were at a record high. Recent traffic studies for the Port has determined that the traffic volumes on major streets in the area have been lower in recent years. It is acknowledged that current container volumes for the Port are near record levels, and some new counts on Harbor Island were collected to account for this condition. The traffic generated by these former terminals along East Marginal Way was not removed from the network before the growth associated with the 3 million twenty-foot equivalent units (TEUs) condition was added. Therefore, the additional growth from SSA’s operation at T-25 is accounted for in the projections.


3.4—Comment noted. The traffic volumes assumed for Harbor Island reflect a condition in which all intermodal cargo from Terminal 18 would be drayed to the Seattle International Gateway (SIG) or the Argo Intermodal Yard.

3.5—Specific growth for the cold storage facility was not included in the forecasts for East Marginal Way. However, when the forecasts for the Port of Seattle’s East Marginal Way grade-separation project were reviewed, it was determined that the high growth rate of background traffic combined with the inclusion of the container traffic from the former Terminal 25 and Terminal 30 in the analysis would account for the additional growth in the cold storage facility.

3.6—Comment noted. The City of Seattle and the Washington State Department of Transportation are undertaking a study of the east-west corridors in the Duwamish area to determine needs for future improvements. Issues to resolve include the following:

- If and where State Route 519 Phase 2 should be constructed
- When the Lander Street grade-separation project should be constructed

Letter 3-2

 Port of Seattle—Comments on the DEIS for Seattle’s Solid Waste Facilities Master Plan Page 2

Truck issues

The DEIS addresses the impacts of truck traffic generated by a joint City/County facility. However, we are concerned that the study underestimates freight mobility needs in the vicinity of the proposed project:

3 | 1. The DEIS assumes increases in Port-related truck traffic based on 3 million TEUs in 2030. Yet we are currently projecting that the Port will handle 3 million TEUs by 2015, 15 years earlier. At the same time, we are preparing for growth significantly beyond 3 million TEUs within the 30-year timeframe of the Solid Waste Facilities Master Plan. (For example, we are reconfiguring the northern portion of T-25 for use for domestic containers. This provides room for growth in international cargo at T-18. The move of domestic cargo from T-18 to T-25 has not been addressed in the traffic impact study.)

4 | 2. Increasing the throughput capacity of our container terminals will require a growing number of containers to be drayed to SIG and/or ARGO yards.

5 | 3. On the southern portion of T-25, Seattle Cold Storage (SCS) will develop and begin to operate a 330,000 SQ/FT cold storage facility within the next two years. This facility is expected to employ over 200 staff and have over 100 truck doors.

6 | 4. There are many questions about the future capacity and functionality of east-west street connectors in the Duwamish. Plans to close Royal Brougham Way, S Holgate St, and Horton St to eliminate at-grade rail crossings are in varying stages of development. This improves train speeds and the safety of the general public. However, closure of these facilities without provision of adequate capacity elsewhere will increase traffic on remaining facilities, including Spokane St.

7 | We hope that the City will revisit the traffic impact analysis and mitigate any impacts generated by solid waste on Harbor Island. Freight mobility in the area should be improved, not reduced, by this project. This means ensuring that intersections function properly, facilitating speedy construction of the East Marginal Way Grade Separation, ensuring sufficient east-west street capacity in the Duwamish, completion of the Spokane St Viaduct Widening Project, and potentially other, as yet unidentified improvements.

Rail issues

8 | The DEIS provides an analysis of potential truck impacts but does not address rail impacts. The Port of Seattle is currently in the process of evaluating the ability of the rail infrastructure in the harbor to meet the dramatic growth in business projected for our existing tenants. Preliminary results indicate that the projected solid waste train activity will have a negative impact on the operations of our existing tenants. We are particularly concerned about impacts of solid waste trains being built on Harbor Island—rather than switched in and out in strings—on the lead tracks on Harbor Island.

Further analysis will need to demonstrate that a Solid Waste Facility can be operated by switching in strings, and that it will not require the building of trains on Harbor Island. This is important for any Solid Waste Transfer Facility on Harbor Island, but particularly critical for any facility developed and operated jointly by the City and the County as a single facility.

- Whether further improvements to the Spokane Street Viaduct (beyond those already proposed) should be considered
- Whether a grade separation at South Holgate Street is feasible and necessary to mitigate the effects of the Amtrak switching yard.

These east-west access issues are, however, major considerations for one of the existing intermodal transfer facilities: Rabanco's Recycling, Transfer, and Intermodal Facility at Third Avenue South and South Lander Street.

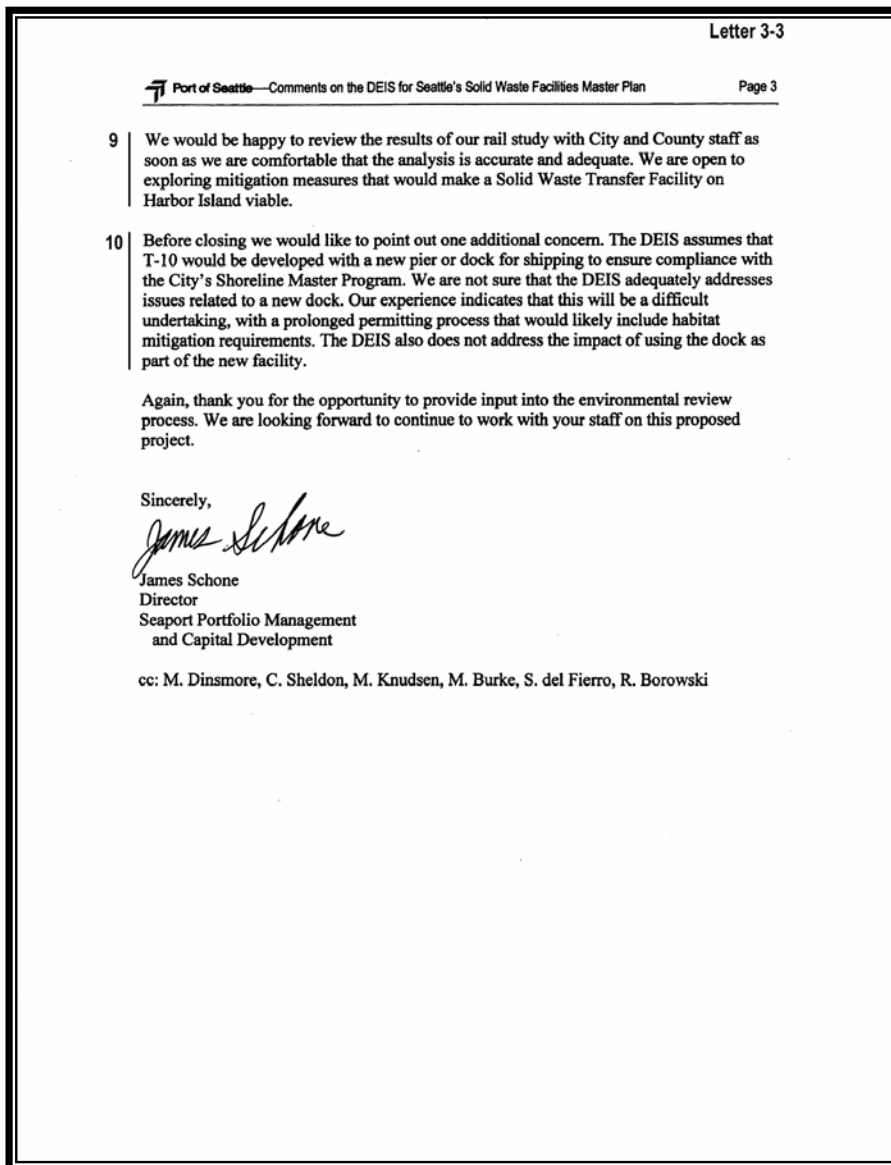
3.7—The analysis considered many of the cumulative effects listed by the Port of Seattle and determined that the intersections on Harbor Island and nearby would operate acceptably with the Seattle Public Utilities facility at the Harbor Island Terminal 10 site. No mitigation needs were identified.

3.8—Comment noted. Seattle Public Utilities (SPU) and Port of Seattle staff met last fall to discuss the Port's rail study. The final results have not yet been shared with SPU. If the Harbor Island Terminal 10 site is selected, SPU would work with the Port and railroads to design the rail system and determine operation scenarios.

Letter 3 – James Schone, Port of Seattle (continued)

3.9—See the response to the previous question.

3.10—The City of Seattle’s understanding is that the dock previously used at Terminal 10 will be rebuilt as part of remediation activities at the site. For this reason, the new dock is not addressed in this supplemental EIS. Whereas the initial operation of the transfer facility is not expected to involve water transport of solid waste, water transport may be important to the operation of the transfer facility at some point in the future. However, the timing and magnitude of the water transport is unknown at this time. If and when water transport is imminent, the City will evaluate the expected magnitude of barge traffic to the facility and its potential for impacts and prepare additional documentation required by the State Environmental Policy Act, if appropriate.




Letter 4 – Susan Hempstead, Puget Sound Energy

4.1—In Part 3 this supplemental EIS, the section “Land Use,” acknowledges that the Georgetown operating base of Puget Sound Energy would be displaced if Alternative 4 (Corgiat Drive site) is selected for the proposed intermodal transfer facility. The City of Seattle will provide fair and equitable compensation to owners of property that is acquired on any of the alternative sites under consideration and will consider the cost of property acquisition when selecting the alternative to be implemented.

4.2—This supplemental EIS addresses all the probable significant adverse impacts as required to comply with the State Environmental Policy Act. The City of Seattle will consider project impacts, along with cost, engineering constructability, system operations, and other factors when selecting the alternative to be implemented.

www.pse.com



PUGET SOUND ENERGY

Puget Sound Energy, Inc.
P.O. Box 90868
Bellevue, WA 98009-0868

Letter 4

March 31, 2005

Mr. Henry Friedman
Seattle Public Utilities
P.O. Box 34018
Seattle, WA 98124-4018

RE: Puget Sound Energy's Georgetown Operating Base
Solid Waste Intermodal Transfer Facility

Dear Mr. Friedman:

Puget Sound Energy (PSE) appreciates the opportunity to provide comments on Seattle Public Utilities Solid Waste Intermodal Facility DEIS. PSE is the largest energy supplier (natural gas and electricity) in the State of Washington. PSE has a gas service base of almost 650,000 customers in six counties. We provide natural gas services to approximately 110,000 customers within the City of Seattle.

1 The comments within this letter focus on PSE's Georgetown Operating Base property (6.68 acres located at 6500 Ursula Place South, Seattle, WA 98108) which is one of the four alternative locations for the City's proposed intermodal facility. This property is currently not for sale. Although, PSE recognizes that certain public projects need to be constructed, we are open to continued dialogue with the City. However, if the City selects the 6500 Ursula Place South location, PSE no longer will be able to use the Georgetown Operating Base in our utility operations.

The Georgetown Operating Base property is a special purpose, operating utility property. PSE needs a functional operating base in the south area of Seattle. Because PSE's Operating Base is a special use property, there are several components of just compensation. PSE is entitled to be compensated for the highest and best use to which the property may reasonably be put. In this case, PSE believes the highest and best use of this property is for its current use, operating utility service center purposes. However, there is not a ready market for this type of property. In these types of cases, a typical approach used to determine just compensation is through determining the cost PSE will incur to obtain replacement facilities.

As part of PSE's service obligation, we are required to maintain and reinforce our natural gas system as the need arises. New growth increases demand for energy services and associated infrastructure, while decreasing available space for utility infrastructure creates hardships on our system. PSE must have the ability to access and maintain safe, immediate and reliable service to our customers. To do otherwise puts the reliability of our natural gas system, the general public, and our customers at risk.

2 Projects of regional significance need to address all project impacts. Utility facility relocation costs are a construction impact for PSE and should be included in the estimated project cost for purposes of evaluating alternatives and making public policy decisions. In order to help SPU evaluate the costs and other issues that would be involved in relocating our Georgetown facility, the following points need to be taken into consideration. Other than the standard relocation obstacles to overcome, below are some that are unique to this property:

Letter 4 – Susan Hempstead, Puget Sound Energy (continued)

Letter 4-2

2
conti.

- 1) There is a 16-inch diameter high-pressure gas main that feeds a limiting station as well as a regulator station. The regulator station has numerous distribution lines ranging from 2" to 8" in diameter that feed Seattle. If these facilities were moved to the south, it would adversely impact their ability to adequately supply gas to the City of Seattle. The only option would be to relocate to the north. Additionally, these facilities would need to be relocated to a site that meets the City's current noise and odor requirements.
- 2) The Georgetown facility cannot be rendered non-operational for any length of time. This means that an entire new facility would need to be constructed and operational before the current facility could be vacated.
- 3) A new site must be very close to the current location, as PSE is required by the Washington Utilities and Transportation Commission (WUTC) to be able to respond to anyone within a defined geographical area within 55 minutes.
- 4) Training classes for first responders on managing live natural gas leaks and fire situations are conducted at this site. All fire fighters and law enforcement personnel in western Washington use this facility to gain hands-on training dealing with natural gas incidents.
- 5) The railroad spur track is used periodically to off-load propane tanks used during peak shaving operations. PSE would need to maintain that ability.
- 6) The main building on the property is approximately 44,500 sq. ft. of office and warehouse space. PSE currently houses 116 regular employees at this site. Some unique features that would need to be replaced are:
 - a. A welding and fabrication shop that requires special ventilation.
 - b. A classroom specially fitted for training of personnel in the repair and maintenance of all gas appliances such as stoves, water heaters, furnaces, etc.
- 7) There is a compressed natural gas (CNG) filling station located on this property. It is used to fuel PSE fleet vehicles, taxis, as well as vehicles for a certain select group of businesses. PSE is close to completing a \$410,000 upgrade of this activity. The CNG is also needed in cold weather reinforcement situations.

The above lists some of the issues connected with this facility that would have a definite impact on costs associated with relocation. Hopefully, this will be of some assistance in your siting process.

Thank you for the opportunity to comment on the proposed Solid Waste Intermodal Facility DEIS. If you have any questions concerning these comments, please contact me at 425-456-2838 or susan.hempstead@pse.com.

Sincerely,


Susan Hempstead
Local Government & Community Relations Manager
PUGET SOUND ENERGY

Letter 5 – Jeanne Muir

5.1—The issues you raise, which relate to the overall operation and configuration of Seattle’s solid waste system, have been addressed through the City of Seattle’s solid waste comprehensive planning process. The most recent update to the City’s solid waste comprehensive plan (*On the Path to Sustainability, 2004 Plan Amendment*) reconfirms the City’s conclusion that its solid waste management system would function most effectively by the retention and upgrading of the two existing transfer stations (north and south recycling and disposal stations) and the construction of a new intermodal transfer facility. The upgrading of each of the two transfer stations will be preceded by the preparation of environmental documentation in compliance with the State Environmental Policy Act. That environmental documentation will address the likelihood of potential impacts on the surrounding communities.

<p>Draft DSEIS</p> <p>Henry Friedman - Draft DSEIS</p> <hr/> <p>From: Jeanne Muir <jeanne.muir@muirpr.com> To: <swfmp.spu@seattle.gov> Date: 3/16/2005 9:55:59 AM Subject: Draft DSEIS</p> <hr/> <p>1 I recognize that this DSEIS discourages any discussion of including the two transfer stations in the intermodal facility. Nevertheless, I find that eliminating discussion of that as an option is unsupportable.</p> <p>The transfer stations in the neighborhoods—both Fremont/Wallingford and South Park—are intrusive, smelly and a poor use of central-location property. The intermodal stations need to be constructed so that they absorb ALL commercial traffic rather than directing some of the commercial traffic to the transfer stations at certain times of day, and the intermodal stations should accommodate residential and small business traffic as well.</p> <p>It is absurd to create rail-supported facilities that are efficient, and still leave a portion of the trash and recycling requiring multiple levels of handling. The transfer stations should be incorporated into the intermodal station, and should be removed from the neighborhoods.</p> <p>If small businesses and residents still require some place more local to recycle or dump trash, commercial providers could accommodate them.</p> <p>---</p> <p>Jeanne Muir Vice-President, Fremont Chamber of Commerce Member, University District Chamber of Commerce 180 North Canal Street Seattle, WA 98103 206-547-1008 206-547-2070 FAX 206-819-5413 CELL www.muirpr.com</p> <p>Muir Marckworth Company</p>	<p>Page 1 of 1</p> <p><i>Received 3/17/05</i></p> <p>Letter 5</p>
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Letter 6 – Leslie Jackson, Greater Seattle Chamber of Commerce

6.1—Comment noted. Please see the responses to comments in letter 4 from Puget Sound Energy.

Page 1 of 1	
Letter 6	
Henry Friedman - Solid Waste Intermodal Facility EIS: comment	
<hr/>	
From: "Leslie Jackson" <LeslieJ@seattlechamber.com> To: <swfmp.spu@seattle.gov> Date: 4/4/2005 10:02:35 AM Subject: Solid Waste Intermodal Facility EIS: comment	
<hr/>	
<p>The Greater Seattle Chamber of Commerce would like to submit the following comment regarding Seattle Public Utilities' Draft Supplemental Environmental Impact Statement (DSEIS) for the Solid Waste Intermodal Transfer Facility:</p>	
<p>"The Greater Seattle Chamber of Commerce understands that Seattle Public Utilities has identified four alternatives for the SPU Solid Waste Intermodal Facility including property located at 6500 South Ursula Place in Georgetown (currently owned by Puget Sound Energy).</p>	
1	<p>The Chamber recognizes that the City of Seattle has a critical need to upgrade the existing solid waste handling facilities. However, if SPU determines that relocation is necessary, the Chamber urges SPU to 1. justly compensate all property owners who are required to relocate for all the costs associated with obtaining replacement facilities, and 2. relocate dislocated businesses within the City of Seattle. In the case of Puget Sound Energy, their operating base functions in Seattle are essential in order to maintain a safe and reliable natural gas system for the Puget Sound Region. Having a strong infrastructure system is a regional priority in retaining and attracting new businesses to Seattle."</p>
<p>Leslie Jackson Communications Manager Greater Seattle Chamber of Commerce 206-389-7241</p>	
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4/4/2005	

Letter 7 – Terry Williams, West Seattle Chamber of Commerce

7.1—All the analyses of alternatives concentrated on the intersections most likely to be negatively affected by Seattle Public Utilities’ proposed action during the commuter PM peak hour. The key offsite intersection for Alternatives 2 and 3 is East Marginal Way South/South Spokane Street. As shown in Table 8 of Appendix C, this intersection would operate at LOS C in the year 2028 under the no-action condition and after implementation of the proposed action. Under Alternatives 2 and 3, the delay would increase slightly over that of the no-action condition in the year 2028. The intersection would carry 42 PM peak-hour trips related to the intermodal transfer facility, which represents approximately 3.2 percent of the total PM peak-hour traffic.

The Alaskan Way Viaduct project will affect truck traffic from the North Recycling and Disposal Station (NRDS) regardless of whether a new intermodal facility is built or where it is built (Appendix C, Section 4.2). Trucks currently use the Alaskan Way Viaduct to transport material between NRDS and Argo Intermodal

Yard and Rabanco’s Recycling, Transfer, and Intermodal Facility. No matter which alternative is chosen, waste and/or transfer trips would be rerouted during the construction of the Alaskan Way Viaduct.

Extensive studies of the Spokane Street Viaduct have been and are still being conducted by the City of Seattle. The results of these studies have been the impetus for the City’s proposed improvements to widen the viaduct to the north and construct new ramps in the eastbound direction. The final plans for these improvements are finished, and the utility relocation work needed to accommodate the widening has already been completed. The Spokane Street Viaduct project is one of the City of Seattle’s highest priority projects.

Most residential collection trucks from West Seattle do not use the Spokane Street Viaduct to access Rabanco’s Recycling, Transfer, and Intermodal Facility at Third Avenue South and South Lander Street. They use the existing ramps to and from First Avenue South. In the future, if the Harbor Island Terminal 10 site is selected, these trucks would descend to the lower level and use the Spokane Street Swing Bridge to access Harbor Island. If the Corgiat Drive site is selected, these trucks would likely stay on the Spokane Street Viaduct all the way to Interstate 5. If the Edmunds Street site is selected, the travel route would be similar to the current route, but the trucks would likely

Letter 7

April 5, 2005

Mr. Henry Friedman
Solid Waste Facilities Planning Manager
Seattle Public Utilities
700 Fifth Ave., Suite 4900
Seattle, WA. 98124-4018

Re: Solid Waste Intermodal Transfer Facility – Draft EIS

Mr. Friedman:

The Transportation Committee for the West Seattle Chamber of Commerce has had a chance to review the Draft SEIS transportation sections and we would like to submit the following response. We will reference our comments to the traffic study in Appendix C by Heffron Transportation that is a part of this D-SEIS.

1 We understand the need for an *Solid Waste Intermodal Transfer Facility* in the City of Seattle, however the committee feels that SPU and the D-SEIS has failed to consider the larger transportation picture when considering the Harbour Island T-10 site and the transportation impacts it will have on the West Seattle Peninsula.

We believe that it is crucial that an extensive comprehensive traffic and transportation study be required for the entire West Seattle Peninsula, including the Spokane Street Viaduct corridor to I-5, to determine the specific long range impacts. The traffic study refers basically to traffic calculations and levels of service on the T-10 site without giving consideration to the Spokane Street Corridor or the Alaskan Way Viaduct Corridor. The only off site analysis is at the East Marginal/SW Spokane St. intersection.

2 Infrastructure is the backbone of a Community. The West Seattle Chamber of Commerce is concerned that the following elements were exempted from the study:

- Accurate Port of Seattle Container Growth through 2030
- Commuter/Passenger traffic from the West Seattle Peninsula on the lower level roadway and its growth through 2030
- Truck traffic on the Spokane Street Viaduct and the increase of Commuter/Passenger traffic through 2030
- Realistic analysis of construction on the Alaskan Way Viaduct on the impact it will have on the Spokane Street Viaduct
- Realistic analysis of construction on the Spokane Street Viaduct on the traffic impact if both Viaducts are under construction at the same time.
- Impacts of trucks entering the eastbound lane of the Spokane Street Viaduct via the 1st Avenue on/off ramps and SR 99 north.

3 The West Seattle Chamber’s goal is to optimize traffic pathways and flows for all modes of transportation. Public safety, emergency access to medical facilities, conflicts with commercial vehicles on both the ground level and elevated roadways, and reasonable access for the flow of goods and services in the Spokane Street Corridor must be given priority consideration. It is essential that the surrounding communities, public interest and future generations’ greater good be given priority over any one agency’s agenda or desire.

continue east on lower Spokane Street. Operation of a new intermodal facility at any of the alternative sites would have no effect on traffic in West Seattle west of Spokane Street.

7.2—Appendix C, Section 3.1.2, specifies the factors used for estimating the growth in background traffic for the Harbor Island area. These factors include full utilization of Terminals 5 and 18, expansion of Hanjin’s operation at Terminal 46, a new cruise ship terminal at Terminal 30, and King County’s proposed intermodal transfer facility. Overall, Port of Seattle growth was projected to be 3 million twenty-foot equivalent units (TEUs) in the future. Through commuter traffic on South Spokane Street and East Marginal Way South was projected to grow an additional 0.5 percent per year through the year 2028. This is a conservatively high growth rate for this area of Seattle.

It is highly unlikely that the City of Seattle would allow simultaneous construction on both the Spokane Street Viaduct and Alaskan Way Viaduct. The Spokane Street Viaduct will be part of the major detour routes around the Alaskan Way Viaduct construction. Also, the final plans for the Spokane Street Viaduct have been completed, and the project is awaiting funding.

As mentioned in the response to comment 1 above, trucks now enter and would continue to enter (if no new intermodal facility is built) the Spokane Street Viaduct using the eastbound ramp from First Avenue South. This volume would be the same or less for any of the proposed alternatives.

7.3—Comment noted. The City of Seattle will consider the overall public health, safety, and welfare when determining the alternative to be implemented.

Letter 7 – Terry Williams, West Seattle Chamber of Commerce (continued)

7.4—Comment noted. Please see the responses to comments 1 and 2 of your letter.

7.5—Please see the response to comment 3 of letter 3.

7.6—Please see the response to comment 1 of your letter.

7.7—The eastbound on-ramp from surface Spokane Street to the Spokane Street Viaduct has excess capacity; however, the merge with the eastbound off-ramp to northbound State Route 99 is often congested, particularly during the morning commute when there is heavy traffic from West Seattle destined to downtown Seattle. Additional trucks from the new intermodal transfer facility at the Harbor Island Terminal 10 site would add to this congestion. Early planning for the Alaskan Way Viaduct project included an evaluation of options for improving this eastbound-to-northbound flow, and it was determined to be too costly or not feasible.

7.8—Comment noted. Trucks traveling to the intermodal transfer facility at Terminal 10 and King County's adjacent facility would use the Spokane Street Viaduct. All of the other alternatives, including the no-action alternative, would also result in the use of the Spokane Street Viaduct by collection trucks. Please see the response to comment 1 of your letter.

7.9—Please see the response to comment 2 of your letter.

Letter 7-2	
DSEIS Transportation Analysis	2
3.1.1 <i>Transportation Network</i>	
4	The traffic report insinuates that only the streets on site will affect traffic and need to be analyzed as well as the intersection at East Marginal/Spokane St. Also mentioned are the two major viaduct construction projects but they will only affect traffic during the construction phase. There is no mention of the viaducts being included in the transportation network for the planned facility or how the facility will affect streets other than those onsite.
3.1.2 <i>Traffic Volumes and Operations</i>	
5	The traffic report states that the POS may handle up to 3 million TEUs by 2030. The POS now anticipates that they will reach that volume in 10 years. Increasing container volume will increase drayed freight movement along surface streets. Matson will begin operations at T-25 in the summer of 2005 and Seattle Cold Storage will also operate a new facility at T25 with significant truck traffic. The East/West connectors in the Duwamish area are uncertain at this time and lack of adequate capacity will push traffic to Spokane Street.
6	When determining LOS at peak commuter periods the traffic report only analyzes traffic on Harbour Island from Todd Shipyards and workers at the new facilities. There is no analysis on how the new truck traffic affects commuter traffic on the two viaducts and directing them to one site that has limited access.
3.1.4 <i>Traffic Safety</i>	
7	The report analyzes four intersections for traffic safety which are all on Harbour Island. Many trucks will be using the 1 st Ave. on ramp to get onto the two viaducts heading east and north. The capacity of this ramp should be determined and how will the additional truck traffic affect safety with general commuter traffic.
4 Project Impacts	
4.1 <i>Trip Generation</i>	
8	The facility will generate 299 inbound and 299 outbound trips per average day. This total does not include the King County 150 inbound and outbound trips per day. (see table 6 – page 21). According to Figure 10 this would mean that 56% of residential truck traffic would use the Spokane Street Viaduct to access the Harbour Island site. It is also safe to assume that all of King County's trucks would use the Spokane Street Viaduct since they will be coming from the Eastside. That would mean, according to Figure 9 – page 22, that 167 residential garbage trucks would be added to commuter traffic on the Spokane Street Viaduct between 3:00 and 5:00 pm. The Committee feels that this has not been addressed in the Traffic Report.
4.2 <i>Trip Distribution Patterns</i>	
9	The last paragraph states that trucks now use the Alaskan Way Viaduct to access existing sites. During Viaduct construction, truck movement would be independent of the proposed action to build the new facility. In actuality you would be bringing trucks into an area of limited access and a major east/west corridor that would have extra traffic on it due to the closure of the Viaduct. The committee feels that this has not been addressed at all in the D-SEIS.
2	

Letter 7 – Terry Williams, West Seattle Chamber of Commerce (continued)

7.10—All residential and commercial collection trucks that serve Seattle are now stored in various yards in the Duwamish industrial area. These trucks use most of the major arterial routes when leaving the yards in the morning or returning in the afternoon and when many of them make trips to the existing transfer facilities. These routes include the Alaskan Way Viaduct, the Spokane Street Viaduct, First Avenue South, and Fourth Avenue South. A new intermodal yard on Harbor Island would result in some changes in travel patterns, but the major routes used for travel between the Duwamish industrial area and the neighborhoods where collection occurs would be nearly identical. The largest change would occur in the immediate vicinity of Harbor Island after trucks have exited the major arterials.

It is recognized that construction of the Alaskan Way Viaduct or the Spokane Street Viaduct could result in substantial traffic diversions if either facility is closed or their operations are severely restricted during construction.

An evaluation of these potential diversions was not possible for this supplemental EIS because construction planning for the Alaskan Way Viaduct is not yet complete. The City of Seattle and the Washington State Department of Transportation are now undertaking a major evaluation of potential construction impacts that could result from the various construction scenarios for the Alaskan Way Viaduct. This analysis will include nearly every major intersection between the First Avenue South Bridge and the Mercer corridor. Seattle Public Utilities will be monitoring this analysis as part of its site-selection process.

7.11—Please see the responses to comments 2 and 10 of your letter.

7.12—The level of service calculations do account for full utilization of Terminal 18 plus growth in commuter traffic across Harbor Island. Please see the response to comment 2 of your letter.

7.13—Many trucks use the viaduct today, including collection trucks that access the existing transfer facilities. A new intermodal transfer facility at the Harbor Island Terminal 10 site would increase truck traffic on portions of the viaduct, which could increase the potential for accidents. The City of Seattle has a final design prepared to improve the Spokane Street Viaduct. This improvement project would improve many of the viaduct’s substandard elements

DSEIS Transportation Analysis Letter 7-3 3

4.3.1 *Transportation Network*

10 | Again the report only deals with Harbour Island street networks. The study needs to address capacity on streets leading up to Harbour Island. The Spokane Street Viaduct is already at 120% capacity. With construction on the two Viaducts increasing traffic in both east/west directions it is imperative that the traffic study include the street networks leading to the facility from all directions.

4.3.2 *Traffic Volumes and Operations*

11 | The report states the future traffic volumes include growth in traffic to Terminal 18 and business on harbor Island. It also measures commuter traffic on/off of Harbour Island only. There is no mention in the report of lower level commuter traffic from/to West Seattle. With Alaskan Way Viaduct construction these numbers will increase substantially.

12 | Table 8 – page 27 indicates LOS at two intersections inside the terminal facility and at E. Marginal Way/Spokane Street. Again the LOS does not take into account increased POS container movement, years of Spokane Street/Alaskan Way Viaducts construction, or LOS at on ramps to/off the Spokane Street Viaduct. These LOS have to be included as Figure 12 shows that 50% of truck traffic will be on the Spokane Street Viaduct.

4.3.3 *Traffic Safety*

13 | Again no mention in the traffic report of Accidents between car/truck vehicles or projections of accidents due to increased traffic on the Spokane Street Viaduct.

Final Statements

14 | It is the feeling of the Transportation Committee that the other sites were reviewed in the traffic report in more detail to show more negative impacts than the Harbour Island site, despite the higher traffic volumes that would be coming to/from West Seattle over the high level and lower level bridges. West Seattle currently has 20% of the population of Seattle with large growth potential. Due to the large population, limited east/west access to the West Seattle peninsula, and large multi-year road construction projects the Transportation Committee feels that the current D-SEIS and accompanying traffic report is inadequate to recommend placement of the *Solid Waste Intermodel Waste Facility* on Harbour Island.

Terry Williams, co-chair
West Seattle Chamber of Commerce, Transportation Comm.

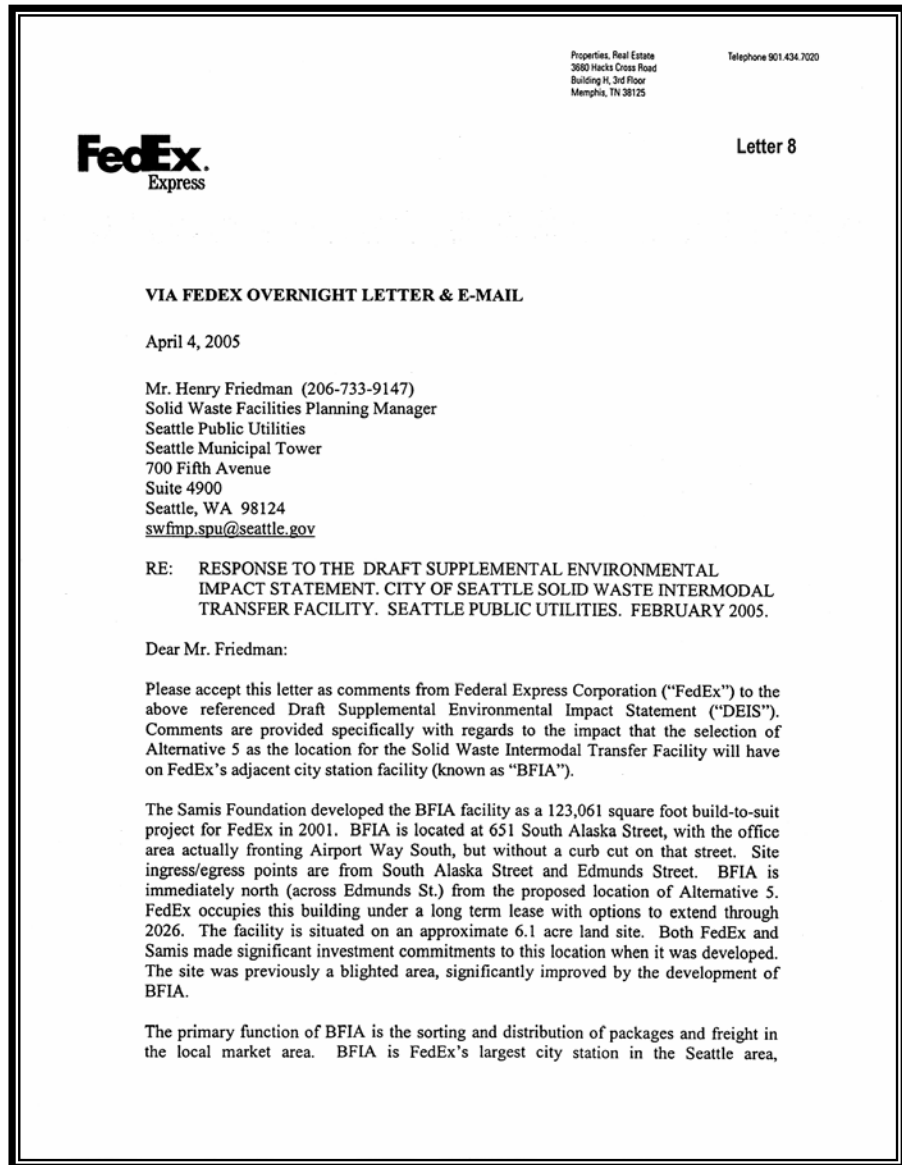
Cc: Amy Bovenkamp – President WSCofC
Patti Mullen – Ex. Dir. WSCof C
John Musgrave – co-chair Transportation Comm.
Stan Lock – Stan Lock, Director SW Service Center

3

such as no shoulders or narrow shoulders, inadequate merge and diverge lengths on the ramps, and narrow lanes, and therefore improve safety on the Spokane Street Viaduct. The City of Seattle is one of the major funding partners for this project.

7.14—Comment noted. Traffic impacts were evaluated for the nearest intersections for all of the alternative sites. All of the sites are located near major arterials and highways such as Interstate 5 and the Spokane Street Viaduct, which have congestion during peak hours.

Letter 8 – John George, Federal Express Corporation



Letter 8 – John George, Federal Express Corporation (continued)

8.1—The site boundaries in Figures 2-8, 3-3, and 3-8 have been corrected in the final document. The supplemental EIS addresses noise, odor, animal attraction, and traffic in Part 3, in the sections “Noise,” “Air Quality and Odor,” “Plants and Animals,” and “Transportation,” respectively. For any significant adverse impacts that are likely to occur, Part 3 describes measures to mitigate these potential impacts. The supplemental EIS concludes that with the design and operation of the proposed facility and the mitigation measures discussed in Part 3, significant adverse impacts on adjoining properties are unlikely.

8.2—Volumes during the commuter PM peak hour are higher than volumes during the commuter AM peak hour in the area around the Edmunds Street site (Alternative 5), as well as the other alternative sites. Therefore, the PM peak hour was chosen for the hour of study. This does not discount potential conflicts between traffic from the intermodal transfer facility and the Federal Express delivery trucks during other periods. For the reasons listed in your comment, this supplemental EIS states that an alternate egress route would be necessary for the Edmunds Street site (Appendix C, Sections 4.5.2 and 4.5.3).

This supplemental EIS evaluated a worst-case condition for the AM peak-hour, which assumes that the facility would not open until 7:00 a.m. However, many commercial collection trucks pick up during off-hours for businesses in locations such as downtown Seattle. Therefore, it is likely that the facility would open earlier to accommodate these trucks. This would reduce loads during the time when the Federal Express trucks are leaving the area.

The existing geometry of South Edmunds Street complicates turning movements at Airport Way South, for both entering and exiting vehicles. The north curb on-street parking exacerbates the condition. An alternate egress route would be necessary for this site (Appendix C, Sections 4.5.2 and 4.5.3).

The traffic analysis for the no-action alternative included a growth rate of 2 percent per year (Appendix C, Section 3.3.2), which represents a large growth in traffic over a 23-year period. As discussed above, if Alternative 5 is

Letter 8-2

accommodating a fleet of 120 pick up and delivery vehicles that are launched daily onto South Alaska and Edmunds Streets. Additional aspects of the BFIA operation include a 3,300 square foot vehicle maintenance shop, a World Service Center where customers can pick up and drop off packages and approximately 12,150 square feet of administrative offices.

1 | The DEIS fails to consider and address the impact that the selection of Alternative 5 will have on FedEx's BFIA operation. Specifically the obvious impact considerations of noise, odor, vermin and traffic are not addressed in the DEIS with regard to impacts on FedEx. In many respects, the DEIS is written as if BFIA didn't exist, which brings to mind the conflicts in some of the exhibit materials presented in the DEIS. The outlined area of Alternative 5 on the full page aerial photograph presented in the DEIS properly excludes FedEx's BFIA property, but is inconsistent with Figures 3-3 and 3-8 which includes the FedEx property within the area highlighted as the project area for Alternative 5. Upon review, you'll note in these two figures that South Alaska is mistakenly labeled as South Edmunds Street.

Specific concerns with the selection of Alternative 5 are provided below:

2 | **Traffic:** The DEIS and Appendix A provide data that is particularly troubling. It is stated that “traffic on Airport Way South is growing at a faster rate than volumes on other arterials in the industrial area” and that left turns onto Airport Way South from Edmunds Street would deteriorate from a current “C” level of service to an “F” in 2028 with no-action. Furthermore the DEIS stated that traffic levels at this intersection did not warrant the installation of signalization equipment. The report notes a posted speed limit of 35 miles per hour on Airport Way South, but observations showed actual speeds to be much higher, making “turns onto Airport Way South even more difficult.” Figure 9 of Appendix C depicts peak traffic periods for the Intermodal Facility to be between the hours of 7:00 and 9:00 a.m. (84 trips) and 3:00 and 4:00 p.m. (81 trips). The traffic count observations stated in the DEIS were taken between 4:00 and 5:00 p.m. The DEIS errs in its analysis because it failed to observe and consider the impact on FedEx, since the time that it launches delivery vehicles in the morning overlaps with the peak operating hours of the Intermodal Facility, with a significant amount of this traffic sharing the use of Edmunds Street and desiring to make left hand turns onto Airport Way South, a problematic traffic movement. Table 7 of Appendix C estimates approximately 652 daily trips will be generated by the Intermodal Facility, all of which will utilize Edmunds Street, a narrow two lane street, with sidewalk improvements on the north side of the street. One has to observe that this street and its intersection with Airport Way South were not designed to carry this traffic load in addition to what FedEx is already generating. The DEIS does not address or take into account that FedEx may have to operate additional pick up and delivery vehicles, further exacerbating the traffic situation, dependant upon the level of impact of Intermodal Facility traffic. The DEIS does not address the potential backup and queuing of vehicles waiting to enter the

chosen, an alternate egress route would be needed, as the South Edmunds Street intersection would operate below acceptable levels of service.

Letter 8 – John George, Federal Express Corporation (continued)

8.3—As indicated in this supplemental EIS, the noise levels that would be experienced by properties surrounding the Edmunds Street site are unlikely to be substantially different from the existing levels. In 2028, truck traffic on Airport Way would approximately double due to the facility, but overall vehicle volumes on Airport Way would increase slightly less than 3 percent due to the facility. In addition, the site is near Interstate 5, which is a source of substantial noise. Based on these considerations, noise levels (measured as Leq) in the immediate vicinity of the site are expected to increase less than 3 dBA, which would be an imperceptible change. The Edmunds Street site is currently used for intermodal transportation; therefore, the activities and resulting noise levels associated with truck unloading, container storage, and train loading operations in conjunction with the proposed solid waste intermodal transfer facility would be similar to the noise levels that are generated by current activities. Also, the noise from waste handling activities would be limited because these activities would primarily occur within the enclosed main transfer building. Activities occurring outside the main transfer building would primarily involve the handling of sealed containers.

Letter 8-3	
2 conti.	Intermodal Facility and its impact on traffic circulation on Edmunds Street and Airport Way South.
3	Noise: The DEIS makes note that no residential receptors are located adjacent to Alternative 5, but fails to address impacts on the adjacent FedEx facility.
4	Air Quality and Odor: FedEx’s BFLA facility has four overhead doors on its south elevation facing the Alternative 5 site. These doors are often open and the facility has a ventilation system in the warehouse area that draws in outside air to mitigate vehicle exhaust fumes. The DEIS does not address the impact upon the FedEx facility as a receptor of unpleasant odors from the Intermodal Facility building, which the site plan shows will be located just across Edmunds Street. The DEIS states that “unpleasant odors from existing recycling and disposal sites have been apparent only within a few blocks of the facility.” FedEx’s BFLA facility certainly falls within that range of proximity, making odors a likely problematic issue.
5	Plants and Animals: FedEx is particularly concerned about this area with respect to the health and welfare of its employees. Undoubtedly the rat population in the area will increase exponentially as a result of the Intermodal Facility and they will undoubtedly venture onto the FedEx BFLA site and into the building. Birds in search of food will perch on the FedEx building/roofline with their accompanying unhealthy excrement.
6	Litter and Debris: An increased level of trash and debris falling from covered and uncovered loads transported to the facility will be a negative impact on FedEx’s facility and the area and FedEx’s employees and customers.
7	Hazardous Materials: The DEIS states that ground water from the Alternative 5 site flows northward, directly towards FedEx. Therefore, any hazardous material release generated by the Intermodal Facility that enters the ground and contaminates the ground water will likely migrate underneath the FedEx site
8	Alternative 5 Inadequacies: The DEIS notes that Alternative 5 has two significant shortcomings. First, at a size of 7.5 acres, it is the smallest of the four alternatives under consideration. Secondly, unlike Alternatives 2 and 3, Alternative 5 does not have water access. The DEIS makes note that having water access is a positive site attribute due to providing barge transportation as an alternative to rail.

8.4—The design and operation of the proposed intermodal transfer facility would minimize odors experienced at adjacent properties. Unconfined, uncompacted, putrescible waste would be handled in the enclosed main transfer building. Waste delivered by trucks would be handled on the tipping floor of the main building. An air control system will substantially minimize the escape of odors and dust from the building. Typical controls within the waste processing building include a misting system that reduces air borne dust and an air exhaust filtration system that removes dust and odors. All putrescible waste stored outside the main building would be compacted and contained in sealed intermodal containers.

8.5—As described in the response to your preceding comment, the handling of putrescible solid waste would limit the attraction of the intermodal transfer facility to nuisance animals. In addition to the measures previously described, vehicle entrances and exits in the main transfer building would be designed to inhibit bird movement into

the building's interior, and bird exclusion material would be installed on portions of onsite structures that could serve as bird perches.

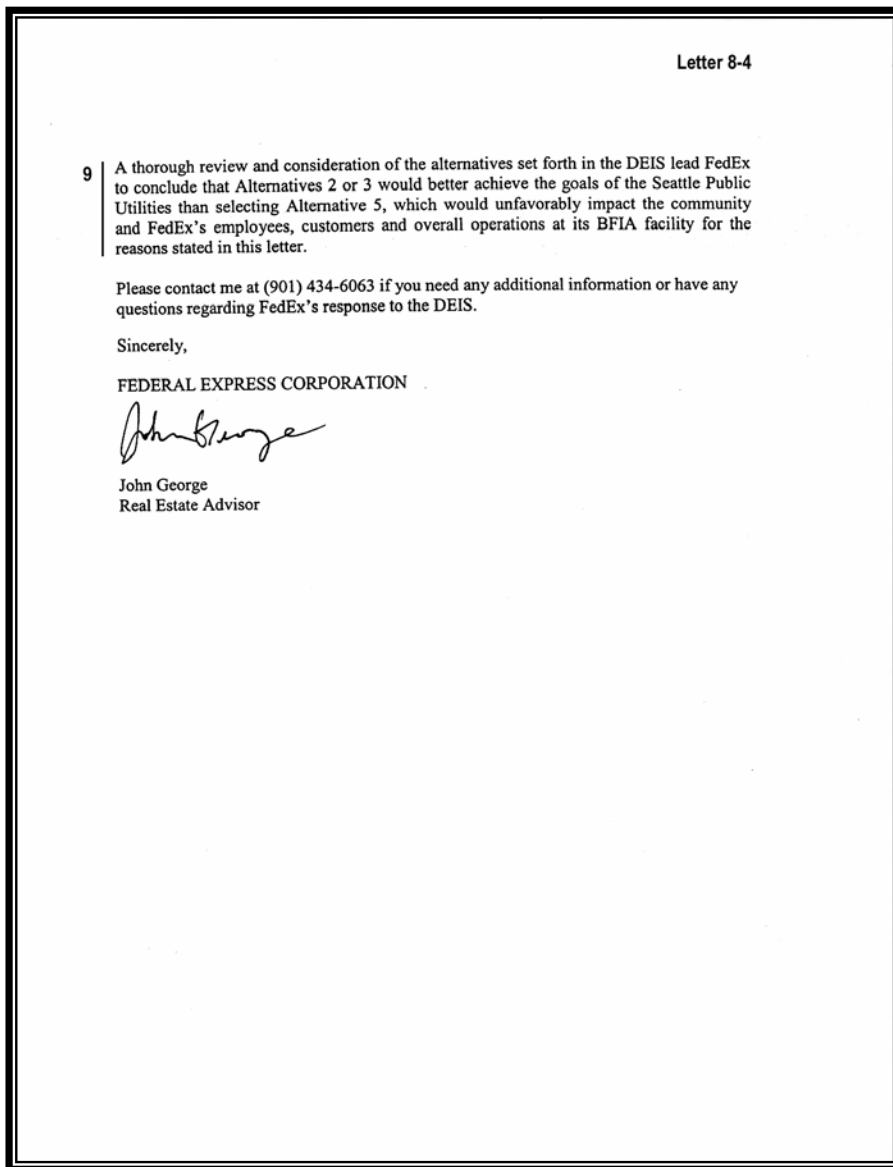
8.6—All loads of solid waste that are transported within the Seattle city limits are required to be covered so that solid waste debris does not fall from trucks that deliver material to the intermodal transfer facilities. City police are authorized to issue citations if they observe violations. Furthermore, an additional fee is charged at all public and private transfer stations for uncovered or unsecured loads.

8.7—The intermodal transfer facility would not accept designated hazardous material. If any hazardous material is inadvertently delivered to the facility, it would be separated and handled according to state and federal requirements. All runoff generated within the main transfer building would be collected and drained to the sanitary sewer system. Also, the entire site would be paved so that if hazardous materials were inadvertently delivered to the site or if hazardous materials were inadvertently generated on the site (for example, through a spill of petroleum products), the materials could not enter the ground and migrate offsite.

8.8—Comment noted.

Letter 8 – John George, Federal Express Corporation (continued)

8.9—Your preference for Alternative 2 or Alternative 3 is noted.



Letter 9 – Herald Ugles, Kurt Harriage, and John Munson, ILWU Local 19

9.1—The City of Seattle agrees that marine shipping is an important component of Seattle’s economy. However, water depths adjacent to the Harbor Island Terminal 10 site are shallow and unsuitable for ocean-going container ships; therefore Terminal 10 is not a deep-water port site. Furthermore, the Terminal 10 site and the adjacent Pendleton site would allow the transport of waste via water, which would provide flexibility in regional solid waste transport.

Page 1 of 1
Letter 9

Henry Friedman - Comments on DSEIS

From: "ILWU Local 19" <ijwulocal19@qwest.net>
To: <swfmp.spu@seattle.gov>
Date: 4/5/2005 2:09:42 PM
Subject: Comments on DSEIS

April 5, 2005

Mr. Harold Friedman
Solid Waste Management Planning Manager
Seattle Public Utilities

Dear Mr. Friedman:

The International Longshore and Warehouse Union Local 19 would like to address the Solid Waste Intermodal Facility Draft E15 regarding concerns we have regarding the potential location of the intermodal project at Terminal 10 on the east side of the west waterway.

1 | Local 19 believes that all of the land that is not being currently used at Terminal 10 and the West Waterway must be used in the future for commercial shipping.

While the Local has no problem with alternatives 4 (Corigant Drive site) and 5 (Edmunds Street site), alternatives 2 and 3 which both use property on Harbor Island are unacceptable to the local. The Terminal 10 site must be saved for future shipping expansion at the Port.

Shipping throughput in the Port of Seattle has increased dramatically in the last few years and total cargo volume in the West Coast is expected to double by 2015. Volume in the Port of Seattle is up by 44% this year after increasing by 19% in 2004. Because of this increase in volume it is vital to have a facility available for development to meet future shipping needs. Terminal 10 is ideal for this purpose. The land area is large enough to support a rail yard so containers can come from the ship to rail for transshipment, avoiding the already congested roads in the area. This is the last deep water port site on Harbor Island that is available for expansion and must be used for marine related commerce.

In summary, Local 19 realizes that the city and county have a responsibility to deal with the garbage produced by its people, the city and county, but they also have a responsibility to see that the little shore side industrial land left in the city is used for marine related purposes which will provide the greatest economic benefit to the city.

Sincerely,
I.L.W.U. LOCAL #19
Herald Ugles, President
Kurt Harriage Business Agent
John Munson, Puget Sound District Council

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Letter 10 – Marilyn Young Skogland, Manufacturing Industrial Council

10.1—Through its comprehensive solid waste planning process, the City of Seattle has determined that a new intermodal transfer facility is needed to safely and cost-effectively handle Seattle’s solid waste. As an industrial use, the intermodal transfer facility would be best located on land that is zoned as industrial. The City recognizes that industrially zoned property in Seattle is limited and will consider the displacement of existing industrial uses as one of the factors in selecting the alternative to be implemented. Whichever alternative is selected, the City is committed to providing equitable and fair market compensation for all property that is acquired for the proposed intermodal transfer facility.

Letter 10
Page 1 of 1

Henry Friedman - PUBLIC COMMENT - New Solid Waste Intermodal Facility Draft SEIS

From: "Marilyn Young Skogland" <mysmic@qwest.net>
To: <swfmp.spu@seattle.gov>
Date: 4/5/2005 9:17:07 AM
Subject: PUBLIC COMMENT - New Solid Waste Intermodal Facility Draft SEIS

1 | The Manufacturing Industrial Council is concerned about the various alternative sites under consideration by Seattle Public Utilities for this project. Specifically, the MIC is concerned about displacing more industrial businesses from within the M&I Centers of Seattle. Public projects have had a disproportionate impact on industrial businesses in the past decade. The Alternative sites under consideration by SPU for this project add to those impacts. The effect may be to push valuable, community members out of our City.

If the alternative selected ultimately does impact industrial businesses, it is imperative that SPU work to make any effected business whole as a result of displacement. The MIC is actively working to retain industrial businesses in Seattle through our Seattle First program. This program is a public-private project supported by the City of Seattle's Office of Economic, the Port of Seattle and others. We would be more than willing to provide our services to businesses that are affected by this project.

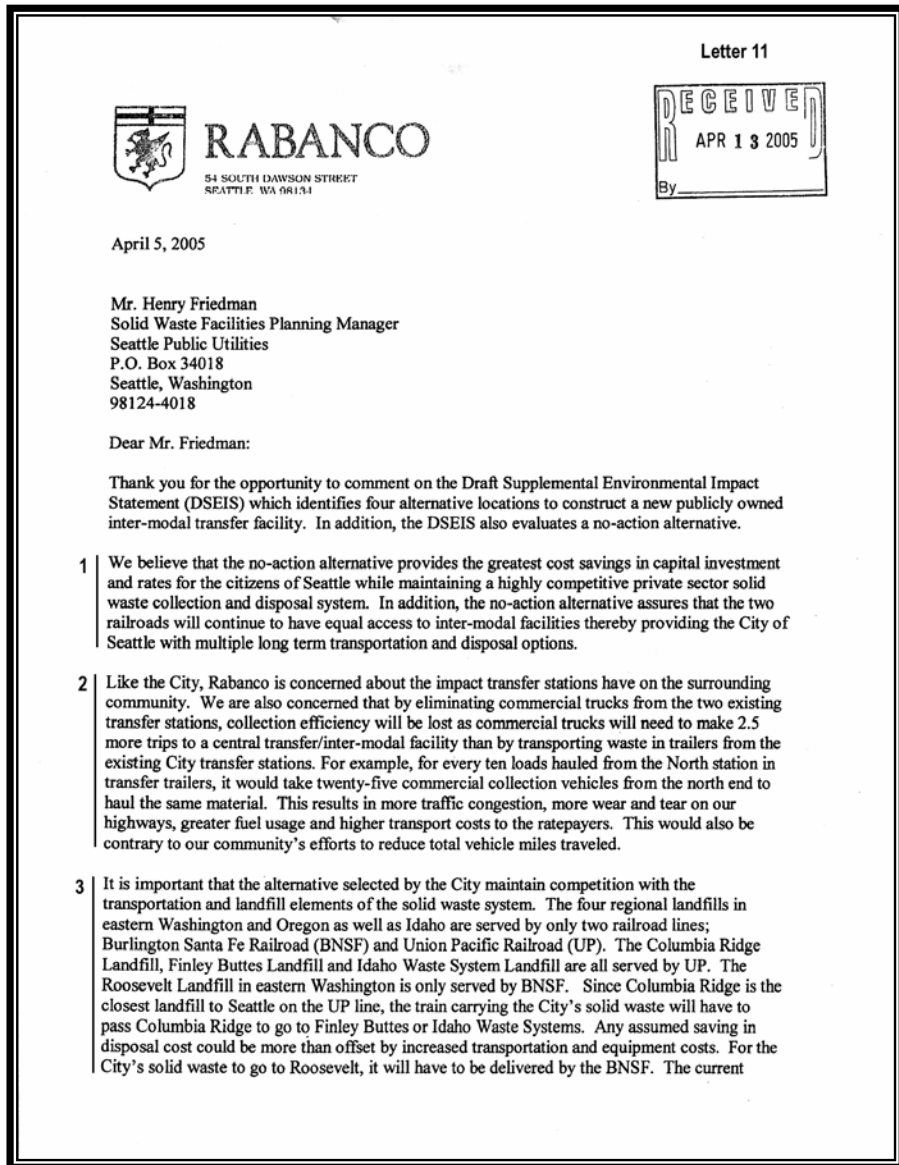
Marilyn Young Skogland
Program & Business Development Manger
Manufacturing Industrial Council (MIC)
5509 1st Ave S, Suite B
Seattle, WA 98108
t.206-762-2470 f.206-762-2492
mysmic@qwest.net

Letter 11 – Nick Harbert, Rabanco

11.1—Your preference regarding alternative selection is noted.

11.2—The development of a new solid waste intermodal transfer facility would not generate new vehicle trips. It would simply add one more facility in the network of solid waste transfer facilities to which Seattle Public Utilities can direct vehicles. Collection vehicles could continue to use the existing north and south recycling and disposal facilities in the future or they could be redirected to the new intermodal transfer facility. In all likelihood, there would be a little of both. For planning purposes, Seattle Public Utilities modeled the majority (more than 98 percent) of the municipal solid waste and yard waste collection trucks as going directly to the intermodal facility for unloading in order to represent the maximum probable impact of the proposed facility. In actual practice, the traffic flow between the north and south recycling and disposal stations changes frequently. However, Seattle Public Utilities anticipates that a large percentage of the collection trucks would be directed to the intermodal transfer facility on a regular basis in the future, but probably not as many as the number that were modeled for the studies related to the supplemental EIS. Some routes would be shorter and some would be longer if all collection trucks are directed to the intermodal transfer facility for unloading. The net difference would be relatively small as described in the next paragraph.

Under a scenario in which almost all (more than 98 percent) of the collection trucks transporting municipal solid waste and yard waste would be directed to a city-owned intermodal transfer facility, there would be a net increase of 80,000 miles per year (17 percent). This increase would occur primarily on main arterial roads that are designed to handle trucks. This scenario would also result in a small net decrease in miles driven on the more vulnerable residential streets and alleys. The net increase in mileage would have negligible impacts on pavement conditions/wear because the overall increase would be relatively small compared to the amount of total traffic and most of the main arterial roads are designed to handle truck traffic.



11.3—The City of Seattle agrees that the selected alternative should maintain competition between the transportation and landfill elements of the regional solid waste system. Two of the proposal’s objectives described in Part 2 of this supplemental EIS are the following:

- The solid waste intermodal transfer facility should maintain competition for waste collection, transfer, long-haul transport, and disposal by providing equal opportunity for contractors that bid on solid waste services, thereby maintaining the quality of service at a competitive price.
- The solid waste intermodal transfer facility should maintain system flexibility and the ability to deal with emergencies by having access to multiple modes of transportation, both the Burlington Northern Santa Fe Railway, the Union Pacific Railroad, and multiple landfills.

Each of the four action alternatives would meet these objectives.

Letter 11 – Nick Harbert, Rabanco (continued)

11.4—These two letters are included here along with your comment letter regarding the draft supplemental EIS.

11.5—Comment noted.


Letter 11-2

3 | private inter-modal system insures competitive access to the transportation system as well as
conti. | regional landfill alternatives.

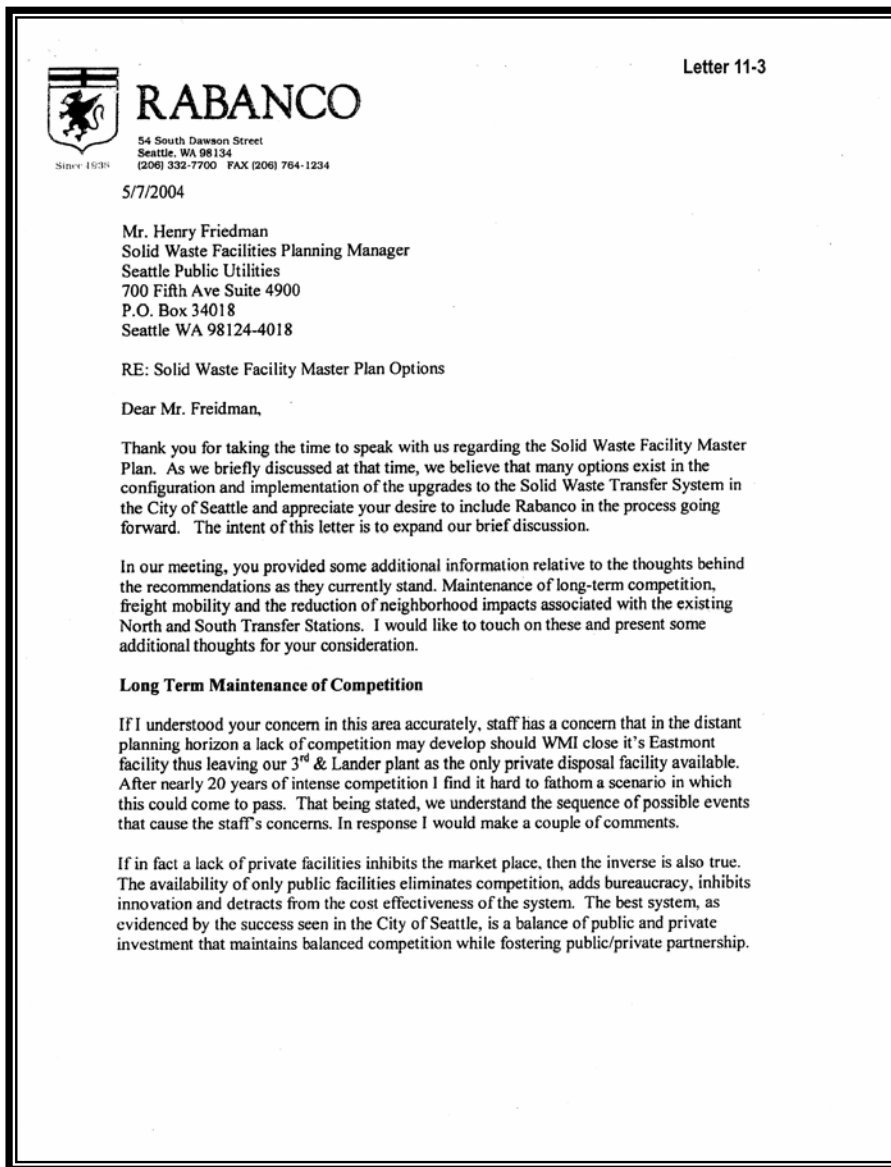
4 | In separate correspondence to Mark Buscher, King County Solid Waste Division, dated April 16, 2004, Pet Keller, Vice President, Rabanco, LTD, discussed in detail the issues with respect to inter-modal facilities, rail haul competition and landfill options. Likewise, Jeff West, then District Manager Rabanco Companies, submitted a letter to you dated May 7, 2004, discussing long-term competition, freight mobility and neighborhood impacts. By reference, I am including these letters in our response today.

5 | The partnership that has been developed over the years between the City and private industry has proven to be highly competitive and advantageous to the ratepayers. We believe the citizens of Seattle are best served by preserving and enhancing the current public/private partnership.

Again, thank you for the opportunity to provide our comments. Please feel free to contact me if you have any questions or require additional information.

Sincerely,

Nick Harbert
District Manager
Seattle District

Letter 11 – Nick Harbert, Rabanco (continued)



Letter 11 – Nick Harbert, Rabanco (continued)

Letter 11-4

The structure of the competitive proposal process is the key element in meeting the system goal of delivering the highest level of service in the most cost effective manner. We spoke previously about some of the many options that are available to the City in structuring competitive proposals. These include: Design, Build, Operate and Maintain (DBOM) model, Managed Competition and several other variations.

The best proposal process we believe is one that allows for respondents to offer more than one operating scenario from which the City can choose and we would ask that this be the structure that is recommended. We do not believe that the City must finance and/or operate any solid waste facility. Rather the City must ensure that those who do are competent and competitive.

Freight Mobility

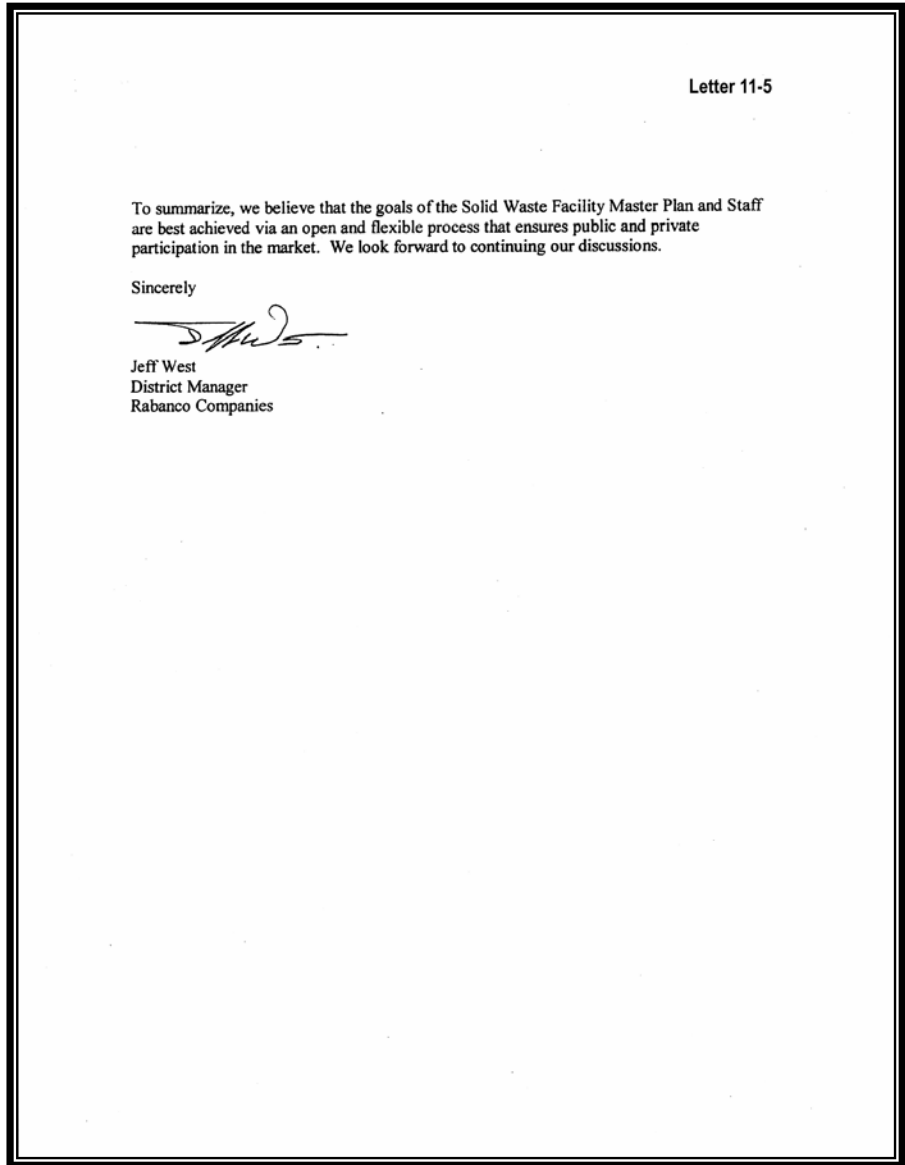
We understand the City's desire to lever these system changes to augment the regions efforts in this important area. Specifically relief of congestion in the Union Pacific Argo yard is a consideration. This issue however must be considered carefully to ensure that no single company, either rail or solid waste service provider, benefits inappropriately. The cargo capacity owned by the Union Pacific at the Argo yard is theirs to manage and invest in. It should be free of indirect subsidy.

We believe an update and review of all potential Inter-modal loading capacity is an important part in determining the scope of work and should be part of the proposal process planning. Should the City desire to invest in regional freight mobility then it should be done directly through the economic development processes and not funded by City ratepayers.

Neighborhood Impacts

As the community surrounding the two facilities is comprised of customers of our company, we are also very sensitive to the impacts a facility can have upon a community. What cannot be lost however are the cost impacts of eliminating all commercial loads from the facilities. Commercial collection from north of the ship canal typically average 10-11 tons each. Compacted loads as currently produced average between 25-30 tons each. That means for each current compacted load, commercial vehicles will need to make 2.5 more truck trips to a new centralized facility. Again we understand the community impacts but it needs to be understood that front line collection efficiency will be lost.

Letter 11 – Nick Harbert, Rabanco (continued)



Letter 11 – Nick Harbert, Rabanco (continued)

Letter 11-6

April 16, 2004

VIA OVERNIGHT DELIVERY

Mark Buscher
Lead Planner
King County Solid Waste Division
201 South Jackson St., Suite 701
Seattle, WA 98104-3855

Re: Waste Export Planning

Dear Mr. Buscher:

Rabanco, LTD appreciates the opportunity to provide the following comments and suggestions relative to your Department's on-going analysis and work regarding the eventual export of King County solid waste. Further, Rabanco appreciates the extra effort that you in particular have exhibited in reaching out and meeting with various service and stakeholder groups. As you are infinitely aware, many of the changes the Division faces in the coming decade will be Herculean tasks.

While the 2004 Business Plan, dated September 2003, identifies many changes the Division will be undergoing near-term, Rabanco has limited its focus to the export planning process. As the process evolves, we assume there will be additional opportunity to provide input as other issues are addressed. That being said, and in keeping with work previously done by the County, we have structured our comments and suggestions around three categories: Landfill Capacity, Compaction at Facilities, and Intermodal Capacity.

LANDFILL CAPACITY

Because the County has previously determined that over-the-road transport of solid waste is undesirable, there are three regional landfills that naturally are primary disposal sites for the County's material. There is a more distant fourth site that may also provide a disposal option for the County. The three primary sites are Finley Buttes Landfill, Boardman, Oregon; Columbia Ridge Landfill, Arlington, Oregon; and Roosevelt Regional Landfill, Roosevelt, Washington. The fourth site is the Idaho Waste Systems (IWS) Landfill, Mountain Home, Idaho. These four sites have combined remaining and currently permitted capacity in excess of 400 million tons.

Further, each site, on a stand-alone basis, has ample remaining capacity to service 100% of the County's projected volume for more than 25 years, minimum. If the County's eventual export plan includes multiple sites, there is between 50 and 100 years of permitted landfill capacity

Letter 11 – Nick Harbert, Rabanco (continued)

Mark Buscher
 April 16, 2004
 Page 2

Letter 11-7

available to the County. There should be little doubt that sufficient private-sector disposal capacity is available.

COMPACTION AT FACILITIES

As we have discussed, the County is considering the development of a reload facility. A County reload facility may be employed in concert with a County-owned intermodal facility or on a stand alone basis. The decision-making matrix for this option is fairly straight forward, driven largely on assumed baleweights achieved, the cost of various transportation components, and the cost of capital improvements to achieve desired goals.

Rabanco has extensive experience loading varying types of wastes utilizing various container configurations and compaction methods. The table below illustrates baleweights the County could reasonably expect to achieve with various operating parameters.

Waste Type	Container Type	Compaction Method	Net Payload
MSW	Open-top 48'	None	24 tons
MSW	Open-top 48'	Hoe or knuckleboom	30 tons (road legal)
MSW	Closed-top 40' or 48'	Stationary Compactor	29 tons (road legal)
MSW	Closed-top 40'	Stationary Compactor	31 tons
MSW	Closed-top 48'	Stationary Compactor	33 tons
CDL	Open-top 48'	None	20 tons
CDL	Open-top 48'	Hoe or knuckleboom	27 tons
CDL	Open-top 48'	Pre-ground or shredded	29 tons

The net payload figures represented above assume appropriate tractor and chassis configurations are specified, allowing maximization of loads. Further, it is assumed that loads are tipped on a transfer floor, as opposed to direct-loaded into trailers. Allowing for a few reasonable assumptions, it is clear that relatively high payloads can be achieved without the use of stationary compactors, especially when the bulk of material being handled is MSW. However, when containers are loaded in facilities that are contiguous to rail and/or barge service, payload figures can be increased significantly because there are no over the road weight considerations.

The fundamental questions becomes "Does a Reload facility pay for itself?" Any analysis undertaken, and the corresponding cost assumptions, should include efforts to maximize payload from the existing infrastructure. Without doing so, the number of containers being delivered to a traditional intermodal facility will be inflated, and will dictate a reload option. Maximizing payload potential from existing facilities will also reduce the number of truck-trips, containers,

Letter 11 – Nick Harbert, Rabanco (continued)

Letter 11-8

Mark Buscher
 April 16, 2004
 Page 3

labor, maintenance, and fleet size required to perform the work. These reductions must be considered when analyzing system components. In other words, the analysis should not consider payloads that are currently being achieved relative to payloads that are anticipated from a reload, rather payloads that could be achieved with some operational and facility improvements at the current transfer stations relative to a reload.

In that context, the County will have a clearer picture as to whether or not a reload facility is an appropriate use of public funds.

INTERMODAL CAPACITY

For very obvious reasons, the issue of intermodal capacity is of significant interest to us. Our current customer base, including affiliated companies, relies heavily on existing capacity. For purposes of discussion, we consider intermodal capacity and rail (system) capacity to be interchangeable. While it is given that intermodal capacity must exist to trans-load containers to rail, rail capacity must also be considered to ensure trains can move.

As the County is finding out, this can be a complex issue. There are two primary rail carriers in the region, the Union Pacific Railroad and the Burlington Northern Santa Fe Railroad. The mainline that exists between Seattle and Vancouver, Washington is owned and maintained by the BNSF; however, the UP has running rights. Therefore, for purposes of analyzing capacity issues, both carriers' traffic, including all types of trains, need be considered.

Such an analysis, beginning around the year 2012, is wrought with uncertainty due to necessary projections of varying types of rail traffic. These projections would include grain, commuter, intermodal, Z-train, freight, bulk commodity, timber, solid waste, and other movements. Many of these products are subject to the pressures of international trade and ebb and flow in sometimes unpredictable fashion. The primary focus of a successful rail export plan should not be whether or not capacity exists, but how to ensure that reliable and guaranteed access *will* exist. That issue is discussed later in this letter.

Site Availability

Rabanco continually evaluates alternative properties that may be viable for development of intermodal capacity, both in and outside King County. It is recognized that large tracks of land on or near the I-5 corridor that are contiguous to the mainline are scarce. That being said, there are several candidate sites within King County, excluding Harbor Island, that Rabanco believes could be developed given reasonable time. Our series of 14 existing intermodal facilities provides a unique and unparalleled perspective of facility siting, permitting and design requirements. Additionally, we have recent experience permitting, designing, and constructing a fully functional intermodal in the heart of Seattle. The development of the Port of Seattle's Terminal 25 yard for use as a barge to rail facility, all in 3-month period, is a grand example of what the private sector is capable of when real opportunity presents itself.

Public Subsidy

A cornerstone of the County's Solid Waste Business Plan is to promote competition. Rabanco certainly agrees with the premise of competition and the value it ultimately lends ratepayers.

Letter 11 – Nick Harbert, Rabanco (continued)

Letter 11-9

Mark Buscher
April 16, 2004
Page 4

There are several recent examples, right here in the Puget Sound region, demonstrating the point. Specific to the export plan, the County states "To obtain the best price for waste export services, it is therefore necessary to ensure there is a physical point of entry into the market that allows all possible landfill operators to have an equal opportunity to access the County's waste and compete to provide waste export services." Rabanco does not agree with that position.

The term 'waste export services' generally includes intermodal yard operations, and always includes rail (or barge) transportation *and* disposal. The County suggests in numerous documents, transportation *and* disposal services of approximately 1 million tons will generate approximately \$40 to \$50 million of revenue for the private sector. That number is likely conservative, but certainly in the correct range for planning and discussion purposes. Assuming that the cost of intermodal operation is not included, approximately 55-60% of the revenue will be spent on the mode of transportation, and 40-45% of revenue will be spent on actual disposal. These ratios could diverge further upon delivery to more distant landfills.

Therefore, as a generic example, if the County's cost to transport and dispose of material outside the County is \$40/ton, \$22/ton will be for transportation and \$18/ton for disposal. With this in mind, Rabanco questions whether a publicly-owned intermodal facility is the best use of public funds. Providing a subsidized cost of entry into the marketplace for "all possible landfill operators" will never generate the return on investment for the ratepayer and misses the bigger picture. The rail carrier, distance to site, container and car requirements, and other related factors will drive the cost of waste export more so than disposal.

Further, such a subsidy creates a distinct disadvantage for operators who already have points of access. The County, and the public, would be far better served to have the private sector, through contract to the County, provide the requisite capacity. There must be cost of entry for all comers to 'level the playing field'. Why would the County want to limit the ability of any prospective bidder to utilize existing, available or expandable capacity – especially if it would ultimately result in better service and lower cost? If the County ultimately decides it believes a publicly-owned intermodal facility is necessary, there should be a cost to use that facility that all prospective bidders would have to pay. This would allow the use of other, potentially more cost effective points of access *and* protect the public interest.

There should be little doubt that the private sector, through its multiple contracts with both rail providers and greater than 3.5 million regional tons, will have significantly better 'buying power' than the County, even with your 1 million tons.

Natural Alliances

It is also important to note that natural alliances do exist. As discussed previously, there are up to four regional landfills that will likely be primary disposal options for the County. The Columbia Ridge Landfill, Finley Buttes Landfill, and IWS Landfill are all serviced by the UP. The Roosevelt Regional Landfill is serviced by the BNSF. For King County solid waste to go to Finley Buttes or IWS, it will have to pass Columbia Ridge. Any assumed savings in disposal costs could be more than offset by increased transportation and equipment costs. For King County solid waste to go to Roosevelt, it will have to be delivered by the BNSF.

Letter 11 – Nick Harbert, Rabanco (continued)

Letter 11-10

Mark Buscher
April 16, 2004
Page 5

These factors must be considered by the County through the development of the plan, especially in the context of projecting rail capacity of each carrier into the future.

Contracting for Services

It is Rabanco's strong-held belief that the County, and the public at-large, will be best served by contracting for services. If the County contracts for services, the public will be protected from the uncertainties of future rail capacity and the exposure created by publicly-owned facilities. This protection is conveyed in the form of specific obligations to provide points of entry and capacity by the private sector. Certainly, Rabanco would entertain contractual obligations to perform and provide specified services, along with stipulated damages, ensuring that intermodal and rail capacity exists when the County needs it.

I would assume that the information contained herein will generate additional requests from you. I look forward to additional opportunity to discuss these important issues with you. Please let me know if you have any questions.

Sincerely,
Rabanco

Pete Keller
Vice President

Letter 12 – Adam Hasson, Samis Land Company/Samis Foundation

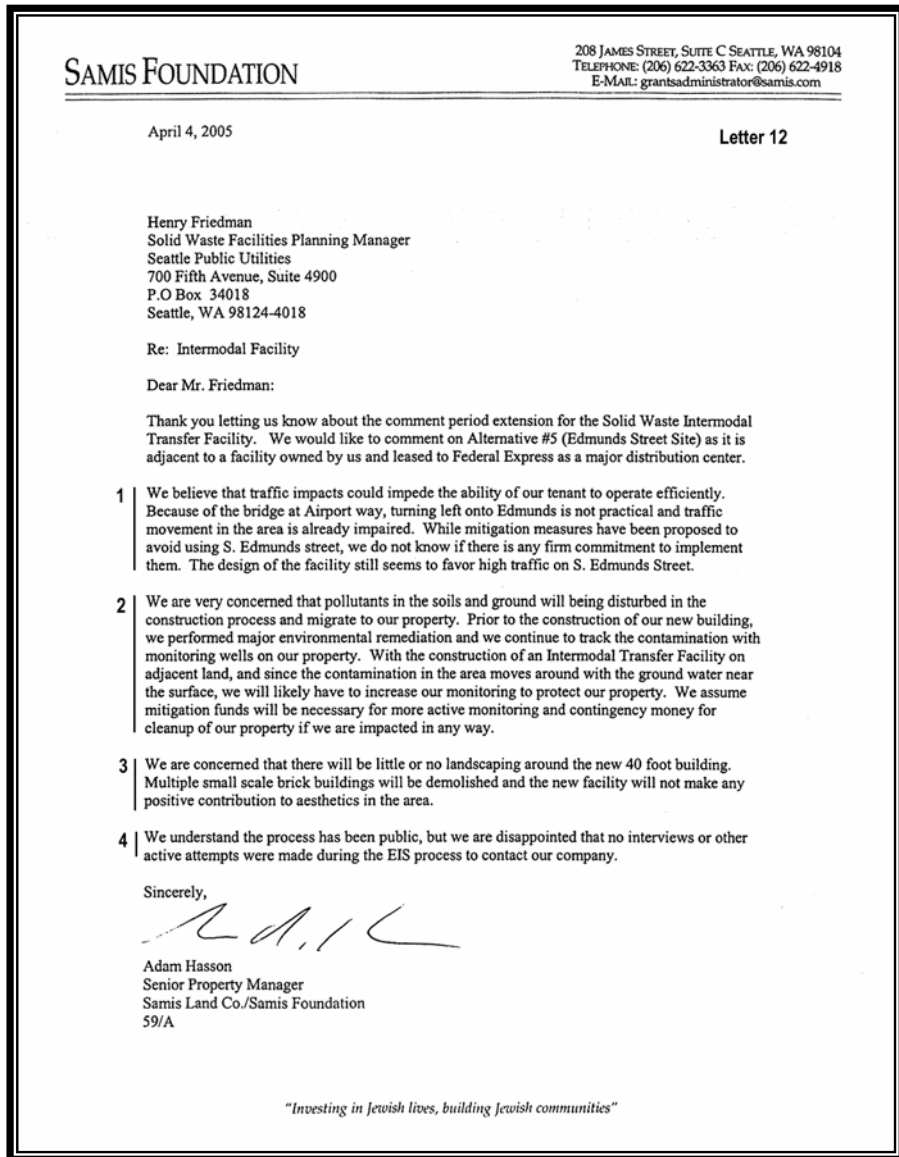
12.1—The Airport Way South/South Edmunds Street intersection would operate at level of service (LOS) F in the year 2028, with or without the new intermodal transfer facility (Appendix C, Table 10). An alternate egress route would be required for this alternative. No specifics have yet been determined for the egress route; however, the most likely route would be a connection to Sixth Avenue South, which would require access through a railroad right-of-way that is currently being used by Northwest Container Services. Another potential route is an extension of Seventh Avenue South to Industrial Way South, which may require an easement or right-of-way from Samis. Any extension of roadways in the study area would require planning and coordination between the City of Seattle, Seattle Public Utilities, adjacent landowners, and business operators.

12.2—Please see the response to comment 7 of letter 8.

12.3—Comment noted. The proposed project has not proceeded beyond the conceptual design; therefore, full details of the main


building’s design are unavailable. However, the project will undergo a mandatory review by the Seattle Design Commission, which provides recommendations regarding environmental and design aspects of City capital improvement projects. The meetings of the Seattle Design Commission are open to the public; if and when this project comes before the commission, we encourage you to participate and provide your input.

12.4—Comment noted. At the outset of the EIS process in August 2004, interested parties and the public were provided an opportunity to comment on the scope of the supplemental EIS, and after the draft supplemental EIS was published in February 2005, they were provided an opportunity to comment on the draft EIS. In addition, a letter was sent to all owners of property adjacent to the proposed sites to provide information about the project.



Letter 13 – Eddie Westmoreland, Waste Connections Inc.

13.1—The issues you raise, which relate to the overall operation and configuration of Seattle’s solid waste system, have been addressed through the City of Seattle’s solid waste comprehensive planning process. The most recent update to the City’s solid waste comprehensive plan (*On the Path to Sustainability, 2004 Plan Amendment*) and the subsequent draft solid waste facilities master plan reaffirm the City’s conclusion that the needs of its solid waste management system would be best served by the construction of a single dedicated intermodal transfer facility that combines waste receiving with train loading.

<p>American Disposal American Portable Storage DM Disposal DM Recycling</p>	 <p>WASTE CONNECTIONS INC. <i>Connect with the Future*</i></p> <p>Northern Washington Division P.O. Box 399 • Puyallup, WA 98371-0158 (253) 414-0345 • Fax (253) 582-9561</p>	<p>Letter 13</p> <p>Murrey's Disposal Olympic Disposal Tacoma Recycling Vashon Island Disposal</p>
<p>April 4, 2005</p> <p>Henry Friedman, Solid Waste Facilities Planning Manager Seattle Public Utilities, 700 Fifth Avenue, Suite 4900, PO Box 34018 Seattle, WA 98124-4018</p> <p>RE: Comments on the Draft Supplemental Environmental Impact Statement for the Solid Waste Intermodal Transfer Facility</p> <p>Dear Mr. Friedman:</p> <p>Thank you for the opportunity to comment on the Draft Supplemental Environmental Impact Statement (DSEIS) for the Solid Waste Intermodal Transfer Facility. On behalf of Waste Connections, I want to express our appreciation for all the time and effort the City has taken in planning and developing this project.</p> <p>1 Our comments center around the No Action Alternative (Alternative 1). This alternative is characterized as perpetuating an inefficient system resulting in a higher overall cost. We believe that Alternative 1 could meet all the objectives of the proposal.</p> <p>The City has successfully turned to the private sector in the past. Cases in point are the recycling processing facilities, the yardwaste processing facility at Cedar Grove and the present intermodal facility at the Argo yard. In 1987, when the City issued a RFP for residential recycling the Rabanco recycling facility was not equipped to receive and process residential material, and Waste Management did not own or operate a processing facility in the region. In 1988, when the City issued a RFP for yardwaste collection and processing, there was no yardwaste processing facility in the area. In 1990, when the City issued a RFP for longhaul disposal services, the ARGO yard was not equipped to handle the volume of solid waste that is presently going through the yard. In all these instances the private sector stepped forward and created facilities to meet the City's needs.</p> <p>There is currently adequate private sector capacity to meet the City's needs. Rabanco currently receives and compacts MSW at their 3rd and Lander facility. A portion of this</p>		

Letter 13 – Eddie Westmoreland, Waste Connections Inc. (continued)

Letter 13-2

1
conti.

material is loaded directly onto a unit train which services their landfill in Roosevelt, Washington. Waste Connections has the ability to load intermodal containers onto a unit train at our facility at Edmunds Street. This facility can be served by either BN or UP trains and UP tracks serve our landfill in Finley Buttes, Oregon. Waste Management currently receives and compacts MSW at their Eastmont facility and they contract for the intermodal operation at ARGO. If the City no longer desires to receive contract tonnages at their transfer stations, there is currently adequate private sector capability to receive and process this material at the facilities presently owned and operated by Rabanco, Waste Management and Waste Connections.

It is our experience that through the use of proper intermodal containers, chassis, and tractors, we can increase the payload of the containers to 30 tons and still be road legal. We believe that it would be difficult to achieve higher average payloads even if road limits were not a concern. Achieving a 30 ton payload is important as our proposal would still require the hauling of intermodal containers over public streets.

We believe that relying on the private sector to receive and process all the contract MSW is a viable option which would save the City a considerable amount in capital cost. This option would enable the City to make needed improvements to the City transfer stations to meet the public's needs, and would eliminate the cost of constructing an intermodal transfer station. We believe that the City should take a more detailed look at this alternative rather than dismissing it as more costly and inefficient.

Again, thank you for providing the opportunity to comment on this DSEIS.

Sincerely,



Eddie Westmoreland
Division Vice President,
Waste Connections, Inc.

cc: Eric Merrill, WCI
Gary Cardwell, NWCS
Art Scheunemann, NWCS

Letter 14 – Angela Van Agtmael


14.1—Some of the roadways in Georgetown have narrow widths and tight turning radii. Other roadways were designed or rebuilt over the years to accommodate large trucks. For the Corgiat Drive site (Alternative 4), most traffic related to the new intermodal transfer facility would use near-direct access to and from Interstate 5 (I-5). For instance, traffic exiting I-5 southbound would use Exit 161. This would bring traffic directly to the signal at South Corgiat Drive and South Albro Place. Trucks leaving the site and returning to the north on I-5 would go through Georgetown. They would turn left from South Corgiat Drive to South Albro Place, turn right onto Stanley Avenue South, and then veer left to South Bailey Street. Stanley Avenue South features two wide travel lanes and parking on both sides. South Bailey Street has two wide travel lanes with parking on one side.

It is recognized that there is a center island on Stanley Avenue South east of 13th Avenue South that has been previously damaged by vehicles. The

majority (91 percent) of the trucks traveling to and from the intermodal transfer facility would be collection trucks that have a short wheel-base and are very maneuverable. The drivers of these trucks are used to maneuvering on narrow streets while collecting refuse; many of these streets have parking on both sides and only one travel lane. The remainder (9 percent) of the trucks traveling to and from the intermodal facility would be transfer trucks with 40-foot containers. These transfer trucks are short relative to many trucks that have trailers longer than 50 feet.

On April 7, 2005, a traffic count was performed during the PM peak period at the South Bailey Street/13th Avenue South/Stanley Avenue South intersection. This all-way-stop intersection currently operates at level of service (LOS) B and would decline to LOS C by the year 2028 due to a growth in background traffic even if the proposed project is not implemented. Additional traffic generated by the new intermodal transfer facility would degrade operations at this intersection to LOS D. This is an acceptable level of service in Seattle, and changes in neither the lane geometry nor traffic control would be needed.

Collection trucks and employee vehicles traveling to and from the area west of the South Corgiat Drive site could use a variety of routes. Figure 15 in Appendix C shows approximately 9 trips during the PM peak hour and 136 daily trips to and from the west. Most trips to and from the west involve either passenger vehicles (employee automobiles) or collection trucks.



Letter 14 3/2/05

WHAT DO YOU THINK?

Solid Waste Intermodal Transfer Facility DSEIS

Please turn this form in tonight, or submit your comments by **March 21, 2005** to Henry Friedman, Solid Waste Facilities Planning Manager, by email, fax or postal mail:

Email: swfmp.spu@seattle.gov

Fax: (206) 684-0206

Henry Friedman
Seattle Public Utilities
Seattle Municipal Tower
700 5th Avenue, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

You are invited to comment on the completeness and accuracy of the Draft Supplemental Environmental Impact Statement regarding the solid waste intermodal transfer facility. Comments that focus on the analysis (assumptions, data collecting methods, and conclusions) are most useful. We are especially interested in any local knowledge, problem areas, or other considerations.

Please send us a copy of this intermodal fac. We will send to community council - thank you.

Name: Angela Van Agtmael Phone: 206-762-1891

Address: 6249 Ellis Street Email: _____

City: Seattle Wn 98108 State: _____ Zip: _____

Two Issues of Concern

1. Size of Streets in Georgetown are small.
2. Safety Issue.

1. The Georgetown area was platted at the turn of the century and the curbs, streets and curving radiuses of the corners are too small to accommodate the large trucks - The trucks run over our curbs - and fan busy strips and traffic circles breaking the concrete and killing our plants.

2. Safety issue is crossing Bailey anytime of the day from Ellis to the bank or grocery store is dangerous. We have no crosswalks or stop lights.

→ Intersection to study 13th & Bailey instead of City Hall & Carlton & Bailey.

As to the freeway.

Buenavistas

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14.2—It is correct that the pedestrian crossings at the South Bailey Street/Carleton Avenue South/Interstate 5 on-ramps do not provide access to all corners of the intersection. These crosswalks cross the east and the south legs of the intersection only. A pedestrian cannot cross the ramp or the west leg of the intersection. This makes it impossible to access the businesses on the northwest corner of the intersection without a long walk to the next intersection west and back. This poor pedestrian access is related not to the volume of traffic but to the geometry and signal phasing of this intersection. Additional traffic generated by the intermodal transfer facility would not degrade this condition.

14.3—Please see the response to comment 1 of your letter. The intersection of South Michigan Street/Carleton Avenue South/South Bailey Street moves traffic directly onto the freeway on-ramps. Part of the interstate highway system, this intersection was constructed to accommodate high traffic volumes, including truck traffic.

Letter 15 – Robert N. Anderton

15.1—Any proposal to upgrade the South Recycling and Disposal Station would be accompanied by the preparation of environmental documentation in compliance with the State Environmental Policy Act. This environmental documentation would evaluate the potential for impacts on surrounding properties and nearby communities.

Your preferences regarding alternative selection are noted.

Letter 15 Page 1 of 1

Henry Friedman - Solid Waste Intermodal Facility EIS Comment: Avoid Residential Areas

From: "Robert N. Anderton" <bob@andertonlaw.com> *Received 3/14/05*
To: <swfmp.spu@seattle.gov>
Date: 3/3/2005 9:57:11 AM
Subject: Solid Waste Intermodal Facility EIS Comment: Avoid Residential Areas

1 I am a resident of South Park, Georgetown's sister neighborhood and I oppose the expansion of the existing South transfer station due to its significant impact on Georgetown residents.

Alternatives 2 or 3 appear to have the least impact on residential use. However, 4 and 5 are preferable to the addition, with 4 being better than 5 due to its location between I-5 and Boeing Field.

Thank you,

Bob

Robert N. Anderton

ANDERTON LAW OFFICE
Representing People, Not Corporations

The Pioneer Building,
600 First Avenue, Suite 400
Seattle, WA 98104

Phone: (206) 262-9290
Fax: (206) 621-8887
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Letter 16 – Suzie Burke

16.1—At its beginning, the supplemental EIS process included an evaluation of upgrading the two City of Seattle recycling and disposal stations in addition to an evaluation of constructing the proposed intermodal transfer facility. After reviewing comments received during the scoping process, the City of Seattle decided to limit the supplemental EIS to an evaluation of the proposed intermodal transfer facility only. An explanation of this decision is provided in Part 2, in the section “Scoping Process.” Separate environmental documentation will be prepared for the upgrades to the two recycling and disposal stations.

Letter 16 Page 1 of 1

Henry Friedman - Comment re Draft SEIS for Solid Waste

From: Suzie Burke <fremontland@yahoo.com>
To: <swfmp.spu@seattle.gov>
Date: 3/21/2005 2:54:18 PM
Subject: Comment re Draft SEIS for Solid Waste

1 | Can't the committee ask that all facilities be considered in the plan? This piecemeal approach is misleading. - Suzie Burke

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Letter 17 – Gingi Cabot

17.1—In choosing the potential sites for the intermodal transfer facility, the major considerations included rail access, appropriate industrial zoning, adequate arterial access for trucks, and other factors. The intention was not to hide the proposed facility from public view or inhibit public awareness; rather it was to ensure the efficient operation of the facility, with minimal impact on incompatible land uses. For safety and security reasons, the intermodal facility will be a restricted facility with access only to authorized personnel, similar to the other intermodal transfer facilities in Seattle. However, the city’s two recycling and disposal stations will remain open to the public, and they are more appropriate locations for the addition of educational components.

Over the past several decades, the City of Seattle has consistently engaged in an aggressive public awareness program that has focused on the need to reduce the generation of solid waste and increase the recycling of solid waste that is generated.

Letter 17

3/29/05

1 | As both a citizen of Seattle and a member of the Solid Waste Advisory Committee, I find the Draft Supplemental Environmental Impact Statement for the Intermodal Transfer Facility to be significantly incomplete with regards to the sites currently under consideration for development. In choosing sites that are intentionally removed from citizen awareness and major traffic patterns, the Public Utility is perpetuating the out-of-sight out-of-mind mentality surrounding the disposal of solid waste that has become the hallmark of our consumer-oriented society. Rather than selecting a location that supports waste reduction and encourages positive perceptions of trash as a useful resource, SPU appears committed to pursuing an antiquated model of solid waste planning that shields waste infrastructure from public view and perpetuates the negative stereotypes surrounding garbage. This decision represents not only an administrative oversight, but a palpable disregard for the public welfare that our municipal utility is, by definition, dedicated to serving. By limiting the potential value of trash to teach present and future customers about wasteful consumption patterns, the Utility is under-serving our community. If we as a society truly intend to move toward reduced waste and increased recycling, then our Public Utility should not fear to lead us in that direction. The current locations selected for the intermodal facility do not adequately or completely address the visibility of waste infrastructure as a valuable signifier to solid waste generators. In this respect, the assumptions and conclusions drawn prior to and as a result of the DSEIS are inherently flawed.

Gingi Cabot

Letter 18 – Mary Corrigan

18.1—The Alaskan Way Viaduct will be replaced regardless of the location of the intermodal transfer facility. Currently, many of the transfer trips between the North Recycling and Disposal Station (NRDS) and the two private intermodal facilities use the Alaskan Way Viaduct. The construction of the Alaskan Way Viaduct will negatively affect traffic regardless of which alternative is selected, including the no-action alternative. The City of Seattle and the Washington State Department of Transportation are now undertaking a major evaluation of potential construction impacts due to the various construction scenarios for the Alaskan Way Viaduct. This evaluation will include nearly every major intersection between the First Avenue South Bridge and the Mercer corridor. Seattle Public Utilities will be monitoring this evaluation as part of its site-selection process.

The following information is from the Final Alignment and Station Location Report for the Green Line, issued in March 2004 (Seattle Monorail Project website). The construction schedules for the Monorail have not yet been determined. The new monorail is proposed as a single-beam guideway with switches at both ends of the West Seattle Bridge (upper bridge). Construction of the new monorail would affect traffic flow for collection trucks that travel from West Seattle regardless of the alternative that is selected, including the no-action alternative. Operation of the monorail is not expected to affect traffic flow on the West Seattle Bridge.

Under Alternatives 2 and 3, the primary routes used for site access would be State Route 99, the Spokane Street Viaduct, or East Marginal Way. Therefore, most site-related traffic would avoid the possible Monorail construction area. See Appendix C, Figure 10, for the Harbor Island trip distribution patterns.

Level of service calculations are based on the methodology of the *Highway Capacity Manual* (Transportation Research Board 2000), which is used throughout the transportation industry and by most jurisdictions for measuring traffic operations. This methodology evaluates traffic operations on a given roadway by projecting the average delay per vehicle and assigning a level of service based on six ratings (LOS A through LOS F). LOS A represents the best traffic flow and LOS F the most congested. In urban areas, an LOS of E or better is generally acceptable. For Seattle, a project that results in or exacerbates an LOS F condition is considered significant from the perspective of the State Environmental Policy Act.

Letter 18

Page 1

Henry Friedman - RE: Transport site in West Seattle

From: "Marni Heffron" <marni@hefftrans.com>
To: "Mary Corrigan" <mcorrigan@holynosaryws.org>
Date: Wed, Mar 9, 2005 12:37 PM
Subject: RE: Transport site in West Seattle

Thank you for your comment. I am forwarding your comment to the City of Seattle's project manager, Henry Friedman, so that it can be included in the formal comments received on the Draft EIS. We will address these comments when we prepare the Final EIS.

Marni C. Heffron
Heffron Transportation, Inc.

-----Original Message-----
From: Mary Corrigan [mailto:mcorrigan@holynosaryws.org]
Sent: Wednesday, March 09, 2005 11:20 AM
To: marni@hefftrans.com
Subject: Transport site in West Seattle

Dear Ms. Heffron,

I have a few concerns about the information you presented at the community meeting in West Seattle in regards to the transport site being built on Harbor Island.

1 You chose not to study the impact of the replacement of the viaduct on traffic in regards to the impact of trucks. I find that irresponsible. Also, there was no mention of the impact of the monorail construction. I feel that your estimation of traffic being downgraded from a "B" rating to a "C" rating in key intersections was not accurate and misleading. Also, it was noted that residential garbage trucks would start arriving at the transfer station around 3:00 pm "before the rush-hour". Clearly you do not travel the West Seattle Bridge. I was just caught in rush hour traffic, backed up along the bridge yesterday at 2:30 pm. Traffic is a huge issue and the authority given to you to investigate it more thoroughly needs to be taken more seriously.

Please reconsider your abandonment of a thorough look at all the impacting factors including the monorail, viaduct, and daily traffic.

Thank you and I look forward to your reply.

Sincerely,
Mary Corrigan

CC: "Henry Friedman" <Henry.Friedman@Seattle.Gov>, "Mark Johnson" <mjohnson@herrerainc.com>

Under Alternatives 2 and 3, operations at some of the intersections evaluated would change from LOS B to LOS C in the year 2028, because of an increase in background traffic (Appendix C, Table 8). With the addition of traffic related to the intermodal transfer facility, the operations at these intersections would remain at LOS C.

Most of the traffic associated with Alternatives 2 and 3 would exit Harbor Island to lower SW Spokane Street and then almost immediately to Harbor Island. The roadways in the area were designed to move traffic, especially truck traffic, quickly out of the mainline and onto Harbor Island.

Residential collection trucks would arrive at the intermodal transfer facility all day long. However, the peak hour for these intermodal truck trips would begin at 3:00 p.m. Traffic analysis is typically performed for the busiest 1 hour of area roadways. For the Harbor Island area, that busiest 1 hour for overall traffic is 3:30 to 4:30 p.m. This is related to the outflow of Todd Shipyard employees after 3:30 p.m., as well as general area traffic that is westbound during this period and at other times. To represent a worst-case condition, the peak 1 hour for the intermodal transfer facility was assumed to coincide with the peak 1 hour for other Harbor Island traffic.

Waste collection trucks from West Seattle would use the West Seattle Bridge facilities whether or not a new intermodal facility is constructed. If Alternative 2 or 3 is chosen, more of the West Seattle collection trucks could use the lower bridge as opposed to the upper bridge. The volume of refuse collected from West Seattle would remain the same, regardless of the site that is selected.

Letter 19 – Fransing Daisy

19.1—In Part 3 of this supplemental EIS, the sections “Air Quality and Odor” and “Hazardous Materials” describe measures that would be taken to minimize or avoid the generation of odor and hazardous materials at the new intermodal transfer facility. Also, please see the responses to comments 4 and 7 of letter 8. The two schools you mention in your comment are located on the east side of Interstate 5 (I-5), while the proposed intermodal transfer facility is located on the west side of I-5. This physical barrier would disrupt air flow from the station to the schools. Also, the intermodal facility is designed to minimize the escape of odors, dust, and chemical compounds (see response to comment 4 of letter 8). If odors or chemical compounds are occasionally detected, additional controls could be activated, such as turning on the air filters, to eliminate the problem.

Letter 19

Henry Friedman - Solid Waste
Page 1

Received 3/17/05

From: Fransing Daisy <fransing@u.washington.edu>
To: <swfmp.spu@seattle.gov>
Date: 3/16/2005 8:02:08 AM
Subject: Solid Waste

1 | Comment: I would like to state my position regarding the proposed solid waste intermodal transfer facility. I would like to voice my disagreement with use of the Corgiat Drive area as the placement for the new facility. Just west of the designated area are two schools Cleveland High and St. George School. Both of these schools would be impacted by the odor and chemical residue generated by processing of the solid waste. Regardless of new technology, solid waste continues to generate significant odor and chemicals. Consequently I am against placement of this facility at the Corgiat Drive site.

Fransing Daisy

Letter 20 – Brian Dougherty

20.1—Comment noted. Traffic analyses were performed for all the alternative sites to identify potential issues. The results of these analyses will be used by Seattle Public Utilities as part of its site-selection process. This supplemental EIS evaluated the potential for noise and odor impacts if the intermodal facility is located on either the Corgiat Drive site or the Edmunds Street site. This final supplemental EIS also describes an additional evaluation of truck-related noise in the Georgetown area that was conducted in response to several comments from Georgetown residents. The conclusion of the original evaluation and the new evaluation is that the noise impacts would not be significant, primarily because the arterial roadways in the area already support substantial volumes of truck traffic and the intermodal transfer facility would not result in significant additional truck volumes.

Odor would be controlled because putrescible solid waste would be handled within the main, enclosed transfer building. Any putrescible solid waste that is stored outside the main transfer building would be compacted and contained in sealed, leak-proof containers.

20.2—Please see the response to comment 1 of letter 14.

20.3—Please see the response to comment 4 of letter 8 for a description of the measures that would be implemented to minimize odor impacts at nearby properties.

20.4—Some residential roadways in Georgetown have narrow widths and small turning radii at intersections. All roads that might be used to access the Corgiat Drive site are arterials on which trucks are allowed. South Michigan Street, Corson Avenue South, South Bailey Street, Ellis Avenue South, Airport Way South, South Albro Place, and Swift Avenue South are principal arterials that are designed to accommodate large trucks. Stanley Avenue South is a collector arterial.

20.5—Comment noted.

Letter 20 Page 1 of 1

Henry Friedman - Intermodal waste facility siting

From: "Brian Dougherty" <industrialbiker@comcast.net>
To: <swfmp.spu@seattle.gov>
Date: 3/2/2005 12:09:33 AM
Subject: Intermodal waste facility siting

Dear Mr. Friedman,

1 | I do not believe Corgiat Drive or Edmunds Street are appropriate locations for the new solid waste facilities. I am a homeowner in Georgetown and we currently have a high level of traffic within our neighborhood as well as odors and noise that are already putting pressure on our residential enclave. These two locations would put even more pressure on our neighborhood. Harbor Island is a much better location – it is much further away from major residential areas and allows for direct access to the seaport.

2 | Specifically I am concerned about the following issues:

1. Additional truck traffic along Bailey Street, which is a neighborhood commercial zone.
2. Additional truck traffic along Airport Way in Georgetown, which acts as our de facto Main Street even though it is zoned industrial (just look at Stellars Pizza, Two Tartes Bakery, Big People Scooters, and Jules Maes).
- 3 | 3. Odors impacting the Boeing Field Apartments and other apartments near the old Georgetown City Hall.
4. Odors wafting to single family neighborhoods in Georgetown and Beacon Hill.
- 4 | 5. Many of the streets in Georgetown were platted in the 19th century and are not wide enough to accommodate heavy volumes of truck traffic.

5 | We are trying to create a small but livable neighborhood in Georgetown. There is a lot of pressure on the neighborhood from heavy industrial activities, and we do not need a "dump" to make things worse.

Thank you for your consideration.

Brian Dougherty
6630 B Corson Ave S.
Seattle, WA 98108

file://C:\Documents%20and%20Settings\friedmh\Local%20Settings\Temp\GW\00001.HTM 4/11/2005

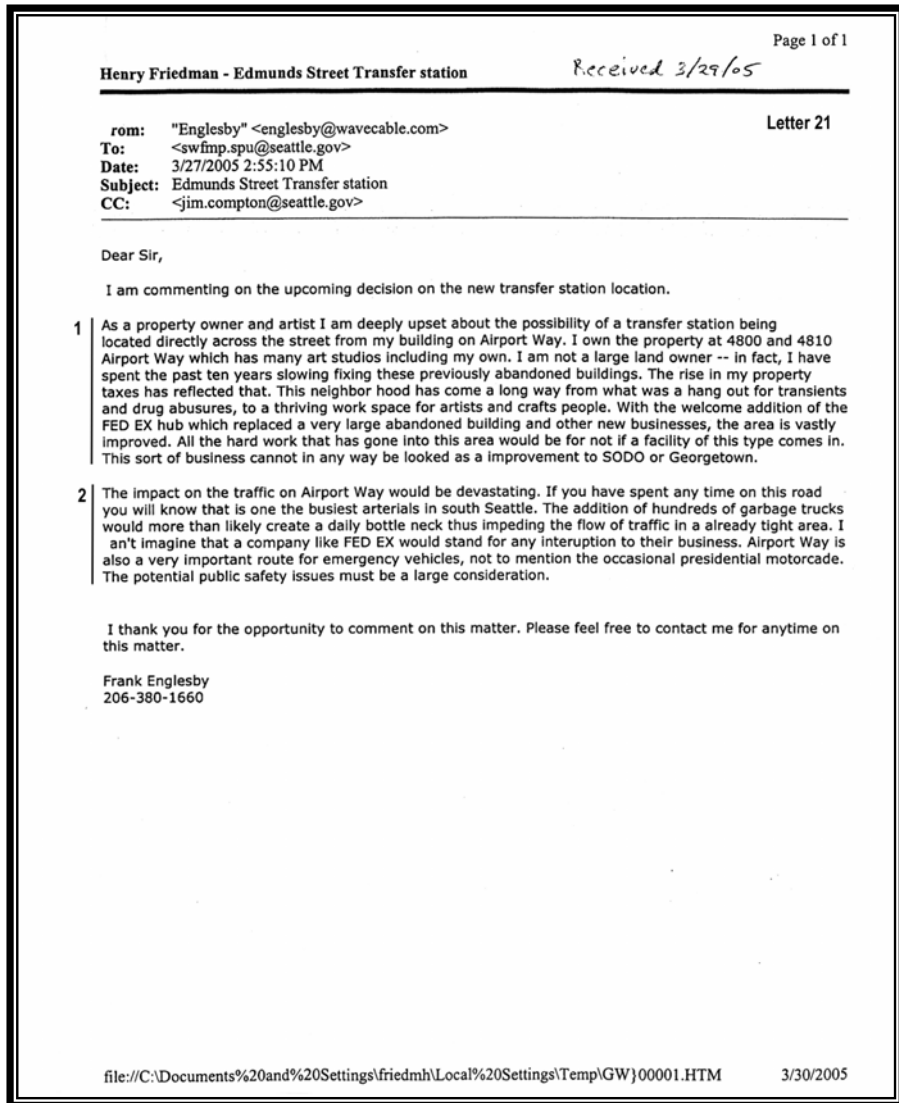
Letter 21 – Frank Englesby

21.1—The proposed intermodal transfer facility would replace an existing intermodal facility at the Edmunds Street site; therefore, the activities at the Edmunds Street site would not change significantly if Alternative 5 is selected for implementation. This supplemental EIS evaluated the likelihood that odor, noise, traffic, and other impacts would result if a new intermodal transfer facility is constructed and concluded that the impacts would not be significant from the perspective of the State Environmental Policy Act. Please see the responses to the comments in letter 8 for additional discussion of the potential impacts and the measures that are proposed for mitigation.

21.2—Airport Way South does carry high volumes of traffic and has had more growth in traffic than other roadways in the south industrial area over the past decade (Appendix C, Section 3.3.2). Figure 19 in Appendix C shows the projected total volumes of through traffic at intersections on Airport Way South in the year 2028, including traffic related to the intermodal transfer facility.

The intersection at Airport Way South/South Edmunds Street would operate at LOS F with or without the intermodal transfer facility in the year 2028 (Appendix C, Table 10). If the Edmunds Street site is selected, another egress route would need to be determined, such as an extension of Sixth Avenue South or Seventh Avenue South to Industrial Way South (Appendix C, Sections 4.5.2 and 4.5.3).

Note that the existing traffic volumes, volumes under the no-action alternative, and volumes under Alternative 5 include Federal Express traffic.



Letter 22 – Mark Johnson

22.1—Comment noted. Traffic analyses and other technical analyses were performed for all the alternative sites to identify potential issues. The results of these analyses will be used by Seattle Public Utilities as part of its site-selection process. Because of mitigation measures that would be included in the facility’s design and operation, the proposed intermodal transfer facility is not expected to generate any significant new odor impacts or noise levels that are substantially greater than the existing levels at either the Corgiat Drive site or the Edmunds Street site. Please see the responses to comment 10 of letter 1, the comments of letter 8, comments 1 and 2 of letter 14, and comment 1 of letter 20.

Letter 22

Henry Friedman - Intermodal Transfer Station EIS
Page 1

3/14/05

From: "Mark Johnson" <MJohnson@JonesandJones.com>
To: <swfmp.spu@seattle.gov>
Date: 3/3/2005 10:10:37 AM
Subject: Intermodal Transfer Station EIS

Hello Henry Friedman -

1 I am writing you today in response to the draft EIS for the Intermodal Transfer Station. Of the five options, I think that the first three are the only options considerate of our city's neighborhoods - beyond the basic design of removing trash from the city. Option one, of course, is required, and thus most likely to not be selected, yet it creates no determinate impact. Options two and three locate the transfer station closest to their route away from the city within a common industrial / multi modal environment. The context is perfect in these two options for a waste sorting / compacting / packaging industry.

Options four and five, however, have substantial aggregate impacts on the quality of life in the Georgetown neighborhood. Garbage hauling vehicles would continually have to move through the residential and newly redeveloped commercial strips of the Georgetown neighborhood, adding yet another dirty, noisy burden to this already burdened "south end" neighborhood. Unseen and potentially unaccounted for costs to the neighborhood, such as compromised air quality, noise pollution, dirty roads, accumulated street trash, and the hazards of many more trucks per day on arterials should be considered in the EIS.

thank you -

Mark Johnson
 South Park

Letter 23 – John Leonard

23.1—Under the State Environmental Policy Act, traffic analyses can rely on and include any funded or significantly funded transportation improvements projects. The Port of Seattle is currently preparing final design plans for the East Marginal Way grade-separation project. With the recent legislative approval of the gasoline tax, the project is fully funded.

23.2—The reconstruction of Harbor Island included significant improvements to access and roadways to help reduce congestion on SW Spokane Street. The most substantial improvement was the relocation of the primary rail access to Harbor Island so that it passes under the Spokane Street Swing Bridge. This has substantially reduced the delay on Spokane Street. Other improvements included changing the way that vehicles from Harbor Island access the Spokane Street corridor. There are now two lanes on eastbound Klickitat Avenue SW—one of these lanes serves as a queue lane for vehicles heading west over the swing bridge. If the swing bridge is open, through vehicles traveling east to SW Spokane Street (toward State Route 99 [SR 99]) can bypass this queue.

Most Harbor Island traffic approaches from the SR 99/Harbor Island off-ramp, along East Marginal Way South, or along the Spokane Street Viaduct. This traffic uses the outside (northernmost) westbound lane to reach either the north or south gate on Harbor Island. Traffic bound for Harbor Island bypasses most of the lower bridge congestion by using that lane.

Accident data from the City of Seattle shows a total of 11 accidents on westbound SW Spokane Street and South Spokane Street, through the merge area to the intersection of westbound South Spokane Street/Klickitat Avenue SW. This data cover a 3-year period from January 1, 2002, to December 31, 2004. These accidents included two head-on collisions, one left-turn (merge) accident, two sideswipes, four right-angle accidents, one rear end collision, and one other accident (loss of control, one vehicle involved). These 11 accidents represent an annual average of 3.67 accidents. This rate of accidents is relatively low given the high volume of traffic using these facilities. Signalized intersections with less than 10 accidents per year are not considered high-accident locations by the City

Public Utilities	WHAT DO YOU THINK?		3/20/05
	Solid Waste Intermodal Transfer Facility DSEIS		Letter 23
Please turn this form in tonight, or submit your comments by March 21, 2005 to Henry Friedman, Solid Waste Facilities Planning Manager, by email, fax or postal mail:			
Email: swfmp.spu@seattle.gov		Henry Friedman Seattle Public Utilities	
Fax: (206) 684-0206		Seattle Municipal Tower 700 5 th Avenue, Suite 4900 P.O. Box 34018 Seattle, WA 98124-4018	
(public mtg, 3 Mar, West Seattle High Sch.)			
Name <u>John Leonard</u>		Phone _____	
Address <u>4411 54th Av SW</u>		Email _____	
City <u>Seattle 98116-3942</u>		State <u>WA</u> Zip <u>98116-3942</u>	
"...level of service was the same, with or without this project"			
"No mitigation required."			
With respect to the Spokane Street corridor across the low level bridge, Harbor Island, the East Waterway, and including East Marginal Way and Duwamish Av feeders, neither of the above-quoted traffic conclusions is credible.			
I drove that corridor, to and from work, for twenty-one years. The conclusions are simply not credible.			
1	<p>A. As long as RR tracks intersect the northbound exit from E. Marginal Way South (Hwy 99), as long as RR tracks intersect Duwamish Av South, as long as RR tracks intersect SW Spokane St on Harbor Island itself, mitigation IS required, level of service IS degraded.</p> <p>It is wrong to list as an "assumption" the future existence of a northbound East Marginal Way vehicle offramp overpass. As long as it does not exist now, for this draft SEIS, it must be labelled "required mitigation". This is not semantics; it is non-existent infrastructure, and its non-existence renders the traffic conclusions invalid.</p>		
2	<p>B. In addition, as long as the low-level swing bridge continues to swing open in obedience to the randomness of navigational servitude, then the level of service in the traffic corridor will be degraded by the infusion, daily, of the entire fleet of garbage trucks.</p> <p>I suspect that the traffic as modelled failed to incorporate the westbound interweaving that takes place over the East Waterway, specifically vehicles desiring to merge left from the Harbor Island lane into the low bridge lane. When the bridge swings open, not only does the traffic in the bridge lane come to a halt, but also the left-merging traffic from the Harbor Island lane. When the merging stops, then the Harbor Island lane and traffic stop, too, clogged by the traffic that wants into the other lane. In other words, when the bridge swings open, the garbage trucks will stop even though they don't want to cross the bridge.</p> <p>Two mitigations suggest themselves:</p> <ol style="list-style-type: none"> 1. request the US Coast Guard to waive navigational servitude between, say, 3:30 – 5:00 p.m., or... 2. increase the capacity of the traffic corridor so that it can accommodate the open-bridge-stopped traffic and keep traffic free-flowing onto the Island, irrespective of whether the bridge is open or not. 		
3	<p>C. My final thought is this: the other mode, the garbage trains leaving Harbor Island will, themselves, exacerbate the vehicle traffic tie-ups and degrade the level of service, unless "mitigation" requires them to leave only between, say, midnight and 4 a.m.</p>		
16 Mar 2005			

of Seattle. The small increase in traffic associated with the intermodal transfer facility at the Harbor Island Terminal 10 site is not likely to increase the accident rate.

Data from the Seattle Department of Transportation's bridge tender were collected previously for the draft EIS prepared for the Terminal 18 improvement project. Data from September 1, 1994, through September 31, 1995, indicate that, on average, the bridge is opened between eight and nine times each day. During this period of data collection, the peak number of daily openings occurred in June. Specific data for that month indicate that the length of time elapsed during each bridge opening ranged from 6 to 27 minutes; however, one opening was reported to last 65 minutes. The average bridge opening lasted 13 minutes. The bridge tenders also record openings during the peak commute periods, which are defined as 6:00 to 9:00 a.m. and 3:00 to 6:00 p.m. On average, the bridge opened two times per day during the peak commute times.

On Thursday, May 6, 2005, westbound traffic flow was observed during an opening of the swing bridge. A total of 22 minutes passed from the time traffic was halted at the base of the bridge until the roadway reopened. Based on the data presented above, this would represent a long opening. Traffic continued to flow down the SR 99/Harbor Island off-ramp and SW Spokane Street off-ramp to Harbor Island for the first 17 minutes of the bridge opening. During the last 5 minutes of bridge opening, traffic was stopped because of a truck that was attempting to merge over to the lower roadway. During that time, traffic queued to about two-thirds of the distance up the SR 99/Harbor Island off-ramp but did not reach the SR 99 mainline flow. This bridge opening occurred during the peak egress time for Todd Shipyard employees. The bridge opening resulted in no apparent impact on traffic leaving Harbor Island.

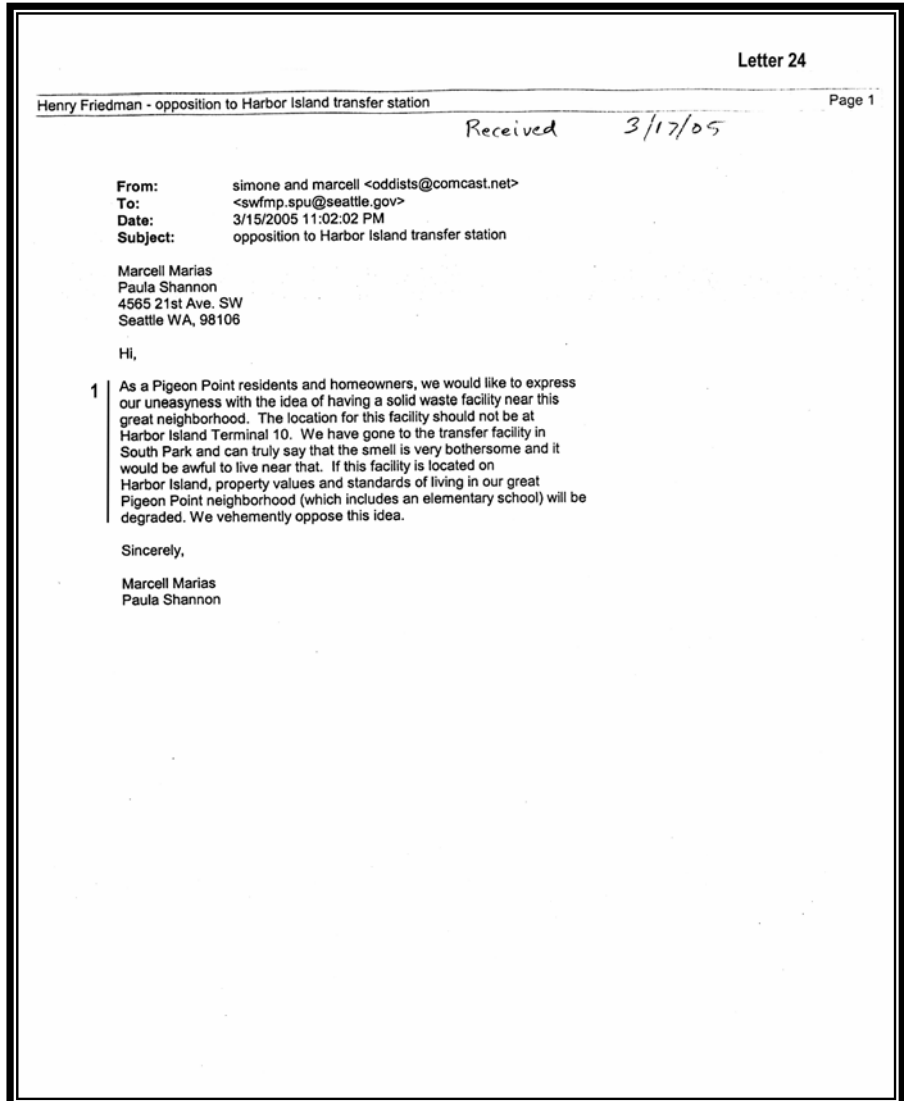
It is recognized that some very long bridge openings or openings during the peak commuter hours could impede access to and egress from the Harbor Island Terminal 10 site. These access restrictions will be considered by Seattle Public Utilities in its site-selection process.

23.3—Under Alternative 2, the intermodal transfer facility would generate about three trains per week. Under Alternative 3, which includes the proposed King County intermodal transfer facility, the combined intermodal facility would generate about seven trains per week, or about one train per day. These trains would use the tracks located under the Spokane Street Swing Bridge. Potential delays at the Duwamish Avenue and East Marginal Way crossings will be mitigated by the Port of Seattle's East Marginal Way grade-separation project. This project is in the final design phase and is fully funded.

While it may seem preferable to restrict train movements to certain time periods, many other factors related to railroad operations and schedules ultimately determine the train movements on and off Harbor Island. Other factors to consider include noise impacts on neighborhoods due to train operations during early morning hours, impacts on commuter rail traffic, conflicts with Amtrak schedules, and issues related to area-wide freight movement.

Letter 24 – Marcell Marias and Paula Shannon

24.1—The intermodal transfer facility would be designed and operated to minimize odors that could adversely affect nearby properties. Unconfined, uncompacted, putrescible waste would be handled in the enclosed main transfer building. Waste delivered by trucks would be handled on the tipping floor of the main building. Waste on the tipping floor would be sprayed periodically with a water mist to limit the mobilization of particulates. All water runoff generated within the main building would be collected and drained to the sanitary sewer system. The main tipping floor would be washed down periodically to remove potentially odoriferous remnant waste and standing water. If odors persist despite these measures, odor-masking chemicals would be applied. The entire main transfer building would have a positive ventilation system that would draw air in from the outside and vent it through the roof. All putrescible waste that is stored outside the main building would be compacted and contained in sealed intermodal containers.



Letter 25 – Larry Mayer, Jr.

25.1—Due to the lack of trackage in the vicinity of the South Recycling and Disposal Station as well as other factors, the City of Seattle is not considering using that facility for intermodal operations.

25.2—Comment noted. Sufficient trackage for storing and making trains is a necessary feature for any site to be considered for the intermodal transfer facility. The tracks at the north end of Lake Union do not have the capacity necessary for the proposed intermodal transfer facility.

25.3—These maps are contained in a separate pdf file that can be viewed on the City of Seattle’ website: <http://www.ci.seattle.wa.us/util/About_SPU/Garbage_System/Plans/Solid_Waste_Facilities_Plan/COS_004315.asp>.

25.4—Comment noted.

3/17/05 Page 1 of 1

Henry Friedman - Comments for SEIS for the Solid Waste Intermodal Transfer Facility Letter 25

From: "Quinton" <quinton@serv.net>
To: <swfmp.spu@seattle.gov>
Date: 3/15/2005 9:51:22 PM
Subject: Comments for SEIS for the Solid Waste Intermodal Transfer Facility

The plans appear well thought out.

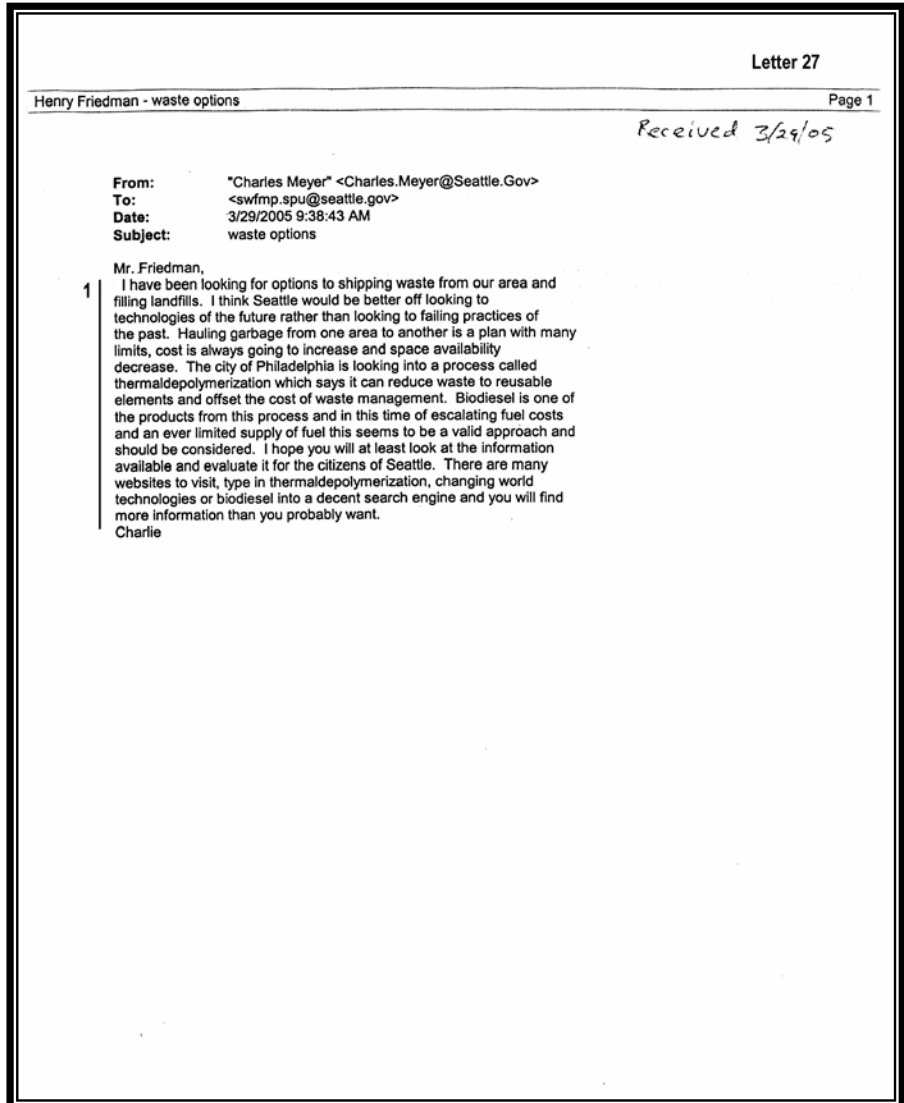
- 1 | I see there are some numbers missing. Perhaps one of those missing plans included running trains directly to the South Transfer station, so the containers could be loaded directly to train. The trucker's union would not like that plan I suppose.
- 2 | I am guessing Wallingford now considers itself too upscale to have trains running around, but there are lots of abandoned tracks at the North End of Lake Union - and trains could run there too.
- 3 | I was unable to find a map of these places in the PDF file:
 - Harbor Island Terminal 10
 - Harbor Island Terminal 10/Pendleton
 - Corgiat Drive
 - Edmunds Street
- 4 | I think the South Station is a good location. It seems like the North Station could be better sited, but that's probably impossible to find any place other than the existing site. Must be a huge hassle for the garbage hauling companies - both the local, and the trucks moving containers to the trains.

Larry Mayer, Jr.
 1823 S. Forest St.
 Seattle, WA 98144
 206-324-4718

file://C:\Documents%20and%20Settings\friedmh\Local%20Settings\Temp\GWJ00001.HTM 3/17/2005

Letter 27 – Charles Meyer

27.1—The possible use of alternative technologies for waste disposal or other system configurations for handling Seattle’s solid waste are issues that would be evaluated through the City of Seattle’s comprehensive solid waste planning process. The 2004 update to the City’s solid waste comprehensive plan (*On the Path to Sustainability, 2004 Plan Amendment*) assessed various options for waste reduction, recycling, and disposal. As a result of that update process, the City decided to continue its current practice of disposing of waste at an arid-region landfill.



Letter 28 – Joseph E. Pasquarella Smith

28.1—One of the conclusions of the noise study conducted for the proposed intermodal transfer facility is that although truck traffic on the south end of Harbor Island is expected to increase by up to 84 vehicles during the AM peak hour, the additional noise generated by this traffic would not affect residential areas, which are at least a half mile away. Because of this distance, odors that may be generated at the intermodal transfer facility (see the response to comment 4 of letter 8 for a description of measures to minimize odors) and diesel emissions from the additional truck traffic associated with the intermodal transfer facility would not adversely affect residential areas.

28.2—Please see the response to comment 2 of letter 23.

28.3—The design and operation of the intermodal transfer facility would include measures for minimizing potential impacts due to odor and noise. Because of these measures (described in the responses to comments 3 and 4 of letter 8) and the distance (at least a half mile) between the intermodal transfer facility and the nearest residential areas, neither Alternative 2 nor Alternative 3 would result in odor or noise impacts.

28.4—As discussed in this supplemental EIS, the existing noise and air quality conditions in the vicinity of Harbor Island and the Spokane Street corridor would not be materially affected if the intermodal transfer facility is located on Harbor Island. However, the existing noise and air quality conditions would probably be improved by projects that improve traffic flow in the area. The reconstruction of Harbor Island included significant improvements to access and roadways to help reduce congestion on SW Spokane Street (see response to comment 2 of letter 23). Additional improvements are also proposed for the area, including the Port of Seattle's East Marginal Way grade-separation project and the City of Seattle's Spokane Street Viaduct improvements. The East Marginal Way grade-separation project is currently in the final design phase and it has been funded; the Spokane Street Viaduct project has been designed but is awaiting full funding. The City of Seattle is not proposing any community amenities associated with the proposed intermodal transfer facility, because no significant adverse impacts on the Riverside Community are expected.

Letter 28	
Page 1	
Henry Friedman - Public Comment - SWITF - Pasquarella Smith	
<i>Received 3/17/05</i>	
From:	Joseph E Pasquarella Smith <sephs@comcast.net>
To:	<swfmp.spu@seattle.gov>
Date:	3/16/2005 1:59:59 AM
Subject:	Public Comment - SWITF - Pasquarella Smith
Dear Mr. Friedman	
As a resident and property owner in the Riverside Community I am concerned that the location of the Solid Waste Intermodal Transfer Facility (SWITF) at either of the Harbor Island sights will have negative impacts on my neighborhood.	
My address is 3835 17th AV SW #4, Seattle WA 98106	
1	Of major concern is the noise and air pollution which will result from the activities at the SWITF. Due to its proximity to the West Seattle Fwy/Bridge, the Duwamish Waterway, the UP and BN&SF Railways and the Duwamish Industrial corridor, my neighborhood is currently impacted by industrial noise and air pollution. The addition of the number of diesel fueled truck trips projected for the solid waste disposal process will only exacerbate this negative impact.
2	Another concern is the impact of the increased traffic on the already compromised lower bridge route.
Each of these concerns has the potential to degrade the quality of life in our area.	
3	How will the City of Seattle and, if included, King County, mitigate these impacts on my community?
4	What amenities will be proposed to compensate the Riverside Community to offset the impacts I have identified above, and others that may result from this decision?

Joseph E Pasquarella Smith 206-935-2747	

How to Comment Send comments by April 5, 2005 to: swfmp.spu@seattle.gov <mailto:swfmp.spu@seattle.gov> or > Henry Friedman, Solid Waste Facilities Planning Manager > Seattle Public Utilities, > 700 Fifth Avenue, Suite 4900, > PO Box 34018 > Seattle, WA 98124-4018	

Letter 29 – Sharon J. Price

29.1—Please see the response to comment 2 of letter 23.

Most Harbor Island traffic approaches from the SR 99/Harbor Island off-ramp, along East Marginal Way South, or along the Spokane Street Viaduct to the lower roadway. Collection trucks from West Seattle would likely use the upper bridge if no new intermodal facility is constructed.

29.2—Please see the response to comment 1 of letter 18.

29.3—Comment noted. Under Alternative 2, the intermodal transfer facility would generate about three trains per week. Alternative 3 includes the proposed King County intermodal transfer facility on Harbor Island. Under Alternative 3, about seven trains per week (one per day) would be generated by the combined operations. These trains would cross SW Spokane Street below the Spokane Street Swing Bridge and would not conflict with the primary westbound traffic flow.

While it may seem preferable to restrict train movements to certain time periods, many other factors related to railroad

operations and schedules ultimately determine train movements on and off Harbor Island. Other factors to consider include noise impacts on neighborhoods due to train operations during early morning hours, impacts on commuter rail traffic, conflicts with Amtrak schedules, and issues related to area-wide freight movement.

Received 3/30/05

Letter 29

Seattle Public Utilities

WHAT DO YOU THINK?

Solid Waste Intermodal Transfer Facility DSEIS

Please turn this form in tonight, or submit your comments by **March 21, 2005** to Henry Friedman, Solid Waste Facilities Planning Manager, by email, fax or postal mail:

Email: swfmp.spu@seattle.gov Henry Friedman
 Seattle Public Utilities
 Seattle Municipal Tower
 700 5th Avenue, Suite 4900
 P.O. Box 34018
 Seattle, WA 98124-4018

Fax: (206) 684-0206

Name SHARON J. PRICE Phone 623-5133
 Address 5624 22nd AVE SW Email _____
 City SEATTLE State WA Zip 98106

You are invited to comment on the completeness and accuracy of the Draft Supplemental Environmental Impact Statement regarding the solid waste intermodal transfer facility. Comments that focus on the analysis (assumptions, data collecting methods, and conclusions) are most useful. We are especially interested in any local knowledge, problem areas, or other considerations.

1) I DO NOT WANT THE FACILITY ON HARBOR ISLAND BECAUSE IT WOULD CAUSE COMPLETE MAYHEM FOR TRAFFIC TO/FROM W. SEATTLE. WHEN CARS CANT FLOW E. ← W. ON THE LOWER BRIDGE BECAUSE OF A BOAT OR TRAIN, TRAFFIC BACKS UP A LOT AND FORCES MORE TRAFFIC TO THE UPPER BRIDGE - AND TRUCKS BACK UP EAST TOWARDS THE #99 BRIDGE, SO TRAFFIC E. & W. BECOMES PLUGGED. WITH ADDITIONAL TRUCKS AND TRAINS IT WILL BECOME ALMOST INTOLERABLE FOR THE TRUCKS AND CARS ALREADY PRESSED TO LIMITS.

2) IN ADDITION, WHEN THE MONORAIL IS BUILT ON THE BRIDGE IN THIS SAME AREA, IT WILL ALSO SQUEEZE TRAFFIC IN THIS CORRIDOR - PROBABLY WILL HAVE TO TAKE 1 LANE OF TRAFFIC FROM THE UPPER BRIDGE BETWEEN #99 AND SPOKANE STREET/ DELRIDGE.

3) THE PIGEON POINT COMMUNITY IS ALREADY COMPLAINING AND PETITIONING AGAINST THE CURRENT TRAIN NOISE - WE DON'T WANT MORE! WE LIVE/SLEEP HERE!

Letter 30 – Angela Skellington

30.1—Comment noted. Traffic analyses were performed for all the alternative sites to identify potential issues. The results of these analyses will be used by Seattle Public Utilities as part of its site-selection process. Please see the responses to comments in letters 8 and 14 for a discussion of traffic impacts in Georgetown.

Letter 30

Henry Friedman - Intermodal Transfer Facility Page 1

Received 3/14/05

From: "Angela Skellington" <askellington@hotmail.com>
To: <swfmp.spu@seattle.gov>
Date: 3/3/2005 6:47:10 PM
Subject: Intermodal Transfer Facility

Hello Henry Friedman,

1 | I am writing to you in response to some troubling news that I just recieved about Georgetown having the possibility of becoming the Intermodal Transfer Facility in Georgetown where all the garbage trucks in Seattle would be routed through the streets of Georgetown. Georgetown is becoming a thriving place for businesses as well as residential homes and I think it would hurt this up and coming community to route all the garbage trucks through it's streets. Please do not select alternative 4 or 5 that place the Intermodal Transfer Facility in Georgetown as a viable option.

Thanks,
Angela Skellington
561 S Donovan St
Seattle, WA 98108

Letter 31 – Jesse Skellington

31.1—Comment noted. See the responses to comments in letters 8 and 14 for a discussion of traffic impacts in Georgetown.

Letter 31

Henry Friedman - Intermodal Transfer Facility Page 1

Received 3/14/05

From: "Jesse Skellington" <jesseskellington@msn.com>
To: <swfmp.spu@seattle.gov>
Date: 3/6/2005 10:07:25 PM
Subject: Intermodal Transfer Facility

Hello Henry Friedman,

1 I am writing to you in response to some troubling news that I just recieved about Georgetown having the possibility of becoming the Intermodal Transfer Facility in Georgetown where all the garbage trucks in Seattle would be routed through the streets of Georgetown. Georgetown is becoming a thriving place for businesses as well as residential homes and I think it would hurt this up and coming community to route all the garbage trucks through it's streets. Please do not select alternative 4 or 5 that place the Intermodal Transfer Facility in Georgetown as a viable option.

Thanks,
Jesse Skellington
561 S Donovan St
Seattle, WA 98108

On the road to retirement? Check out MSN Life Events for advice on how to get there! <http://lifeevents.msn.com/category.aspx?cid=Retirement>

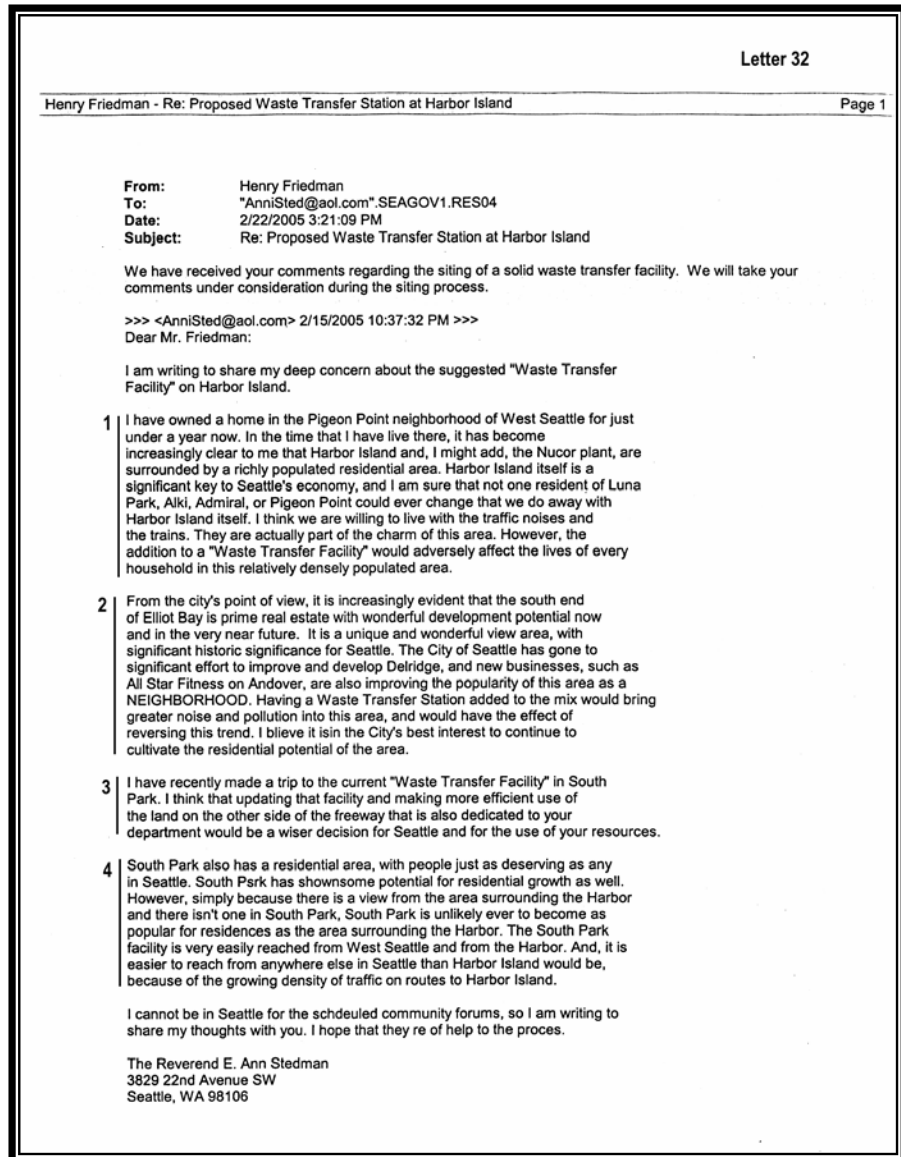
Letter 32 – The Reverend E. Ann Stedman

32.1—This supplemental EIS evaluated the potential for the proposed intermodal transfer facility to result in impacts on surrounding properties and nearby residential neighborhoods. Because of the mitigation measures that would be included in the design and operation of the facility, as well as the half-mile distance between the facility and the nearest residential areas, neither Alternative 2 nor Alternative 3 would result in significant adverse impacts on nearby residential neighborhoods.

32.2—As stated in the response to your previous comment, the conclusion of this supplemental EIS is that the residential areas south and west of the Harbor Island sites (Alternatives 2 and 3) would not experience adverse impacts. The proposed intermodal transfer facility would be located within an existing industrial area, and the facility's visual character, as well as the types of activities that would occur at the facility, would be similar to those of the surrounding industries.

32.3—Comment noted. The City of Seattle is not considering using the South Recycling and Disposal Station for intermodal operations because of the lack of trackage at the site and other factors.


32.4—Comment noted. As stated in the response to your previous comment, the South Recycling and Disposal Station could not be used for intermodal operations.



Letter 33 – Theodore Teppo

33.1—In Part 3 of this supplemental EIS, the section “Plants and Animals” describes measures that would be implemented to minimize the attraction of the intermodal transfer facility to birds. These measures include handling unconfined putrescible waste only in the enclosed main transfer building, excluding birds from the transfer building’s interior, and periodically washing surfaces that have come in contact with putrescible solid waste

Letter 33
3/2/05



WHAT DO YOU THINK?

Solid Waste Intermodal Transfer Facility DSEIS

Please turn this form in tonight, or submit your comments by **March 21, 2005** to Henry Friedman, Solid Waste Facilities Planning Manager, by email, fax or postal mail:

Email: swfmp.spu@seattle.gov

Fax: (206) 684-0206

Henry Friedman
Seattle Public Utilities
Seattle Municipal Tower
700 5th Avenue, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

Name THEODORE TEPP Phone 206 767 9502

Address 6244 Corson Ave S Email KEITHANDTED@MSN.COM

City Seattle State WA Zip 98108

You are invited to comment on the completeness and accuracy of the Draft Supplemental Environmental Impact Statement regarding the solid waste intermodal transfer facility. Comments that focus on the analysis (assumptions, data collecting methods, and conclusions) are most useful. We are especially interested in any local knowledge, problem areas, or other considerations.

1 | at sites 4+5 I am concerned
that birds attracted to the facility
could potentially impact AIRCRAFT operations
at KC Airport. It was stated that
there have been facilities built that are bird
proof & covered. It was also stated that
KC Airport could SHUT DOWN the facilities
(S/WITF). How CAN WE Be sure BIRDS
will not affect the airport operations?
& THAT A huge AMT of \$ is spent to
build a facility that the Airport could
potentially SHUT DOWN Due to BIRD/AIRCRAFT
issues.

Letter 34 – Trish Tlapak

34.1—Your preference regarding alternative selection is noted. The City of Seattle will take into account the potential for impacts on surrounding neighborhoods when selecting the alternative to be implemented.

Letter 34

Henry Friedman - Proposed Intermodal Transfer Station Page 1

3/14/05

From: Trish <trishtlapak@yahoo.com>
To: <swfmp.spu@seattle.gov>
Date: 3/3/2005 11:15:38 AM
Subject: Proposed Intermodal Transfer Station

Dear Henry Friedman,

1 | It is my opinion that Seattle should not build a the new Intermodal transfer station in Georgetown. Building it on Harbor Island makes more sense, and creates less impact on the quality of life in the South End. Please take into account increased truck traffic, etc. and potential impact on neighborhoods surrounding the proposed site.

If an improvement for Wallingford necessarily means a dehancement of someone else's neighborhood, then keep things the way they are now. Otherwise, use Harbor Island as the new site for Solid Waste Transfer.


Thank you,

Trish Tlapak
1043 S Donovan Street
Seattle, Washington

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<http://mail.yahoo.com>

Letter 35 – Vivian Williams

35.1—Please see the responses to comment 2 of letter 7 and comment 2 of letter 23.



**Seattle
Public
Utilities**

Received 3/16/05

Letter 35

WHAT DO YOU THINK?

Solid Waste Intermodal Transfer Facility DSEIS

Please turn this form in tonight, or submit your comments by **March 21, 2005** to Henry Friedman, Solid Waste Facilities Planning Manager, by email, fax or postal mail:

Email: swfmp.spu@seattle.gov	Henry Friedman
Fax: (206) 684-0206	Seattle Public Utilities
	Seattle Municipal Tower
	700 5 th Avenue, Suite 4900
	P.O. Box 34018
	Seattle, WA 98124-4018

Name Vivian Williams Phone 244-5266 (206)
 Address 10671 Marine View Dr SW Email _____
 City Seattle State WA Zip 98146

You are invited to comment on the completeness and accuracy of the Draft Supplemental Environmental Impact Statement regarding the solid waste intermodal transfer facility. Comments that focus on the analysis (assumptions, data collecting methods, and conclusions) are most useful. We are especially interested in any local knowledge, problem areas, or other considerations.

1 | I have not yet read the report. Based on what I heard at the West Seattle meeting, I am not convinced that traffic flow in and out of West Seattle will not be adversely impacted. South bound trucks exiting Alaskan Way viaduct will be queuing along with all the other West Seattle traffic at the Spokane St exit. That exit requires a lane change immediately after merging onto Spokane. This merge is already dangerous because of the trucks on Spokane attempting to exit to Harbor Island. This mixer lane cannot handle too much more volume of trucks going down to Harbor Island. At the meeting there was discussion about the lower roadway. My observation is that truckers prefer to use the elevated roadways whenever possible. These merging trucks on the Spokane St viaduct are a serious hazard already because that roadway was never designed for the speeds & volumes of today. The mixer lanes are too short. The lanes are too narrow. The traffic is too fast despite attempts to slow traffic. At best the use of Spokane St viaduct by most of the trucks destined for Harbor Island will slow down traffic on the viaduct and Alaskan Way.

Letter 35 – Vivian Williams (continued)

Letter 35-2

1
conti. | At worst, it will increase the number of accidents
| on an already dangerous roadway. I don't think
| that it's a risk worth taking.

March 2, 2005, Public Hearing

Speaker 1 – Angela Van Agtmael

1. Some residential roadways in Georgetown have narrow widths and small turning radii at intersections. The roads that might be used to access the Corgiat Drive site (South Michigan Street, Corson Avenue South, Ellis Avenue South, South Albro Place, Stanley Avenue South, and South Bailey Street) are collector or principal arterials with wider lane widths and turning radii at intersections; they are designed to carry higher volumes of traffic, including truck traffic.

2. Please see the responses to comments 1 and 2 of letter 14.

3. It is acknowledged that the pedestrian crossings at the South Bailey Street/Carleton Avenue South/Interstate 5 on-ramps do not provide access to all corners of the intersection. These crosswalks cross the east and the south legs of the intersection only. A pedestrian cannot cross the ramp or the west leg of the intersection. This makes it

impossible to access the businesses on the northwest corner of the intersection without a long walk to the next intersection west and back. This poor access is related not to the volume of traffic but to the geometry and signal phasing of this intersection. Additional traffic generated by the new intermodal transfer facility would not degrade this condition.

T-Letter 1

**Official testimony on the Draft Supplemental Environmental Impact Statement
SPU-SW March 2, 2005**

Questions

- On the traffic study, for the Harbor Island sites you're looking at flow patterns far from the sites, but in [Alternative Sites] 4 and 5, you didn't look at flow patterns far from those sites. How many trucks would be on Michigan St.?
- How do you think that trucks coming from other parts of the city would access the sites in Georgetown?
- How do you get back on I-5 route from Albro? They have to go through Georgetown. The corners are not designed for the turn radius. They [the problem intersections] were named last year.
- Business impacts - what businesses would be impacted on Harbor Island? So, businesses would be impacted at 4 and 5.
- How many residents live on Harbor Island, and how many in Georgetown?
- For the Corgiat site, you breezed over the design requirements for discouraging birds. Have you actually studied that, or are you just assuming it would work?

FORMAL COMMENT PERIOD

Angela Van Agtmael
6279 Ellis Ave. S,
Seattle, WA 98108

1 | • The size of streets in Georgetown – they were planned at the turn of the century. There's not enough turning radius for trucks 30 or 40 or 50 feet. I see on Bailey at Corson and Michigan, trucks enter the ramp onto I-5, where they enter, if they're coming from the east [someone corrects her, west], they have a specially built little ramp, but they still get up on the curb.

2 | • The other issue is, repeatedly at the corner, the intersection in front of City Hall, 13th and Bailey, there's a triangle where people have tried for years -- there's a brick triangle with plants in it, cared for by an elderly woman. Trucks come from the south, they would turn to go east on Bailey to get to the freeway, they make the turn there, and knock bricks off the planting area. City redid it, put in nice plants. All the little bricks still get knocked off and the plants all die. It happens repeatedly, big trucks do it, I see them and I take photos. That area was not designed for that kind of turning radius.

3 | • Another issue is the safety issue with these trucks. From Airport Way to freeway is the main route where I see trucks going, Bailey to 99, etc. There's a safety issue there. I talked to businesses this morning on Bailey. Their customers have a hard enough time getting in and out of the businesses on Bailey – Ellis, Bailey and Flora. Also, as a pedestrian, there are no crosswalks, no lights in Georgetown to cross the street.

Speaker 1 – Angela Van Agtmael (continued)

4. As a result of concerns expressed in comments on the draft supplemental EIS, noise from traffic related to the intermodal transfer facility was modeled to accurately determine the potential impacts on nearby residences. Compared to the existing (2004) noise levels, levels in the year 2028 are expected to increase 3 to 4 dBA if the facility is built. In the year 2028 if the facility is built, the maximum noise level (measured as L_{eq}) is expected to be 65 dBA. Under current Washington state criteria, neither the expected increase nor the expected noise levels are considered a significant impact. The text of the supplemental EIS has been modified to include the results of this modeling.

5. Comment noted. Please see the response to comment 1 of your letter (letter 14) with regard to the South Bailey Street/13th Avenue South/Stanley Avenue South intersection. The South Michigan

Street/Carleton Avenue South/South Bailey Street intersection moves traffic directly onto the freeway on-ramps. Part of the interstate highway system, the intersection was constructed to accommodate high traffic volumes, including truck traffic.

Speaker 2 – Marvin McCoy

1. Comment noted. With respect to noise from traffic, please see the response to comment 4 from speaker 1 (Angela Van Agtmael). With respect to South Bailey Street, please see the response to comment 1 of letter 14 and the response to comment 5 from speaker 1 (Angela Van Agtmael).

Speaker 3 – Pete Dyro

1. Please see the response to comment 1 of letter 14 for information on the additional study at the South Michigan Street/Carleton Avenue South/South Bailey Street intersection. It is acknowledged that the pedestrian crossings at the South Bailey Street/Carleton Avenue South/Interstate 5 on-ramps do not provide access to all corners of the intersection. These crosswalks cross the east and the south legs of the intersection only. A pedestrian cannot cross the ramp or the west leg of the intersection. This makes it impossible to access the businesses on the northwest corner of the intersection without a long walk to the next intersection west and back. This poor

T-Letter 1-2

4 | • I have another concern after listening to the presentation. I was insulted by the comment made about the Corgiat site and the noise issue. It seems all of the study was about noise at the facility, but we'd also have the noise of 300 trucks, so 600 trips. It felt like the attitude was, it's already noisy in Georgetown, so more noise is not significant.

5 | • In front of City Hall, and Carlton and Bailey onto the freeway. Study those two intersections

Marvin McCoy
6279 Ellis Ave. S
Seattle, WA 98108

1 | • The accumulation of the impact, you didn't really look at. Yeah there's a lot of noise in Georgetown, but that doesn't mean you should add to it. Additional noise does impact us. You looked at traffic and noise right at the facilities in Georgetown -- again, residents live right across street from these facilities. You need to look at the impacts to residents, you didn't do that well enough. Bailey splits residential communities right in half. There's too much impact on residents in Georgetown. Harbor Island sites wouldn't have impacts like that.

Pete Dyro
6431 Flora Ave. S
Seattle, WA 98108

1 | • I'm strongly opposed to alternative 4 because the noise issue is one thing. Yes, it is Georgetown, we get jet fuel dumped on us, but it's my town and I believe in Georgetown. It's cool, like, it has lots of pedestrian traffic. My dogs are scared of dump trucks. To walk to the coffee shop, you have to cross Bailey. We already have lots of trucks – we don't need more. Georgetown is a tight-knit community; we're always fighting for less development and industry to make it a quiet neighborhood. There are things that don't belong in a residential area. I would like to see the facility go to Harbor Island.

• Also, Stella's pizza, it's nice to sit out there. It's hard to hear a person now, because of traffic on Airport Way. You couldn't enjoy sitting out there with truck noise.

Tom Knoblauch
6266 Flora Ave. S
Seattle, WA 98108

1 | • I hope plans go well for Harbor Island. That's where it'll cause less problems. I'm concerned because I was at a meeting last year on this, I sent comments, and I didn't see traffic through Georgetown addressed in this traffic study. I'd like to see that addressed again. I echo what people have said already.

pedestrian access is the current condition; it is related not to the volume of traffic but to the geometry and signal phasing of this intersection. The additional traffic generated by the proposed intermodal transfer facility would not degrade this condition.

All roads that might be used to access the Georgetown sites are arterials on which trucks are allowed. South Michigan Street, Corson Avenue South, South Bailey Street, Ellis Avenue South, Airport Way South, South Albro Place, and Swift Avenue South are principal arterials that are designed to accommodate large trucks. Stanley Avenue South is a collector arterial. Airport Way South, Industrial Way, and South Spokane Street are also principal arterials, and the east-west streets near the Edmunds Street site are either principal or collector arterials.

Speaker 4 – Tom Knoblauch

1. Sections 4.4 and 4.5 of Appendix C provide specifics regarding the analyses of project impact for the two Georgetown sites. After the draft supplemental EIS was issued, Heffron Transportation conducted further traffic analysis for the South Bailey Street/13th Avenue South/Stanley Avenue South intersection. Please see the response to comment 1 of letter 14 for details.

Speaker 4 – Tom Knoblauch
(continued)

2. Please see the response to comment 3 from speaker 1 (Angela Van Agtmael).
3. Comment noted. The comment is not specific in terms of the routes the children are using to go to and from the playfields. The transportation appendix in the SEIS provides specifics on PM peak-hour and daily traffic volumes related to the project that will circulate on principal and collector arterials in the Georgetown area. The access routes do not include residential roadways. Please see the responses to comment 4 from speaker 1 (Angela Van Agtmael) and comment 1 from speaker 3 (Pete Dyro).
4. Stormwater generated on the Corgiat Drive site and the Edmunds Street site currently drains to the Duwamish Waterway at the south end of Elliott Bay and would continue to do so if the intermodal transfer facility is developed at either site. Runoff generated within the main transfer building, which could have been in contact with solid waste, would be discharged to the sanitary sewer system. The amount of runoff generated within the building would be controlled by building operations, and there is a low likelihood that runoff from the inside of the building would overflow into the storm drainage system.

T-Letter 1-3

2 | • Some of the other things, let's see, I'm concerned about the alternative by the Seal St. (street name correct?) - Alternative 5 - where the traffic is coming and going from. I hear today that traffic will come off of 6th on the freeway, but I'm concerned that it might go down Airport Way. That's critical for Georgetown, it's redevelopment, but traffic from Corgiat down Bailey is more of a concern, to get to I-5.

3 | • Children go to playfield from the north to the south residential area. Adding truck traffic is a problem. I agree with Angela on noise concerns near businesses and restaurants.

4 | • You mentioned water at the building and how it would be connected into the stormwater overflow? Will it just go into the river if it overflows? Is it really self-contained so it won't overflow?

5 | • If it does end up in Georgetown, I would like to hear about mitigation for adverse effects to the neighborhood, even though I didn't see that in the study. I'll write comments too.

Bill Pease
835 Cloverdale St.
Seattle, WA 98108

1 | • You've got six months to do studies that are well documented. Then the public has two weeks to look at it. It takes a long time to get through, but you tell us to give comments on the EIS only. It's tough.

2 | • Alternative 1 is not really an option, we can agree on that. Even though we're not supposed to say what we prefer, Alternatives 2 and 3 are essentially the same option, it just depends on whether King County joins. These are better because of five reasons: flexibility is a goal, and it's more flexible if you can take containers out by water. Harbor Island has better access; the roads were built for trucks as you said, and at the Harbor Island sites you don't need to demolish existing buildings – and the Harbor Island sites are not in a mixed residential neighborhood. Even though Georgetown is a mixed residential, business, and industrial neighborhood, that doesn't mean it's pure industry. The concerns of residents there should have much weight. Fifth, birds are a real concern. I echo that that was glossed over, like, we will think of something to discourage them.

LaDele Sines.
6913 Carleton Ave. S
Seattle, WA 98108

1 | • I'm for the intermodal on Harbor Island. There are more options for transport. Georgetown locations offer trains only. Edmunds site used to be Phillips services; Georgetown worked hard on that. Putting the intermodal there would cause problems. On Harbor Island you don't have to demolish businesses. I echo other people.

5. Mitigation for the identified potentially significant impacts is described in Part 3 of this supplemental EIS.

Speaker 5 – Bill Pease

1. Comment noted. The timeframe allowed for comments on the draft supplemental EIS conformed with the comment period that is specified in the State Environmental Policy Act (SEPA) and the City of Seattle's SEPA regulations, which are contained in Chapter 25.05 of the *Seattle Municipal Code*. The mandated comment period is 30 days. In response to your request, the comment period was extended to 48 days, from February 17 through April 5.
2. Your preference regarding alternative selection is noted. The City of Seattle will consider the impacts identified in the supplemental EIS, community concerns, cost, engineering considerations, and other factors when selecting the alternative to be implemented. Measures to minimize the facility's attraction to birds are described

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in the section “Plants and Animals” in Part 3 of this supplemental EIS. These measures include handling unconfined putrescible waste only in the main, enclosed transfer building, excluding birds from the transfer building’s interior, and periodically washing surfaces that have come in contact with putrescible solid waste.

Speaker 6 – LaDele Sines

1. Your preference regarding alternative selection is noted.

Speaker 6 – LaDele Sines
(continued)

2. Some of the residential roadways in Georgetown have narrow widths and small turning radii at intersections. All roads that might be used to access the Corgiat Drive site are arterials on which trucks are allowed. South Michigan Street, Corson Avenue South, South Bailey Street, Ellis Avenue South, Airport Way South, South Albro Place, and Swift Avenue South are principal arterials that are designed to accommodate large trucks. Stanley Avenue South is a collector arterial. It is acknowledged that the roadways on Harbor Island were reconstructed specifically to accommodate large volumes of truck traffic.
3. Comment noted.
4. Comment noted.

T-Letter 1-4

- 2 | • All streets on Harbor Island are built for large trucks. Georgetown was not designed that way, as said in the EIS.
- 3 | • I worked in the cruise ship industry for years, and Harbor Island sites won't affect them. They are using the east waterway at Terminal 30; this would be on the west side. People on the ships are not looking outside, they're looking inside, they want to get out.
- 4 | • Where does garbage go off of cruise ships? Harbor Island sites can take cruise ship trash easily, and it won't impact residents or traffic. I understand six or more ships are planned in next years, that is LOTS of trash, plus business and residential. We'll need to get it on a barge or a train. Terminal 30 offers more options to do that.

Allan Phillips
6913 Carleton Ave. S
Seattle, WA 98108

- 1 | • I agree with LaDele on everything. On Edmunds site, Union Pacific uses a spur to back the trains on to couple and uncouple cars, train cars. That rail goes right next to the Georgetown playfield and next to a children's wading pool. Will there be noise from the train blowing its horn next to the wading pool, will there be increased Union Pacific traffic, will Union Pacific be used at the intermodal? You can't say that extra horns by the wading pool don't make noticeable noise. Maybe some pencil pusher can tell you how the level of noise is all background, but it's a stretch.
- 2 | • As for the park on Harbor Island, yes, there would be an increase in noise, but who gets in their car to go to that park? So, when looking at noise, you have to ask who's using the park, who's going to be impacted. The people employed next to the park use the park. It's hard to believe the people being paid by those businesses would complain about noise coming from their employers.
- 3 | • I agree in particular that with cruise ships bringing in tons of garbage that has to be unloaded, I can't see passengers looking out at Harbor Island and complaining. They'll be looking at mountains on the other side.

QUESTION

- 1 | • The site on Harbor Island, are you going to provide salmon habitat; are you required to do so?

Speaker 7 – Alan Phillips

1. Comment noted. The spur track that crosses South Lucile Street connects to Union Pacific's Argo Intermodal Yard. Some of the train movements that involve switching on this track today are associated with yard movements rather than through movements and include operations at the existing intermodal transfer facility. Rail operations associated with Alternative 5 (Edmunds Street site) would be located north of the Argo Intermodal Yard and would have no access to the spur that crosses South Lucile Street.
2. The supplemental EIS acknowledges that the park users referred to in your comment would experience higher noise levels if either Alternative 2 or Alternative 3 is selected. However, the increase in noise level is not expected to be significant primarily because use of the park is limited and the park is located in an environment with high existing noise levels.
3. Comment noted. The City of Seattle has concluded that cruise ships (and their passengers) docked on the Duwamish East Waterway would not be adversely affected by an intermodal transfer facility at the Harbor Island Terminal 10 site or the Terminal 10/Pendleton site.

Question from Unidentified Speaker

1. Construction of the proposed intermodal transfer facility at the Harbor Island Terminal 10/Pendleton site would not involve in-water construction. Therefore no mitigation for salmon habitat would be required. Habitat

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mitigation has been required and is being implemented in the vicinity of Terminal 10 as part of remediation of the Harbor Island Superfund site.

March 3, 2005, Public Hearing

Transcript 1

3/3/2005

Page 1

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2 PUBLIC HEARING)
RE: SOLID WASTE INTERMODAL)
3 TRANSFER FACILITY)
DSEIS)

VERBATIM REPORT OF PROCEEDINGS

6 6:30 p.m.
March 3, 2005
7 West Seattle High School
3000 California Street
8 Seattle, Washington 98165
9
10

11 REPORTED BY: Judith A. Robinson, CCR #2171
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3/3/2005

Transcript 2

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Speaker 1 – Tim Beaver

1. Please see the response to comment 2 of letter 23. For eastbound traffic (from West Seattle to any of the alternative sites), there would be no increase in collection truck trips over today's traffic volumes. Collection trucks and employee vehicles already travel from West Seattle to the North Recycling and Disposal Station (NRDS), the South Recycling and Disposal Station (SRDS), and the two private intermodal facilities. Therefore, there would be no change in eastbound traffic operations related to any of the alternatives reviewed in this supplemental EIS.

Westbound traffic access Harbor Island via the State Route 99/Harbor Island off-ramp, the Spokane Street Viaduct, or East Marginal Way South. There would be no need for these vehicles to use the upper or lower bridge.

Roadways on and around Harbor Island were reconstructed to better

accommodate truck traffic as part of the Terminal 18 improvement project. Access and circulation have improved significantly in this area, compared to operations prior to the reconstruction. The roadways and intersections have the capacity to accommodate the addition of traffic associated with Alternatives 2 and 3. The intersections that were evaluated for this supplemental EIS would operate at level of service (LOS) C under either of these alternatives (Appendix C, Table 8). The level of service at these intersection under the no-action would be no difference from the level of service under Alternative 2 or Alternative 3.

These level of service analyses include the effects of traffic from the proposed King County intermodal transfer facility.

Transcript 3

3/3/2005 Page 3

1 MR. BEAVER: I appreciate this opportunity to

2 share my comments about the environmental impact statement.

3 I live in West Seattle and my name is Tim Beaver. I'm at

4 3840 West Marginal Way Southwest, 98106. I've lived in West

5 Seattle for 30 years. I've traveled -- and I've worked on

6 Harbor Island and West Marginal Way for that entire period

7 of time.

8 So I'm somewhat familiar with the traffic

9 patterns, particularly in the industrial area around and on

10 Harbor Island. The various bridge changes, the alternative

11 traffic patterns, the temporary traffic patterns, the high

12 bridge, the low bridge, the demolitions and the rest of it.

13 So I have some comments to make about the traffic study, the

14 detailed traffic study. A couple of which are uneducated

15 because I haven't read the study completely.

16 First of all, I believe that there will be

17 significant impacts on the elevated West Seattle Freeway,

18 coming in and out of West Seattle. It's our only mode of --

19 way of getting in and out of West Seattle for us here in the

20 Admiral and Northwest Seattle area.

21 I don't believe that there will be no impact on

22 that. It's -- it's impossible. Furthermore, I don't

23 believe that there will be no impact down on the ground

24 level either. I just don't believe it's possible to have

25 during the working day over one truck trip per minute coming

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Speaker 1 – Tim Beaver
(continued)

2. Alternative 2 would generate three additional trains per week in the Harbor Island area. Trains currently carry waste between the Rabanco and Waste Management intermodal sites and to arid-region disposal sites. Therefore, these trains would not be new to the overall area network; only the number of trains would change. These trains would cross beneath the Spokane Street Swing Bridge, out of the primary westbound flow to the lower bridge.

3. Forecasts of future traffic performed for the EIS related to the Terminal 18 improvement project assumed that Todd Shipyard could accommodate between 1,360 and 1,525 day-shift employees. These numbers were coordinated closely with Todd Shipyards and were used to determine the number of parking spaces that would be provided by Todd Shipyards and the Port of Seattle. At the time of the study for Terminal

18, Todd Shipyards held the contract to construct the most recent Washington State Ferries and had a large number of employees onsite. The future projections assumed some growth in employment beyond those levels. Those employment levels were used in determining the year 2028 traffic volumes for the evaluation of the intermodal transfer facility. The peak hour that was used in the analysis of traffic operations assumed that the peak of the intermodal transfer facility would coincide with the peak exiting time for Todd Shipyards.

Transcript 4

3/3/2005

Page 4

1
cont. | 1 in and out of Harbor Island and not have some kind of

2 | 2 adverse impact on traffic.

3 | 3 I think that's -- goes -- it's amplified by the

4 | 4 fact that you will have additional traffic when King County

5 | 5 gets involved with the project, if they do.

6 | 6 In addition, there's a comment in there that says

7 | 7 there will be no additional train impacts. I find that also

8 | 8 to be impossible to believe. The train traffic into the

9 | 9 industrial area does impact traffic patterns. It impacts my

10 | 10 traffic patterns every day. So additional trains will

11 | 11 impact us in West Seattle.

12 | 12 I'm sorry. I'm not very organized here.

13 | 13 Todd Pacific Shipyards has, as well as most of the

14 | 14 waterfront down there, on and around Harbor Island Terminal

15 | 15 5 -- Terminal 18 has a highly variable traffic pattern.

16 | 16 When the ships are in, traffic is heavy. When the

17 | 17 ships are out, traffic is light. I have no idea whether

18 | 18 your studies were of a broad enough nature to account for

19 | 19 those high amounts of fluctuation but I'd like that to be

20 | 20 looked at.

21 | 21 Furthermore, Todd Pacific Shipyards has a varying

22 | 22 number of people working there. When they have a lot of

23 | 23 activity, they can have 5,000, 6,000 or 7,000 people rolling

24 | 24 in and out of there. They arrive at 7:00 and leave at 3:30.

25 | 25 That's exactly the times when your trucks, your 80-plus

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Speaker 1 – Tim Beaver
(continued)

4. Forecasts of future traffic performed for the EIS related to the Terminal 18 improvement project assumed that Todd Shipyard could accommodate between 1,360 and 1,525 day-shift employees. These numbers were coordinated closely with Todd Shipyards and were used to determine the number of parking spaces that would be provided by Todd Shipyards and the Port of Seattle. At the time of the study for Terminal 18, Todd Shipyards held the contract to construct the most recent Washington State Ferries and had a large number of employees onsite. The future projections assumed some growth in employment beyond those levels. Those employment levels were used in determining the year 2028 traffic volumes for the evaluation of the intermodal transfer facility. The peak hour that was used in the analysis of traffic operations assumed that the peak of the intermodal transfer facility would coincide with the peak exiting time for Todd Shipyards.

Transcript 5

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3 | 1 trucks an hour are going to be going on and off the island.

cont. | 2 So I've rambled on about traffic. Now, we'll talk

3 about barges and -- and waterfront.

4 | 4 There's a -- an indication that the Harbor Island

5 site would be preferable because there's the option of

6 having waterborne access.

7 I believe that this is a ruse and it's fake.

8 Because in earlier meetings, it was stated to us and to me

9 that the traffic, that the barge option had been studied and

10 found to be not feasible and that the primary reason for

11 having barges, barge option, was in case of a railroad

12 strike or in case it became hostage to a single railroad

13 carrier. Both of which options seem highly remote.

14 So the environmental impact statement says in it,

15 that the only way that site can be used is, if you build a

16 dock and then pretend you can have access to the water by

17 building this dock. I think it's an expensive thing that

18 the City will pay for, in order to be able to use this

19 property and it will never get used. That's my comment.

5 | 20 Furthermore, that piece of property there, that

21 waterfront property is extremely valuable. If you talk

22 about vanishing areas to do industrial activities such as

23 intermodal activities, the waterfront is vanishing even

24 quicker when it comes to industrial waterfront. And to take

25 that long stretch on the Duwamish River of industrial

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5. Note that the transportation analyses did not assume any barging of traffic, which might reduce the number of daily truck trips and weekly train trips. Therefore, the results of the traffic analyses are conservatively high.

The City of Seattle recognizes that waterfront property is a valuable and limited resource. Developing an intermodal transfer facility at the Harbor Island Terminal 10 site or the Terminal 10/Pendleton site under either Alternative 2 or Alternative 3 would allow the City to transport solid waste via water in the future. This would provide additional flexibility in the solid waste system.

Speaker 2 – Allan Phillips

1. Comment noted. The spur track that crosses South Lucile Street connects to the Union Pacific's Argo Intermodal Yard. Some of the movements that switch on this track today are associated with yard movements, including operations at the existing intermodal transfer facility. The rail operations associated with Alternative 5 (Edmunds Street site) would be located north of the Argo Intermodal Yard and would have no access to the spur that crosses South Lucile Street.

After a review of the comment letters and testimony, PM peak-hour data were collected at the intersection of South Bailey Street/13th Avenue South/Stanley Avenue South. This all-way-stop intersection currently operates at level of service (LOS) B; if the proposed project is not implemented, the level of service at this intersection would decline to LOS C by the year 2028 because of growth in background traffic.

Additional traffic generated by the new intermodal transfer facility would degrade operations at this intersection to LOS D. This is an acceptable level of service in Seattle, and changes in neither the lane geometry nor traffic control would be needed.

Some residential roadways in Georgetown have narrow widths and small turning radii at intersections. All the roads that might be used to access the Corgiat Drive site are arterials on which trucks are allowed. South Michigan Street, Corson Avenue South, South Bailey Street, Ellis Avenue South, Airport Way South, South Albro Place, and Swift Avenue South are principal arterials that are designed to accommodate large trucks. Stanley Avenue South is a collector arterial.

Transcript 6

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Page 6

5 | 1 waterfront and turn it into a dump, the transfer facility
cont. | 2 for garbage, it's intermodal between rail cars and trucks is
3 a waste of that valuable property. And I think that the
4 Port hasn't looked at that carefully enough.
5 And that concludes my comments. Thank you.
6 MR. PHILLIPS: Yeah. I'm Allan Phillips from
7 Georgetown. 6913 Carlton Avenue South, 98108.
8 I'd like to comment again about the -- the Argo
9 site just north of Lucille. I made some comments about it
10 last night but I neglected to make this point.
11 Marny, in the traffic studies, one of the things I
12 believe that you have, not intentionally, I'm sure, failed
13 to address is, Union Pacific has a spur line that comes
14 south, crosses Lucille Street just west of Alaskan Way. And
15 it goes as far as to cross Corson Avenue and a few little
16 side streets just south of that, which is, they aren't major
17 arterials or anything.
18 But Corson is a well-trafficked arterial for
19 automobiles and trucks. And Lucille gets a fair amount of
20 truck traffic as well. Currently, Union Pacific uses the
21 line and the railroad crossings have no crossing arms and no
22 flashing lights. They use it well into the evening well
23 after dark.
24 There have been collisions between cars and --
25 cars colliding with railroad cars at both Lucille and Corson

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Speaker 2 – Allan Phillips
(continued)

Transcript 7

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1 Avenue in the evening hours over the years because there are
2 no crossing arms and no lights. When there's a flatbed rail
3 car sitting still on the track and people come through there
4 half asleep or drunk at night, you know, there have been
5 accidents there.

6 My concern is, I think, existing, certainly
7 existing intermodal operations. Argo are already effecting
8 the amount of traffic crossing those two spots.

9 But if -- if this -- intermodal traffic increases,
10 I see this as increasing the number of crossings, you know,
11 at those streets again and that will end up -- it needs to
12 be considered a major access point. Because of the
13 railroads, there's a long distance that vehicles have to
14 travel before they can cross back over to Airport Way from
15 Fourth Avenue, which is another major traffic, a major
16 traffic run.

17 If these two streets, Lucille and Corson are
18 blocked by trains, increasingly with -- with the intermodal
19 station being located there, that's going to push them
20 further south to cross through Bailey.

21 It needs to be considered that where Bailey meets
22 with -- I can't remember what it is. It's -- Bailey Avenue
23 basically takes you through the commercial district of
24 Georgetown and hooks you up with Airport Way. There's
25 actually a lot of intersections over there that trucks like

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Speaker 2 – Allan Phillips
(continued)

2. An intermodal transfer facility at either the Corgiat Drive site or the Edmunds Street site would not generate trains that are new to the rail system because waste would be loaded onto trains at other intermodal facilities in the area even if the City of Seattle does not build a new intermodal transfer facility. Some additional train activity would occur in the immediate vicinity if the City selects one of these two sites for the facility. This could result in a slight increase in noise at the park you describe in your comment, but the impact is unlikely to be significant.

Transcript 8

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1 | 1 to go already that don't have signal lights. And they are
cont. | 2 very dangerous intersections that already have collisions
3 | 3 happening.
4 | 4 So if this site is picked, which hopefully, this
5 | 5 is the nail in the coffin for this one. There's going to
6 | 6 have to be crossing arms and lights at both of those
7 | 7 railroad crossings and there's going to have to be signal
8 | 8 lights put over in the commercial district of Georgetown to
9 | 9 regulate the flow of traffic onto Airport Way. I'm not sure
10 | 10 that that was considered. It needs to be considered.
11 | 11 And again, to reiterate what -- what was said last
12 | 12 night -- oh, actually one more thing here I neglected to
13 | 13 point out.
2 | 14 That railroad crossing south of Lucille, the
15 | 15 traffic goes behind businesses that are located along the
16 | 16 west side of Airport Way. So that spur line goes behind
17 | 17 those businesses. Between those businesses and our little
18 | 18 neighborhood park right here. (Indicating)
19 | 19 I'd like to hold this thing still. Just trust me.
20 | 20 There's a child's wading pool right there. (Indicating) It's
21 | 21 one of those little ones they fill up in the summertime.
22 | 22 People with infants and young children are playing there.
23 | 23 And when those trains come through, because
24 | 24 there's no crossing arms at those two intersections, you
25 | 25 know, you can yell and scream at the conductors all you

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Speaker 2 – Allan Phillips
(continued)

- 3. Comment noted.

Speaker 3 – LaDele Sines

- 1. Please see the response to comment 1 of letter 14.

Transcript 9

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Page 9

2 | 1 want. Except those are remote-controlled trains. They
conti. | 2 don't have conductors anymore. They -- when they bring the
3 | 3 trains through there, they lay on the horns full throttle.
4 | 4 And I don't know what the decibel level is there but they
5 | 5 are literally right next to the wading pool. And I'm not
6 | 6 convinced that that's not harming the hearing of children
7 | 7 who are playing in that park.
8 | 8 And to contrast that park with the park next to
9 | 9 the facility on Harbor Island, there's no wading pool.
10 | 10 There really aren't any little children playing at that park
11 | 11 on Harbor Island. It's a park that's used primarily by
12 | 12 people who work on Harbor Island during their lunch breaks.
3 | 13 And so I would encourage the use of the Harbor
14 | 14 Island site. And as well as it would be a benefit, as I'm
15 | 15 sure someone else is going to make a comment to this effect.
16 | 16 It will be a benefit to the cruise industry. As the cruise
17 | 17 industry, like any other industry, generates a lot of
18 | 18 garbage of its own. And it will be most convenient -- a
19 | 19 most convenient place for the cruise industry to be able to
20 | 20 efficiently dispose of their garbage. Thank you.
21 | 21 MR. JOHNSON: Ladelle Sines.
22 | 22 MS. SINES: I'm Ladelle Sines. I'm at 6913
23 | 23 Carlton Avenue South, 98108.
1 | 24 I wanted to comment on the traffic that this would
25 | 25 create through Georgetown. I'm happy that Marny had

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Speaker 3 – LaDele Sines
(continued)

2. Appendix C, Section 3.3.2, discusses the growth in traffic along Airport Way South, which has been greater than the growth on other regional roadways over the past decade. The historical growth rate of 2 percent per year was used to predict the traffic volumes between 2004 and 2028 under the no-action alternative and for the analyses of traffic operations. At South Edmonds Street and Industrial Way South, left-turn operations would deteriorate to level of service (LOS F) in the year 2028, without the addition of traffic generated by the new intermodal transfer facility. Addition traffic associated with the intermodal transfer facility would increase the delay (Appendix C, Table 10). An alternate egress from the site would be required to mitigate the traffic impacts.

The traffic analyses for the no-action alternative and the various alternative sites

considered Federal Express, UPS, and other regional delivery and truck traffic. Classified as a principal arterial, Airport Way South carries a high volume of local and regional traffic, both private vehicles and trucks.

Transcript 10

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1 mentioned that the Corgiat site will be funneled through
2 Georgetown. Actually, you can access the Corgiat site from
3 I-5. But to get out of that site, the traffic will come
4 down Bailey to get back onto I-5, which will effectively
5 pass several businesses on one side of the street and
6 residences on the other side of the street. In which this
7 is going to increase the noise on Bailey and it's going to
8 affect the livelihood of the residents who are currently
9 there.

10 The Edmonds site, which is on Airport Way --
11 you've already mentioned in the statement here how there's
12 traffic that goes and exceeds the 35 mile an hour speed,
13 which is correct. You have a 4-lane road that was platted
14 over 100 years ago. These streets aren't wide enough to
15 accommodate the car traffic that's currently going down
16 there. We have commuters who skip off of I-5 when it's too
17 bad, when the traffic is backed up. We have commuters that
18 come off of Highway 99 when the traffic is congested to take
19 Airport Way to get downtown. Adding that site there is
20 going to increase the congestion there, as well as you have
21 no middle turning lane to get into this site.

22 You have the Federal Express hub on Airport Way.
23 You also have the UPS hub on Airport Way. Both are north of
24 this site. They need to get south to the airport to load
25 their planes and get their goods and services that you

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Speaker 3 – LaDele Sines
(continued)

3. Some of the roadways in Georgetown roadways have narrow cross-sections and small turning radii at intersections, which are not appropriate for truck traffic. Collection trucks currently circulate on residential streets to pick up waste. Most truck trips associated with the intermodal transfer facility (regardless of the site) would be collection trucks, which would have a shorter wheelbase and better turning ability than a full-sized tractor-trailer combination.
4. Comment noted.

Transcript 11

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2 | 1 purchase for grandma on the plane in to her to Connecticut
 conti. | 2 or wherever.

3 | 3 Also, having all this traffic, we have businesses
 4 that have moved into Airport Way. Some of the business
 5 owners are also residential residents and friends of mine.
 6 And they're trying to create a business and to revitalize
 7 the storefronts that have been boarded up along Airport Way
 8 for a long time. So this is going to affect not only the
 9 residents but the businesses there.

3 | 10 And you did say here all the streets on Harbor
 11 Island were designed to accommodate high volumes of large
 12 trucks. The way Georgetown was platted, it wasn't created
 13 to take on a large volume of -- of large trucks. Although,
 14 we do have a large volume of large trucks and this will
 15 increase that.

4 | 16 I do want to speak on the tourism because that was
 17 one of the things you had on there. And I've been in the
 18 cruise and tourism industry for nearly 15 years. And for
 19 this last cruise season we had two large ships, Princess and
 20 Holland America, using the east waterway on Harbor Island.
 21 And we had one at Pier 66 which was Norwegian.

22 | 22 In the next coming years, we're going to be
 23 looking at six or more ships coming each week with 2,000 or
 24 more passengers on each ship, plus the crew members, which
 25 are upwards of 800. All of that garbage that's generated

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Speaker 4 – Rick Berkowitz

1. Comment noted. Please see the response to comment 5 from speaker 1 (Tim Beaver).

Transcript 12

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4 1 during this cruise has to come off of the cruise at the end
conti. 2 of the cruise so that it can make it bright and shiny for
3 the next passengers.

4 Having the site at Harbor Island's going to be a
5 better site to effectively move that waste to the other side
6 of the island, rather than trucking it again through the
7 Duwamish industrial area. I hate that because we are a
8 mixed-use area. We are commercial and industrial, as well
9 as residential. Thank you.

10 MR. JOHNSON: Rick Berkowitz and then
11 Vince O'Halloran.

12 MR. BERKOWITZ: Rick Berkowitz. My address
13 is 1900 Alaskan Way, #312, Seattle, Washington, 98101.
14 Excuse me. I have a cold.

1 15 With respect to the garbage on the cruise ships, I
16 think and maybe Sally could help with this, but I think that
17 garbage, there isn't garbage coming off the cruise ships.

18 It is recyclables that come off of cruise ships.
19 But they treat it on board the ship and then it gets dumped
20 at sea, in certain areas at sea. So I don't -- we're
21 dealing with this misunderstanding of garbage and cruise
22 ships. That's totally irrelevant to the discussion here in
23 my opinion.

24 With respect to the alternative, 2 and 3, my main
25 concern is similar to Mr. Beaver, who was the first speaker.

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Speaker 4 – Rick Berkowitz
(continued)

Transcript 13

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1 And that we're using maritime property for essentially
2 non-maritime uses. In business we always want alternatives.
3 Of course, it would be nice to be next to -- have everything
4 available to every business. But in reality that rarely
5 happens.
6 And I'm not going to challenge whether you're
7 serious or not serious about barge -- using barges or
8 vessels to move containers. But when I brought up the
9 potential for locating this elsewhere, I brought up the 91
10 area of the Port and I was told that, no, we're committed to
11 having two rail lines. So seemingly, it's pretty much a
12 certainty to use rail and use rail exclusively.
13 Right now, the Port is thinking about using,
14 giving up maritime industrial land up in the Interbay area,
15 there is -- there is a 14 or maybe more, 14.2%.
16 Sally, are you familiar with the increase in
17 container traffic volumes?
18 SALLY: Last year it was about 20%.
19 MR. BERKOWITZ: 20%. That's a heck of a lot.
20 MR. JOHNSON: We're not going to get that
21 comment, if you want to repeat what she said?
22 MR. BERKOWITZ: There was a 20% increase,
23 according to Port staff, in container traffic. If we have
24 many more years of, I think we're up to about 1.7 or 1.75
25 million TEU worth of containers to this Port, we would reach

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Speaker 4 – Rick Berkowitz
(continued)

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1
cont.

1 the 3 million mark very shortly, if we were to experience
2 additional traffic like we have experienced in the last
3 year. That traffic helps to produce 24,000 jobs just in the
4 City of Seattle. That traffic provides jobs that are worth
5 \$70,000 in average wage at \$70,000 a piece for this
6 community. Those jobs are critical for the entire maritime
7 community.

8 Those would be at risk when one uses maritime
9 property for non-maritime uses. It's a very significant
10 concern that I think all of us should share. So to caution
11 the use of alternate 2 and 3, we should try to concentrate
12 as much maritime uses for maritime property as possible.

13 I think you all remember when Boeing, which is a
14 big supporter of this area, was deciding whether to use the
15 77 project, whether to locate the 77 project here. Many
16 people in this area were very concerned to keep Boeing here.

17 Before -- before the State and this community
18 could even bother to throw \$3 billion worth of concessions
19 to keep Boeing here, they first had to obtain a commitment
20 from this community that they would have a marine terminal.
21 If you didn't have a marine terminal, don't -- you were not
22 allowed to even bother to respond to their RFP.

23 So I think we all need to recognize how valuable
24 this marine terminal space is. You can't create it anywhere
25 else. Once it's gone, it will be gone forever. So

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Speaker 4 – Rick Berkowitz
(continued)

Speaker 5 – Vince O’Halloran

1. Comment noted. Please see the response to comment 1 of letter 9. In Part 2 of this supplemental EIS, the section “Property Search for Alternative Intermodal Sites” describes the City of Seattle’s search for suitable sites for an intermodal transfer facility.

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Transcript 15

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1
cont.

1 although, it may be nice and make some business sense to

2 have a potential alternative, if one or two railroads go

3 down, using a deep draft Port area that's 40' -- I believe

4 it's at least a 40' berth there; is that correct? Do you

5 know?

6 Anyway, that's about a 40' deep draft. That's --

7 that's huge. Okay. It's incredibly important. Other Port

8 areas spend millions of dollars to try to trench their

9 harbor areas to that depth level. So don't give it up for

10 non-maritime use. Even -- even using it for barge traffic

11 where you don't need that kind of draft would really be not

12 the best and most best economic utility for that area.

13 Thank you.

14 MR. JOHNSON: Vince O'Halloran and

15 Robin Tomazic.

16 MR. O'HALLORAN: Vince O'Halloran. 6058

17 Fifth Avenue Northeast, Seattle, 98115. I want to thank the

18 City employees for giving us the time to speak and for you

19 folks showing up and working without overtime, I'm sure.

20 Being a member of the labor community, overtime is a

21 fast-fading dividend.

22 Anyway, I stand opposed to Harbor 18 -- Terminal

23 18 being used for the garbage area. I -- as one of the

24 previous speakers and one earlier, that's a natural,

25 deep-water berth.

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Speaker 6 – Robin Tomazic

1. Comment noted. Traffic analyses were performed for all the alternative sites to identify potential issues. The results of these analyses will be used by Seattle Public Utilities as part of its site-selection process.

Please see the response to comment 1 of letter 14 for additional information and analysis of Georgetown traffic.

The results of the analyses of traffic operations for all the alternatives are provided in Appendix C. The Edmunds Street site would require mitigation for intersections along Airport Way South that would operate at level of service (LOS) F. This mitigation would likely require the construction of an alternate egress route.

Under Alternatives 2, 3, and 4, all the intersections would operate at acceptable levels of service. Rerouting waste collection and employee trips from the Rabanco and Waste Management intermodal sites to any of these three alternative sites would have little effect on traffic operations.

Transcript 16

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1 Harbor Island itself has been -- is uniquely
2 situated for container maritime traffic. I believe it
3 should remain so. I -- I think that, I do believe we can
4 barge those containers. That's a viable and maybe a far
5 cheaper alternative down the road. I think we should look
6 at areas either down the Duwamish or most certainly at
7 Terminal 90 and 91.

8 In speaking with Mr. Friedman earlier, he
9 mentioned some rail line constraints there. I'm sure that
10 those are issues that can be negotiated. But that would be
11 a most wonderful area for barging. And perhaps the City
12 should even look at purchasing its own tug-and-barge system.
13 San Francisco ran one for years and it's not such a big cost
14 item, quite frankly.

15 I'll conclude with that. Thanks again for you
16 folks showing up and giving us the opportunity to speak.

17 MR. JOHNSON: Robin Tomazic and
18 Captain Sweeney.

19 MS. TOMAZIC: My name is Robin Tomazic. I'm
20 the Chair of the Georgetown Community Council and a resident
21 of Georgetown at 6646 Corson Avenue South. I came today to
22 share an Email that I received from a community member.
23 It's brief.

24 I was just visiting my local woodcraft store in
25 Georgetown this afternoon. I had the opportunity to talk to

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Speaker 6 – Robin Tomazic
(continued)

Transcript 17

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1 one of the clerks there and heard of the proposed transfer
2 station and the two locations that are proposed in
3 Georgetown. The Seattle City Council needs to know that
4 little Bailey Street is overcrowded as it is. We don't need
5 a transfer station in Georgetown. We don't need more travel
6 on that road, especially big trucks that put a lot of wear
7 and tear on it.

8 The proposed site at Harbor Island seems a lot
9 more reasonable to me, as big truck travel is already there.
10 I work at a building on South Bailey Street and I see the
11 traffic every day. Sometimes the traffic is so heavy and
12 with the slow light heading west, it takes more than 5
13 minutes to get out of our lot. I feel for the businesses
14 that are trying to service customers, especially the ones
15 that depend on drive-up customers. Please do what you can
16 to stop this.

17 I just wanted to say that one of my largest
18 concerns is the traffic for both of the proposed Georgetown
19 sites. I'm concerned about Bailey, Ellis and Airport Way.
20 Those are very important streets in our residential
21 community, as well as small businesses along all of those
22 streets.

23 I am concerned about how the traffic will impact
24 us, as trucks come to get back on the freeway right down
25 Bailey and possibly Airport Way. Thank you very much.

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1
conti.

Speaker 7 – Kathryn Sweeney

1. Comment noted. Please see the responses to comment 1 of letter 9 and comment 5 from speaker 1 (Tim Beaver).

Transcript 18

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Page 18

1 MR. JOHNSON: Captain Sweeney and
2 Patti Mullen.
3 CAPTAIN SWEENEY: My name is,
4 Captain Kathryn Sweeney. My address is 1916 Pike Place,
5 #1108, Seattle, 98101.
6 I spent my career, over 17 years, working on the
7 water. Currently, I am Captain of the container ship for
8 Mountain Navigation. We transport goods and all sorts of
9 things in containers to and from Hawaii. So I'm very, very
10 familiar with container operations at intermodal.
11 My main concern is building a transfer station so
12 close to the water. While I would love to see these
13 containers go on a barge and support the industry that I'm
14 in or a ship, I don't believe the transfer station needs to
15 be at that location.
16 Obviously, you don't build whatever you're
17 shipping to Hawaii right there on the water, stick it in a
18 container and ship it off. You transfer it from the
19 hinterland, which is outside the Port area, to the docks
20 where we load it on the ship. I think that's a very
21 important aspect because I think eventually Seattle will be
22 transferring their garbage via barge or ship.
23 I know it's been said before but I really think we
24 need to look at displacing the Port jobs. Port jobs, ILWU
25 members, a longshoreman member start out at \$22 an hour.

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Speaker 7 – Kathryn Sweeney
(continued)

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1
conti.

1 My current run is out of the Port of Long Beach.
2 Port of Long Beach hired 3,000 casuals, starting out at \$22
3 an hour. Some of the people I work with, the upper level of
4 the longshoremen make over \$120,000 a year. These are very,
5 very good jobs. And these jobs are not going to be made out
6 in Georgetown, putting up a container terminal. It's not
7 going to happen. You've got to have a waterfront. You've
8 got to have a deep draft to get the containers in.

9 I realize that right now this land is not being
10 used to the best use. But you know, Seattle is growing.
11 LA, Long Beach is at saturation. The Port of Oakland has a
12 lot of problems.

13 You look at Tacoma. Tacoma keeps growing. And
14 these are very good jobs. They are very high-paying jobs.
15 They're family wages. And I really would hate to see us --
16 you know, I realize that there's 20 or so jobs at the
17 transfer station. But those jobs are going to exist no
18 matter where the transfer station is placed. I would really
19 hate to see us displace the -- the Port jobs, as well as
20 hamper trade.

21 The more we're using, we're looking at using a
22 Port facility to -- to transfer onto rail, where there's
23 already going to be containers coming in via the water and
24 being transferred out to the hinterland. And I would hate
25 to see more and more congestion build up.

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Speaker 7 – Kathryn Sweeney
(continued)

Speaker 8 – Patti Mullen

1. Please see the responses to comments from Tim Beaver. Traffic traveling eastbound from West Seattle would use the lower bridge to access the Harbor Island Terminal 10 site and the Harbor Island Terminal 10/Pendleton site (Alternatives 2 and 3). The collection trucks now use the upper bridge, the lower bridge, and SW and South Spokane Streets to access the Rabanco and Waste Management intermodal sites. Alternatives 2 and 3 would not result in any additional trucks to and from West Seattle.

Traffic traveling to Harbor Island from the east would use the State Route 99/Harbor Island off-ramp, East Marginal Way South, or the Spokane Street Viaduct. These routes would carry traffic generated by the intermodal transfer facility to SW Spokane Street and then onto Harbor Island without using the upper or lower bridge.

Transcript 20

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1 This past summer we had -- or last -- I forget
2 when it was. But this past summer we had huge congestion
3 problems in the Port of Long Beach because we could not get
4 the containers off of the ships. Ships waited at anchor for
5 10 and 14 days. And you're looking at a \$10,000 an hour
6 operation for a vessel that you're going to have to wait.
7 I would hate to see the Port of Seattle go down
8 that road, where it becomes impossible to get the freight
9 off the ships and out to the hinterland and vice-versa. And
10 I feel that building a transfer station right on prime Port
11 property is just not the way to go. Thank you very much.
12 MR. JOHNSON: Okay. Patti Mullen and
13 Robb Stack.
14 MS. MULLEN: My name is Patti Mullen. I
15 reside at 5725 Southwest Winthrop, 98116.
16 I also want to mirror what Tim Beaver had to say
17 earlier. That a traffic study that does not result with any
18 indication of impact on our upper bridge has got to be
19 erroneous or an incomplete study at best.
20 One of the main reasons that I focus on that upper
21 traffic on the higher bridge is that there are roughly
22 60,000 people who rely on that upper bridge to take us to a
23 medical community. West Seattle has no access to a medical
24 community outside of Capitol Hill. With impinged for any
25 type of delay, we're talking what I would call a pretty

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Speaker 8 – Patti Mullen
(continued)

2. Comment noted. Future environmental documentation for facilities in the solid waste system that could adversely affect air quality in the Duwamish Valley area will take into account the study you mentioned if the results of the study become available.

State agencies were all made aware of this EIS through the state's SEPA notification process. The Washington State Department of Health did not comment on scoping or on the draft EIS. The Duwamish River Cleanup Coalition will be included for future mailings, including the notice of availability of the final EIS.

Speaker 9 – Robert Stack

Transcript 21

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1 | 1 adverse impact on our community at large.

cont. | 2 | 2 And to discount that, I would like to see that

3 | 3 addressed in some future study. And so thank you, Tim, for

4 | 4 bringing that up as well.

2 | 5 | 5 The other thing I'd like to ask is that the future

6 | 6 EIS, either revised or renewed, take into account a study

7 | 7 that is actually being conducted by the State, Washington

8 | 8 State Department of Health. Right now, they're in a request

9 | 9 for proposal, this is RFP number N13395. That's N13395.

10 | 10 Where they are conducting a study on the Duwamish Valley air

11 | 11 quality. When I spoke to them they were unaware of the

12 | 12 project that's being proposed by SPU.

13 | 13 And they were interested -- very interested in the

14 | 14 potential impact of any dieseling that would occur with --

15 | 15 with truck traffic in that regard. I'd like to see

16 | 16 Washington State Department of Health and the Duwamish River

17 | 17 cleanup organization added to your distribution list on the

18 | 18 next mailing of your revised SAIS. Thank you.

19 | 19 MR. JOHNSON: Okay. Robb Stack, followed by

20 | 20 Holly Krachi.

21 | 21 MR. STACK: Good evening. My name is,

22 | 22 Robert Stack. I'm with Rainier Pacific Company. We're

23 | 23 located at 2201 Sixth Avenue South in Seattle. And we own

24 | 24 two commercial buildings on the alternative 5 site Airport

25 | 25 Way, Edmonds Street. And we're glad to hear we get an "F"

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Speaker 9 – Robert Stack
(continued)

1. The City of Seattle will consider potential displacements along with other factors in selecting the alternative to be implemented. Equitable and fair market compensation will be provided to owners of any property acquired for the proposed intermodal transfer facility.
2. Comment noted.

Transcript 22

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1 on access at that location. Our buildings there are a
2 longtime home of three tenants that employ about 40 people
3 currently.

4 3 years ago, we had to sell a large site on Lander
5 Street to the evil Sound Transit for their light rail
6 station. And that was the loss, City's loss of 12 tenants
7 and probably 60-plus employees that worked in that building.

1 | 8 We have three properties on Martin Luther King Way
9 that are affected by Sound Transit. And those tenants may
10 leave once work begins with that project and loss of access,
11 due to the light rail project. All of this speaks to now
12 comes Seattle Public Utilities in targeting us again for
13 another potential condemnation. So you can see my bias
14 against another taking, potential taking, for this waste
15 transfer station.

16 Well, obviously, I'd like to protect our family
17 business. And there are strong reasons to locate the
18 intermodal facility on Harbor Island.

2 | 19 Harbor Island is a trucker's paradise. The Port
20 controls the large part of that island and most of the
21 private enterprises have been relocated off the island.
22 Road improvements have been made to facilitate container
23 trucks coming onto the island. And not to say that more
24 improvements could not be made to streamline access for
25 refuse trucks coming and going off the island. It is an

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Speaker 9 – Robert Stack
(continued)

3. The facility would be designed and operated to minimize odors and the facility's attraction to birds and other nuisance animals. Please see the response to comments 4 and 5 of letter 8.
4. The site of the new intermodal transfer facility would not be open for public use, as the North Recycling and Disposal Station (NRDS) and the South Recycling and Disposal Station (SRDS) are today. Collection trucks would travel between businesses, residential neighborhoods, and the new intermodal transfer facility. The Corgiat Drive site lies between Interstate 5 (I-5) and Airport Way South, with direct a direct connection from I-5 southbound and close connections to I-5 northbound via South Albro Place and Swift Avenue South. Please see the response to comment 1 of letter 14 for additional information about traffic impacts in Georgetown.
5. Solid waste collection and transfer vehicles are required to cover their loads to prevent incidental spilling of waste.

Transcript 23

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Page 23

2 | 1 industrial place. That's where facilities like waste
 conti. | 2 transfer stations belong, in industrial locations.

3 | 3 The -- if you've ever gone by the Rabanco
 4 facility, most of us have on Fourth Avenue South and Forest
 5 Street, you'll see scavenger birds. You'll see a lot of
 6 litter, dust, debris, rocks, dirt. You'll maybe notice the
 7 smells. You'll notice the nets to keep the birds out, which
 8 are not altogether effective. And you'll see the traffic
 4 | 9 and congestion that this today example of garbage trucks
 10 coming and going to a transfer facility create.

11 So to place that kind of use within other business
 12 locations where there are maybe pedestrians in some places.
 13 Georgetown has legal residences in the Sunny Arms and just
 14 south of the proposed alternative 5 site.

15 Those are conflicts, along with the other truck
 16 traffic business that carries on in that location.

17 So if you're just lucky, looking at the Rabanco
 18 site, you might get stuck waiting for a garbage train to
 19 pass on Lander, Holgate or Royal Brougham Street.

5 | 20 And maybe while you're waiting, you might go down
 21 to the All Beef Burger place there at Fourth and Forest and
 22 enjoy the ambiance and look out the window and see six
 23 garbage trucks lined up. You might not be able to get out
 24 of the parking lot for a while. You get back onto Fourth
 25 Avenue and you might get a nail in your tire from the trash

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Speaker 9 – Robert Stack
(continued)

- 6. Comment noted.
- 7. Your preference regarding alternative selection is noted.

Speaker 10 – Holly Krachi

Transcript 24

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5
conti. | 1 that they're leaving.

6 | 2 So this is what we live with, with this type of

3 facility in a business, a well-developed business area.

4 That's why a waste transfer station really needs to be away

5 from the predominance of pedestrians, consumers and vehicle

6 auto traffic as best as possible. Nothing's perfect. But

7 as best as possible. Which makes Harbor Island the

8 much-preferred site for consideration.

7 | 9 And when you consider also the Port of Seattle,

10 I've heard the Port mentioned several times. The Port has

11 excess capacity now. Yes. They're growing in container

12 traffic but they have way excess capacity. They don't want

13 to be in the container traffic business. They're looking at

14 more real estate development. Because dealing with the

15 container traffic has become a -- a difficult issue.

16 So the growth in that marine activity is very

17 containable on the properties they have, leaving the sites

18 along the west waterway absolutely open to development.

19 Look what's been there before. Ship repair and flour mill

20 business. We don't need more marine-related activity

21 necessarily. It's great to have the option of barging it.

22 But that location is ideal. Thank you.

23 MR. JOHNSON: Holly --

24 MS. KRACHI: My name is Holly Krachi. I am

25 the proud owner of George Gift Shop in Georgetown at 5633

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Speaker 10 – Holly Krachi
(continued)

1. Your preference regarding alternative selection is noted.

Transcript 25

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1 Airport Way South, 98108. I'm one of the folks that Ladelle
2 spoke about.

3 I guess my deal is more on the emotional side
4 because Georgetown is cast as an industrial area on your
5 thing. We were called Sodo. We are not Sodo. We are
6 totally Georgetown. Different. Different.

7 Georgetown was at one time a viable community. It
8 was Safeways and pharmacies and all kinds of normal Ballard,
9 Phinney Ridge, West Seattle type businesses. Once it was
10 zoned industrial the community started to fade away. But
11 there are 1400 of us that choose to live in Georgetown.

12 And I make zero dollars an hour. I invest \$40 to
13 \$45 a day into our business. And that's to make Georgetown
14 better. And being on Airport Way, we have a very popular
15 pizzeria, a bakery, coffee shops. The -- what is it, Big
16 Brothers and Sisters program is located right above Corgiat.

17 So there are lots of things to take into
18 consideration. We are not industrial. We are contaminated
19 in certain areas but we are a residential community.

20 And so I love the idea of putting it on Harbor
21 Island because it is an industrial area, a true industrial
22 area. And I just wanted to make that statement. So thank
23 you for listening and thanks for being here.

24 MR. JOHNSON: Terry Williams, followed by
25 Dennis Ross.

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Speaker 11 – Terry Williams

1. Please see the responses to comments from Tim Beaver. Alternatives 2 and 3 assume a King County intermodal transfer facility on Harbor Island (Appendix C, Section 4.3.2).

Transcript 26

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1 MR. WILLIAMS: My name's Terry Williams and I
2 reside at 10671 Marine View Drive Southwest.

1 | 3 And my main concern with the facility being on
4 Harbor Island is traffic. The -- the Spokane -- the West
5 Seattle Bridge and the Spokane Street Viaduct are the
6 lifeline of West Seattle. We have businesses there. We
7 have people, residences and everything else that depend on
8 this -- this lifeline.

9 The day after the earthquake, my father-in-law had
10 a heart attack. It took an hour and a half to get to
11 Swedish Hospital. And it -- these backups are not just
12 because everything else was closed after the earthquake.
13 They closed down the Alaskan Way Viaduct periodically. It's
14 about a 45-minute drive from the top of the hill to I-5
15 every time that they do that. So it is a lifeline.

16 I don't believe that your traffic study, at least
17 not what was presented tonight, deals with truck traffic
18 getting onto the Spokane Street Viaduct at First Avenue or
19 getting off. I didn't see anything where that was
20 addressed. I also didn't see anything, even though she
21 said, well, we did it. I didn't see anything that indicated
22 the truck traffic, the added truck traffic, if King County
23 went there also after you folks did. I didn't see anything
24 that addressed that. So the traffic is a major, major
25 concern.

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Speaker 11 – Terry Williams
(continued)

2. The Alaskan Way Viaduct will be replaced regardless of which alternative is chosen. Alternative 1 (the no-action alternative) includes collection and transfer truck trips on the Alaskan Way Viaduct. Trucks use that road today to travel between collection locations and the Rabanco and Waste Management intermodal transfer facilities.

Most residential collection trucks from West Seattle now use the Spokane Street Viaduct to access Rabanco's Recycling, Transfer, and Intermodal Facility at Third Avenue South and South Lander Street. These trucks use the existing ramps to and from First Avenue South. In the future, if the Harbor Island Terminal 10 site is selected, these trucks would descend to the lower level and use the Spokane Street Swing Bridge to access Harbor Island. If the Corgiat Drive site is selected, these trucks would likely stay on the Spokane Street Viaduct all

the way to Interstate 5. If the Edmunds Street site is selected, the route used by trucks would be similar to that used today, but the trucks would likely continue east on lower Spokane Street.

3. Traffic generated by cruise ships was included in the traffic volumes and forecasts.
4. Although some additional truck traffic in the Harbor Island area would result if the proposed intermodal transfer facility is located at the Harbor Island Terminal 10/Pendleton site, the conclusion of the air quality study conducted for the supplemental EIS is that significant adverse impacts on air quality are unlikely. The facility would be designed to minimize queues of vehicles delivering waste. With the additional truck traffic, the intersections in the vicinity of the facility would continue to operate at level of service C. The vehicle delay at these intersections would be only slightly higher than the delay that would occur if the intermodal transfer facility is not constructed. Over the entire city-wide solid waste system, trucks would drive approximately 17 percent more miles than they drive currently if the intermodal transfer facility is built, but the emissions per mile would decrease as the garbage haulers' fleets are modernized. For this reason, the total emissions from garbage hauling vehicles would be lower than the current level after the new intermodal transfer facility becomes operational.

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1 Also, one of the things that she talked about was

2 growth. We have five urban villages in the West Seattle

3 peninsula. And the reason they became urban villages is

4 because of the capacity, the extra capacity that they have

5 for growth. And that growth is starting to happen. And

6 that is also more traffic that is coming down the hill.

7 And then it was brought up about cruise ships. I

8 didn't realize that there was 2,000 people coming every week

9 to the traffic down there. That's also going to add to the

10 traffic, which I didn't hear was addressed tonight either.

11 Air quality, with the added traffic probably

12 that's going to be just sitting for a lot of the time,

13 taking longer to get there. I am concerned about that.

14 In the Seattle Times they talked about Harbor

15 Island with the earthquakes and the tsunamis. They have an

16 article in the paper and they were talking about Harbor

17 Island actually tilting and falling into Puget Sound. So I

18 don't know if that has been addressed in the EIS.

19 The Port of Seattle, I agree with Tim. They don't

20 rezone property, industrial property or they don't allow

21 uses on property unless it's a water use.

22 And the fact that in earlier meetings that we had,

23 it's an emergency use, if you're going to use or if you're

24 going to barge garbage off -- off of Harbor Island. But

25 you're going to use trains. It's obvious because of where

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5. In Part 3 of this supplemental EIS, the section “Earth” discusses the likelihood of large earthquakes in the Seattle area. The design of the facility would comply with the seismic stability requirements of the City of Seattle. Large earthquakes associated with movement along the Seattle fault zone or within the subduction zone off the Washington coast are infrequent events with periods between earthquakes of 400 or more years. The State Environmental Policy Act requires that an EIS address probable significant adverse impacts of seismic activity. The supplemental EIS does not discuss impacts due to large earthquakes because earthquakes are so infrequent that any potential impacts from these events would not be defined as “probable,” and while a large earthquake could affect the intermodal transfer facility, predictions of impacts on offsite locations due to seismic effects on the facility would be speculative and significant impacts would, in any case, be unlikely to occur.
6. Comment noted. Please see the response to comment 5 from speaker 1 (Robert Stack).

Speaker 11 – Terry Williams
(continued)

7. Comment noted. The timeframe allowed for comments on the draft supplemental EIS conformed with the comment period specified in the State Environmental Policy Act (SEPA) and the City of Seattle’s SEPA regulations, which are contained in Chapter 25.05 of the *Seattle Municipal Code*.

Speaker 12 – Dennis Ross

1. Table 7 in Appendix C indicates the trips generated by the new intermodal transfer facility. The table shows daily trips, commuter AM peak-hour trips, facility PM peak-hour trips, and commuter PM peak-hour trips. The table includes a breakdown by type of trip.

The intermodal transfer facility would result in 652 daily trips, with 84 trips between 7:00 and 8:00 a.m. and 81 trips between 3:00 to 4:00 p.m. Trip generation would be lower during the commuter PM peak hour (34 trips). To be conservative, the traffic analyses added the higher facility PM peak-hour trips (those that would occur between 3:00 and 4:00 pm) to the commuter PM peak-hour volumes.

Waste collection trucks and employee vehicles already use roadways in the Seattle area, circulating between collection routes and the North Recycling and Disposal Station (NRDS), the South Recycling and Disposal Station (SRDS), and two private intermodal facilities. Trips to and from West Seattle today use the upper and lower bridges and SW Spokane Street. Therefore, not all trips associated with Alternatives 2 and 3 would be new to the Harbor Island area.

Please see the responses to comments 1 and 2 of letter 23 for further information about the traffic analysis for the Harbor Island sites.

Transcript 28

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6 | 1 you're going -- where you're headed with this.

conti. | 2 And I question the use of this facility for

 | 3 waterborne traffic. You're not really using it. It's not

 | 4 really going to be waterborne traffic. Again, the King

 | 5 County impacts I don't think you addressed.

7 | 6 And then the last comment I have -- I have a real

 | 7 issue with, all our comments have to be in by March 21st.

 | 8 That only gives us 17 days to review this thing. And we are

 | 9 only residents, volunteers looking at this and concerned

 | 10 about our area. And you know, that's a lot of work for us

 | 11 who go to work every day and then have to come to home at

 | 12 night and try to review this and then send in comments.

 | 13 That's all.

 | 14 MR. JOHNSON: Dennis Ross followed by

 | 15 Pete Thiro.

 | 16 MR. ROSS: My name is Dennis Ross. I live at

 | 17 2000 California Avenue Southwest, 98116. I represent the

 | 18 Admiral Community Council.

1 | 19 I think it's disingenuous to say in your study

 | 20 that the addition of the 250 or 300 Seattle trucks and

 | 21 perhaps 200 more County trucks into the Spokane Street/West

 | 22 Seattle bridge corridor would not have any impact.

 | 23 I think if that's the case, that the sea level of

 | 24 service has that wide of a span, that you should refine your

 | 25 study to look at what the impacts are between, perhaps a

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Speaker 12 – Dennis Ross
(continued)

2. Under the State Environmental Policy Act, traffic analyses can rely on and include any funded or significantly funded transportation improvements projects. The Port of Seattle is currently preparing final design plans for the East Marginal Way grade-separation project. With the recent legislative approval of the gasoline tax, the project is fully funded. The widening of the Spokane Street Viaduct has been designed but is awaiting funding.

Speaker 13 – Pete Thiro

1. Comment noted.

Transcript 29

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1 C+ that may exist today and a C- that's going to exist when
2 you add this traffic to that corridor.

3 West Seattle Bridge currently operates in excess
4 of 120% capacity in both directions. I didn't see that
5 mentioned in your study.

6 And the traffic engineer mentions the improvements
7 that are going to be made at East Marginal Way and the
8 Spokane Street below the facility for those. And also the
9 widening of the Spokane Street Viaduct. That project has
10 been in the works for 10 or 12 years and no funding has
11 appeared to accomplish it.

12 The improvement that she's referring to, I believe
13 are part of what is called, a freight mobility study. There
14 is no funding available to do those improvements. So I
15 think your study should not conclude until you can predict
16 when those improvements can be funded. Thank you very much.

17 MR. JOHNSON: Pete.

18 MR. THIRO: My name is Pete Thiro. 6431
19 Flora Avenue South in Georgetown.

20 I recognize that there will be more traffic, no
21 matter where this site is located. The West Seattle Bridge
22 is -- is equipped for a large capacity of traffic as it is.
23 And you can bet that there will be added capacity through
24 ramps and whatever the clever people at the Department of
25 Transportation do. The trucks headed eastbound coming out

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Speaker 13 – Pete Thiro
(continued)

- 2. Comment noted.
- 3. Comment noted.

Speaker 14 – Amy Bovencamp

Transcript 30

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1 1 of the facility will be staggered. And I think that things
cont. 2 like medical access back into Seattle will not be as gravely
3 affected as some people might think.

2 4 Also, from an operations management standpoint, it
5 doesn't make sense for a city to build a facility that would
6 be limited, in terms of not being near the water.

7 7 It was stated earlier, that a large volume of
8 trash comes in, is barged in from the island. And why would
9 -- why would we put it on trucks to move it to trains, when
10 we can put it directly on trains and ship it out? If there
11 ever was a railroad strike and it became imperative that we
12 do barge our garbage out, it seems like it would be
13 advantageous to have that option.

3 14 I have no -- there is no doubt in my mind that
15 people in the -- in the Port and shipping industry make a
16 lot of money. I'm not quite sure what that has to do with
17 the issue at hand. But there's also going to be a lot of
18 jobs in the waste removal business once that's established.
19 Thanks.

20 MR. JOHNSON: That concludes the people who
21 signed up. Is there anyone else who has decided they would
22 like to speak? State your name and address.

23 MS. BOVENCAMP: My name is, Amy Bovencamp.
24 3703 California Avenue Southwest, Suite A.
25 Not only am a resident of West Seattle but I'm

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Speaker 14 – Amy Bovencamp
(continued)

1. Most residential collection trucks from West Seattle now use the Spokane Street Viaduct to access Rabanco's Recycling, Transfer, and Intermodal Facility at Third Avenue South and South Lander Street. These trucks use the existing ramps to and from First Avenue South. In the future, if the Harbor Island Terminal 10 site is selected, these trucks would descend to the lower level and use the Spokane Street Swing Bridge to access Harbor Island. If the Corgiat Drive site is selected, these trucks would likely stay on the Spokane Street Viaduct all the way to Interstate 5. If the Edmunds Street site is selected, the route would be similar to the route used today, but the trucks would likely continue east on lower Spokane Street. Therefore, the no-action alternative and Alternative 4 or 5 would have the most effect on emergency access to and from West Seattle, although this effect would not be significant.

Transcript 31

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1 also the current president of the West Seattle Chamber of
2 Commerce. And I have to echo the previous gentleman's
3 statement, that saying there's no significant adverse effect
4 on traffic is absolutely disingenuous.

5 And I want to reiterate the fact that there is no
6 emergency care on the West Seattle peninsula. When you're
7 talking about 400 to 600 trucks per day and you line those
8 up end to end and tell me there's not going to be a problem,
9 if there is an ambulance trying to get to some of the
10 emergency facilities on First Hill. I think it's -- that
11 comes down to a matter of public safety and that has to be
12 recognized and discussed further and reviewed. Thank you.

13 MR. JOHNSON: Actually, a couple more. Okay.
14 Can I ask you to spell your name?
15 MS. BARKER: Cindi Barker. C-I-N-D-I,
16 B-A-R-K-E-R. I live at 3711 Southwest Morgan Street.
17 And I previously had the pleasure of living out in
18 Covington, which meant that my daily drives often went down
19 the Maple Valley Highway. And I would follow trucks to the
20 Cedar Hills Dump out that way. So to talk about a topic
21 that hasn't been brought up yet specific to the EIS.

22 Absolutely, I know that there will be an impact
23 on, I don't know what category you want to call it -- the
24 visual esthetics of land and water. But you just know that
25 trucks even though you have talked about using closed

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Speaker 15 – Cindi Barker

1. Vehicles transporting solid waste are required to have their loads covered to prevent incidental spillage. The City of Seattle aggressively enforces this regulation within its jurisdiction.

Speaker 16 – Richard Kimberlin

1. Comment noted.

Speaker 17 – Ted Teppo

Transcript 32

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1 | 1 garbage trucks to get to and from, the operators of those
conti. | 2 trucks often have hang ups and that garbage blows off at
| 3 some point.
| 4 And the drive out at Maple Valley is just hideous.
| 5 There's litter that has accumulated for years out there. I
| 6 haven't been out there lately to see if they have ever
| 7 bothered to clean it up.
| 8 But absolutely, the EIS should address the
| 9 cumulative impact of garbage. 300 trucks a day moving it
| 10 back and forth. And this applies to alternatives 2 through
| 11 5. All the alternatives are going to have this problem and
| 12 mitigation measures ought to be included that talk to
| 13 regular monitoring of the situation. Penalties, should the
| 14 operators not operate their trucks as they are supposed to
| 15 and enforcement of that throughout the years.
| 16 MR. KIMBERLIN: Hi. My name is,
| 17 Richard Kimberlin, K-I-M-B-E-R-L-I-N. I live at 6906
| 18 Carlton Avenue South.
1 | 19 And I'd like to mention, the lady said that you
| 20 can't make \$100,000 a year in Georgetown. Well, you can. I
| 21 work for UPS. There's a lot of people there that make
| 22 \$100,000 or more. Excuse me. Georgetown has high-paying
| 23 jobs just like the Port does. That was the main thing. And
| 24 thank you very much.
| 25 MR. TEPPPO: My name is Ted Teppo, T-E-D.

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Speaker 17 – Ted Teppo
(continued)

1. Any reflection of sound off the intermodal transfer building would probably be minimal and any effects would be localized to the site itself. The flat building surface would not act to concentrate any reflected sound, and the main transfer building, which would be at a higher elevation than Boeing Field, would, in any case, reflect sound upward from aircraft on the ground. Although the sound from flying aircraft could reflect off the building's surface onto adjoining properties, the direct line-of-sight sound would greatly exceed the reflected sound so that the additional effects would be minimal.

Speaker 18 – Keith Russell-Willard

1. Comment noted. The higher-than-posted speeds on Airport Way South were considered in the traffic analysis for this site.

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1 Last name is Teppo, T-E-P-P-O. I live at 6244 Corson Avenue
2 South in Seattle, 98108.

1 | 3 One thing I'd like to bring up. I know that the
4 studies indicated that there were impacts due to sound. And
5 one -- I was kind of picturing the Corgiat site.
6 And I'm thinking that if a building is built there
7 and it's a physical building, right now near there behind
8 that area is Beacon Hill, the west slope of Beacon Hill.
9 I'm wondering if there has been any thoughts or any impacts
10 concerning aircraft noise from Boeing Field which adjoins
11 the site. And if there's a building built or facility that
12 will collect up this garbage. That any aircraft noise
13 that's currently at Boeing that migrates out towards Beacon
14 Hill and is kind of absorbed by the greenbelt. But if the
15 aircraft noise is bounced against a facility, it may
16 reverberate back to the west into the residential
17 neighborhood in Georgetown. So I would like to make sure
18 that if it hasn't been studied that it should be.
19 MR. JOHNSON: Any other comments?
20 MR. RUSSELL-WILLARD: My name is,
21 Keith Russell-Willard. Last name is R-U-S-S-E-L-L, hyphen,
22 W-I-L-L-A-R-D. I live at 6244 Corson Avenue South, zip
23 code, 98108.

1 | 24 I just have to address the traffic issue. There
25 was mention earlier about how they did the speed study on

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Speaker 18 – Keith Russell-Willard (continued)

2. Figure 18 in Appendix C shows the trip distribution percentages for residential collection trucks, as well as daily and PM peak-hour volumes on Airport Way South, both north and south of the Edmunds Street site (Alternative 5). The collection routes and activity are concentrated north of the Edmunds Street site, where most of the Seattle’s population resides and where the jobs are concentrated. Most traffic would use the Spokane Street Viaduct and SW Spokane Street for travel to and from Interstate 5.

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1 | 1 | Airport Way South. And I drive Airport Way South pretty
 conti. | 2 | much on a daily basis back and forth to work. The speed
 | 3 | limit on Airport Way South is exceeded every day, not only
 | 4 | by regular everyday people but by Fed Ex, UPS. You name it.
 | 5 | It's just like driving on I-5.

2 | 6 | And if there's going to be that much added truck
 | 7 | traffic, there is only one way for all these trucks to get
 | 8 | back to Interstate 5 and that's through the Corson/Michigan
 | 9 | intersection to get back on I-5. And that needs to be
 | 10 | studied too because that would also affect our access to
 | 11 | medical too, with an ambulance trying to get back up on I-5
 | 12 | to get us up to Capitol Hill.

13 | MR. JOHNSON: Thank you. So that -- that
 | 14 | will conclude our public comment period. Thank you all for
 | 15 | your patience. It's been a long evening for most of you.
 | 16 | It has been 2 hours or more this evening.

17 | There will be written comments as well through the
 | 18 | 21st. And if you have any further questions or
 | 19 | clarification that you want to come up and find us, we'll
 | 20 | take questions.

21 | (Whereupon, the public hearing was concluded
 | 22 | at 9:10 p.m.)
 | 23 |
 | 24 |
 | 25 |

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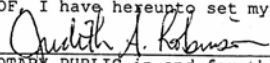
1 CERTIFICATE

2 STATE OF WASHINGTON)
3 COUNTY OF KING) ss.
4)

5 I, Judith A. Robinson, Certified Court Reporter
6 and an officer of the Court under my commission as a Notary
7 Public for the State of Washington, hereby certify that the
8 foregoing deposition upon oral examination of said witness
9 was transcribed under my direction;

10 That the witness was duly sworn by me to testify
11 truthfully; that the transcript of the deposition is a full,
12 true, and correct transcript to the best of my ability; that
13 I am neither attorney for, nor a relative or employee of any
14 of the parties to the action or any attorney or counsel
15 employed by the parties hereto, nor financially interested
16 in its outcome.

17 IN WITNESS WHEREOF, I have hereunto set my hand
18 and seal.



19 NOTARY PUBLIC in and for the
20 State of Washington, residing
21 in Seattle.

22 My Commission expires November 26,
23 2004, CCR License #2171.

24
25

Part 5: References and Distribution List

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Distribution List

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